

THE PHOENIX PRINCIPLE
AND THE COMING DARK AGE



THE PHOENIX PRINCIPLE AND THE COMING DARK AGE

*Social catastrophes – human progress
3000 BC to AD 3000*

Marc Widdowson

Amarna Ltd
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TABLE OF CONTENTS

Acknowledgements	ix
Introduction	xi
Chapter 1 - Demise of a superpower	1
Egypt's forgotten writing.....	1
The gift of the Nile	2
Institutional complexity	4
A profound loss of prestige.....	5
Durability in doubt.....	6
Chapter 2 - What goes up... ..	8
The mighty are fallen.....	8
Asia	8
Africa	9
America... ..	10
Europe.....	10
Australia and Oceania... ..	10
The forgotten ones	11
A never-ending saga	11
On the shoulders of giants	14
A busy, busy world	15
Chapter 3 - Imposing order.....	18
The enforcers	18
The hierarchs	19
The management.....	22
Chapter 4 - Creating wealth.....	25
The division of labour.....	25
Trade and prosperity	26
Inventiveness and entrepreneurship.....	27
The global nature of decline	29
Money and writing.....	30
Education.....	31
Chapter 5 - Asserting a moral way	33
Aesthetic standards	33
Moral standards	34
From religion to cultism	36
Innovators and imitators	37
Community and individual	38
The anti-social ones	39
Chapter 6 - The human ferment.....	41
The inevitability of change	41
The constancy of change	41
Fluctuations on all scales.....	44
Seamless history	44
Experiences much the same.....	46
Chapter 7 - Rotten at the core	48
Mishaps.....	48
Doubtful explanations.....	50
Not mutually exclusive.....	52
Not out of the blue	53
The inadequate response.....	54

Inherent logic	55
Chapter 8 - The principle of mutual causality.....	57
Recurrent arrangements	57
Institutional reinforcement.....	58
Mutual causality.....	59
Self-defeat.....	60
International interaction.....	61
Simultaneity in social change	62
Chapter 9 - The camel's back	65
Dynamism and stagnation.....	65
Resistance to change.....	66
The erosion of advantage.....	67
Overextension.....	67
Soft living	68
Burdens of complexity.....	68
Parasites.....	69
Chapter 10 - The phoenix principle	71
Interruptions in history	71
Perceiving catastrophe	73
Timings.....	73
A squatter's world	74
Violent ends.....	75
Creative destruction.....	76
Chapter 11 - Motivation and method.....	81
A considered theory.....	81
The science of society.....	82
Scientific method.....	83
Uniformitarianism.....	84
History's logic	86
A theory of relationships	89
Chapter 12 - Terms and concepts	91
Introduction	91
Polity, economy and society	91
Friends, acquaintances and strangers.....	93
Friendship.....	94
Acquaintanceship.....	95
Strangership.....	95
Abstraction and reality.....	95
Ensembles	96
Complexification	97
Perception and reality	98
Contradictions.....	99
Chapter 13 - Political integration.....	101
Introduction	101
Coercion	101
Peace and order.....	102
Monopoly of force	103
Extraction.....	105
Scale	107
Maintenance of integration	109
Chapter 14 - Economic organisation	111
Specialisation.....	111
Wealth.....	113

Connectedness	116
Creating organisation.....	119
Ferment.....	121
Chapter 15 - Social cohesion	123
Shared values	123
Religion	124
Legitimacy	125
Pluralism.....	126
Creating cohesion	127
Group effectiveness	130
Chapter 16 - Coupling	132
Introduction	132
Polity-economy.....	132
Polity-society	134
Economy-society	135
Polity-economy-society	136
States.....	137
Chapter 17 - Defining dark ages	140
Decline and collapse	140
The dark age experience	141
Creativity and continuity	142
Conceptualising ferment.....	143
Cycles	143
Chaos	144
Self-organised criticality.....	144
Breaking the mould.....	146
Deep and abstract themes	148
Chapter 18 - Problems and non-problems	149
Introduction	149
Population.....	149
Resources.....	150
Technology	151
Culture	152
Environment	153
Interaction.....	155
Conclusion.....	156
Chapter 19 - Proximate causes.....	158
A natural process	158
Mismanagement.....	159
Decadence.....	161
Political decadence	161
Economic decadence	162
Social decadence.....	162
Biological decadence	163
Exogenous factors.....	164
Changing rules	165
Chapter 20 - Ultimate causes	167
Introduction	167
Contradictions.....	167
Ambitions and capacities.....	170
Chapter 21 - The story so far	177
An unfolding saga.....	177
History as the growth of scale.....	177

Integration.....	178
Organisation.....	179
Cohesion.....	179
The rise of the west.....	180
The state of play.....	182
Chapter 22 - Going to the dogs.....	185
A sorry situation.....	185
Are things really worse?.....	186
The sleep of nations.....	187
Contradictions.....	189
Tide of history.....	191
Chapter 23 - Internal disintegration.....	193
Increasing state control.....	193
Attenuation of intent.....	194
Democratisation of force.....	195
Discrepant scale.....	198
Symptoms of disintegration.....	199
Chapter 24 - Internal disorganisation.....	203
Detecting the warning signs.....	203
Vulnerability to economic collapse.....	204
The drags on the economy.....	205
Entrepreneurial failure.....	207
Innovation failure.....	209
Education.....	211
Chapter 25 - Internal dis cohesion.....	214
No common values.....	214
Looking after number one.....	214
Breaking the bonds.....	216
The permissive society.....	219
De-legitimisation.....	222
Chapter 26 - International disintegration.....	225
Pax occidentalis.....	225
No peacekeeper.....	227
Levelling the playing field.....	228
Losing the monopoly of force.....	230
Wars that are coming soon.....	232
Chapter 27 - International disorganisation.....	236
The global economy.....	236
Entrepreneurial failure.....	237
Protectionism.....	239
Wealth differentials.....	241
Chapter 28 - International dis cohesion.....	246
The stalling of supranationalism.....	246
The old divisions.....	247
Familiarity and contempt.....	249
Divergent values.....	250
Discrepant interests.....	255
Chapter 29 - Shocks to the system.....	257
Introduction.....	257
Too many mouths.....	257
Resource exhaustion.....	258
Ecocatastrophe.....	260

The unexpected.....	263
Chapter 30 - A plague of blessings.....	266
Introduction	266
Precious life and dignity	266
Decoupling from reality.....	268
Problematic solutions.....	269
Reinforcement of dependency	271
Ambitions and capacities.....	273
Chapter 31 - The coming dark age.....	277
Phases of cultural change.....	277
Holding back the tide.....	278
Duration and nature	278
Taken by surprise.....	280
The livable future.....	283
Chapter 32 - The disintegration process	285
Weakening domestic authority	285
Weakening hegemony	286
Warfighting.....	288
Nuclear war.....	291
Chapter 33 - The disorganisation process.....	294
Boom and bust	294
Changing fortunes.....	294
Trade disputes.....	295
Wealth differentials	296
Dependency	296
Innovation failure	297
Criminal economy	298
Ill education	299
Things falling apart.....	299
Squatting.....	299
Business failure.....	300
Chapter 34 - The discohension process	301
Less sociability	301
Rampant de-legitimisation.....	301
Art in decline	302
International estrangement.....	303
Nationalism and devolution.....	304
The culture of rights.....	306
Women	306
Cults.....	308
Chapter 35 - The disintegrated world	309
All against all.....	309
New dynasties.....	310
De-urbanisation	311
Ruins.....	312
Barbarian invasion.....	313
Chapter 36 - The disorganised world.....	315
Impoverishment.....	315
Uncomfortable times	316
Back to the land	317
Loss of knowledge.....	318
Inventiveness	320

Chapter 37 - The discohesive world	322
Privacy and obscurity	322
Narrow horizons	323
Bloodbaths	323
The consolation of faith	325
Moral restoral	326
Chapter 38 - The political recovery	328
Re-urbanisation.....	328
Autocracy and achievement.....	328
A new world order.....	329
World integration.....	332
Enlightened coercion	333
Chapter 39 - The economic recovery.....	335
New economic order.....	335
Resources.....	336
Innovations	336
Spacefarers.....	338
Scientific discovery	340
Chapter 40 - The social recovery	343
Multicoloured civilisations	343
World identity.....	343
Religion	344
Art.....	345
Roles	346
A fourth ensemble?.....	347
Envoi.....	351
Notes.....	353
Bibliography	373
Index	387

TABLES AND FIGURES

Table 3-1: <i>Political factors associated with the rise and fall of complex societies.</i>	24
Table 4-1: <i>Economic factors associated with the rise and fall of complex societies.</i>	32
Table 5-1: <i>Social factors associated with the rise and fall of complex societies.</i>	40
Figure 8-1: <i>Relative shares of world manufacturing output, 1750-1900.</i>	58
Figure 12-1: <i>Reflexive connection between perceptions and reality (Soros 1994, 1998).</i>	98
Figure 13-1: <i>External interaction promotes internal integration.</i>	103
Figure 13-2: <i>A model of the influence of political centres; each centre is represented as the central pole of a conical tent; the more powerful the centre, the higher the pole; centres whose tents are fully contained within the tent of another centre are subordinate to that centre.</i>	107
Figure 13-3: <i>Changes in communications produce changes in the integration and scale of groups.</i>	107
Figure 13-4: <i>Changes in the ability to coerce produce changes in the integration and scale of groups.</i>	108
Figure 14-1: <i>Three villages which may trade with each other.</i>	111
Figure 14-2: <i>The base and reach of a good or service.</i>	112
Figure 14-3: a. <i>A closed loop of economic relationships; b. a minimal loop (exchange).</i>	117
Figure 14-4: a. <i>Branching; b. Further complexity of organisation.</i>	117
Figure 14-5: <i>An eddy consisting of loops of organisation threading through an economic actor.</i>	118
Figure 14-6: <i>Eddies form hierarchies. Here a thread of organisation leaving a given firm within an industry/town returns to another firm in that industry/town but is closed by an economic relationship between the firms concerned. Viewed at the level of the industry/town, loops are closed just as for the individual firm.</i>	118
Figure 14-7: <i>Eddies tend to dissipate; a continual background of entrepreneurship is needed just to maintain the flow.</i>	122
Figure 14-8: <i>Large eddies persist for longer since temporary interruptions in the flow are less likely to lead to economic failure.</i>	122
Figure 15-1: a. <i>Poor communications, many small scale, local groups, each highly cohesive; b. Good communications, few large scale groups, less cohesive but encompassing more actors.</i>	129
Figure 16-1: <i>Effects of government extraction (here set at 20 percent) on organisation. a. Before; b. After.</i>	133
Figure 17-1: <i>Log-normal graph plotting the frequency of recessions (1871-1989) against their size (measured as the number of European countries in which a fall in GDP was registered in a given year). (Source: Maddison 1991, pp. 115-117.)</i>	145
Figure 18-1: <i>The Malthusian model: population grows exponentially and must eventually outstrip food production, which grows at a steadier rate.</i>	149
Figure 18-2: <i>The demographic transition. This is a movement from a regime of high fertility and high mortality to one of low fertility and low mortality. During the transition population rises but it eventually stabilises at a higher level.</i>	150
Figure 18-3: <i>Since innovation is an autocatalytic process, technology may increase fast enough to support exponential population growth (compare with Figure 18-1).</i>	151
Figure 19-1: <i>A social group gradually learns the lessons of fluctuations in its circumstances, eventually sticking to the long term maximum rather than pursuing the short term maxima that repeatedly present themselves.</i>	166
Figure 19-2: <i>Through experience, the social group gradually accommodates to the secular trend in the long term maximum.</i>	166
Figure 24-1: <i>Organisation forms closed loops and a firm's suppliers are connected to its customers. Impoverishing one's suppliers eventually impoverishes oneself.</i>	207
Figure 31-1: <i>Phases of cultural change.</i>	277
Figure 31-2: <i>Changing world order.</i>	277
Table 31-1: <i>The next one thousand years – an overview.</i>	281
Figure 40-1: <i>The new era may be characterised by smaller groups embedded within a more cohesive global culture. This could be a step towards a fully unified world society, which will be achieved in some later era.</i>	344

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Introduction

I was driving on the motorway north of London. It was mid-morning, one weekday in January 1999. I was making good progress. Ahead of me the traffic was strung out, going up the hill. It was a cold day with the sun embedded in high cloud. Everything had a washed out appearance. The fields were lost in a bright haze. The salt that had been scattered on the roads overnight covered every vehicle with a dirty spray. I felt that I was witnessing the last years of an era that failed some time ago. All these trucks, vans and private cars seemed to me as though they were already ghosts. They pressed on up the hill, preoccupied with their mysterious business. I foresaw that their destination was oblivion.

This book is about the catastrophe that is going to overtake today's world civilisation. Many people may regard this as a preposterous notion, and certainly a morbid one. Nevertheless, when I first set out to research past catastrophes and dark ages, I soon discovered that this was to research five thousand years of history across every inhabited continent. No theme in human experience is more pervasive or consistent. Time and time again, people have built up societies of outstanding power, wealth and morality, only to see them degenerate into weakness, poverty and dissipation. Those at the apogee of their success have invariably believed themselves to be the chosen ones, immune from the accidents that befell their predecessors, ensconced in glory for all time. Invariably they have been proved wrong. There is something going on here that commands our attention. Humility and common sense suggest we take seriously the prospect of our future downfall.

The topic is not as pessimistic as it seems. While some people live quite well, and a few live very well, the present world order has many casualties – failed countries and, within successful countries, failed people. The overturning of existing arrangements will not be a misfortune to all. A dark age is a time of great turmoil, suffering and insecurity. It is also a time of great creativity. A dark age is a melting pot when old, corrupt and exhausted institutions are finally broken down and destroyed. Something new and better suited to human needs can then be built up in their place. For the beneficiaries of the old institutions, this is certainly a painful process. For the rest, who are far more numerous, it is also a hopeful one.

The detailed characteristics of a dark age will become clear in the chapters that follow. By way of preview, it may be described as a time without government, without trade, and without any sense of community. It is a time of everyone for him or

herself. During the dark age, mere survival is the only concern. No one has the leisure for any higher activity, including keeping records. That is why a dark age is dark. Its principal feature is that we know nothing of what took place in it. The collapse that precipitates the dark age is abrupt and unexpected. The dark age itself is surprisingly brief. The recovery is slow and uneven, but eventually civilisation ascends to heights never before seen.

The book is divided into four parts. The first part reviews the history of social collapse and subsequent dark ages, in order to draw out the common themes and characteristics. The second part presents a theory of human sociality and shows how it can account for this evidence. The third part applies this theory to our present situation, and demonstrates that we fit the pattern of a civilisation in decline, our potential being rapidly used up, our progress increasingly hindered by impasses. Finally, the fourth part discusses the timing of the coming dark age, what it will be like, by what route we will arrive there, and what might come afterwards.

The purpose of this book is not really to make precise forecasts. It is rather to present a set of theoretical ideas. Everything else is more or less an exercise and a demonstration of these ideas. Above all, I have sought to pursue this investigation with rigour. It is not a complaint about declining standards. I take no moral positions. I make no criticisms or recommendations. I offer only analysis. I wish to help my readers be like anthropologists from Mars, fascinated by humans, sometimes despairing of them, often charmed, but able to judge dispassionately, their eyes unclouded by their own involvement.

The approach to a dark age is paradoxically a time when things seem to be getting better in many respects. Political authorities seem less oppressive. Economic activity is more elaborate than ever. Social attitudes become more enlightened. On the surface, everything can appear to be excellent. Behind the scenes, though, the contradictions are growing and they threaten all this wondrous achievement. It is not when you think you have a problem that you actually have one – for having identified it you can do something about it. The real worry is when things seem to be going swimmingly well. Let those who say 'preposterous!' and 'how pessimistic!' reflect on that.

MARC WIDDOWSON
Bedford, 2001

Part One

*a recurrent and
global phenomenon*

Chapter 1 - Demise of a superpower

Egypt's forgotten writing

It was the summer of 1799. French engineers were constructing military earthworks near the Egyptian coastal town of Rosetta. They belonged to Napoleon's expedition that had arrived in the country a year before. Digging in the sand, one of the soldiers struck something with his shovel. He tried to work round and underneath it, but this was no ordinary piece of rubble. He could not prise it loose. The others came to his assistance, helping him to clear away the sand from the massive object. There was no excitement, just weary annoyance at the unwelcome obstruction that only made their labours more difficult in the unfamiliar heat.

It turned out to be a slab of black basalt, about the size of a table-top but more than 25 centimetres thick. Several men were needed to lift the stone and manhandle it out of the pit. An officer's attention was drawn to the slight commotion. He came over to investigate and saw that the slab was covered in writing. Realising its significance, he ensured that it was removed intact to a safe place, then alerted his superiors. With little delay, the stone was taken to Cairo. Two specialists were sent over from Paris to make rubbings, which were then returned to France. The stone itself passed through a succession of hands and eventually arrived in the British Museum. There it remains, still in good condition.

The exciting thing about the Rosetta stone was that it contained three separate inscriptions. The first was in Egyptian hieroglyphs. These were still a mystery when the stone was discovered, despite many attempts that had been made to decipher them over the years. The second was in the equally mysterious demotic script, a highly stylised form of hieroglyphs suitable for ordinary handwriting. Crucially, however, the third inscription was in Greek; and Greek could be easily read and translated. Since all three inscriptions undoubtedly bore the same message, there opened up the possibility of deciphering the hieroglyphic and demotic texts. Within twenty years, Jean-François Champollion had produced the outlines of an Egyptian grammar. Others soon completed his work.

The story of hieroglyphic decipherment, which the Rosetta stone made possible, is one of immense scholarship and ingenuity. However, there is something else remarkable as well. This is that Egyptian civilisation could have degenerated to the point where it could no longer read its own writing. At the time that the Rosetta stone was produced, in 196 BC, Champollion's distant ancestors were mere tribal people.¹ They lived directly off the land and fought frequently among themselves. The Egyptian state, on the other hand, was a mighty and

venerable empire, among the most opulent and sophisticated in the world. Its fame spread far.

Somehow, these terrific advantages of Egypt seemed to have disappeared. The former tribal peoples now had the superior military organisation and equipment. They could enter the country with impunity and take it effectively unresisted. Napoleon's forces were not barbarians but the representatives of their own sophisticated civilisation. They set about surveying and interpreting the ruins that they found. By contrast, the society of the ancient Egyptians had sunk as far as could be imagined. Their former glories were resoundingly over and done with. Their precious documents and their magnificent buildings were all broken and buried in the sand, to be dug up by the French army and used as ballast. Their writing was long forgotten and with it their history and their culture. It had to await a painstaking decipherment by the descendants of backward tribal cultivators before it could be read again.

Pharaonic Egypt had been in decline before France was even born. The Rosetta stone was produced and erected in an Egypt that was already dominated by foreigners. The ruling Ptolemaic dynasty were Hellenes who had come to power after Alexander the Great conquered Egypt in 332 BC. It was on their account that one of the Rosetta inscriptions was in Greek in the first place; the hieroglyphs were already out of fashion. The Ptolemies had also been responsible for getting demotic texts transliterated into the Greek alphabet, which at least meant that the sounds and structure of the ancient Egyptian language were known to nineteenth century linguists.²

Today pharaonic Egypt conjures up images of empty tombs, silent statues and museum cases full of chipped and dusty objects. It may seem only natural that it should be no more. Yet for three thousand years this civilisation was a living and enduring reality. Today its demise is familiar and unexceptional. Yet people living in the heyday of the pharaohs would have found it inconceivable that they could end up as a rather backward society, living in a land of ruins. They had acquired a phenomenal head start in the methods and benefits of civilised living. It must have seemed inevitable that their highly developed nation would forever overshadow the obscure peoples of north-western Europe. The fact that there was a massive turnaround demands some attention.

Pharaonic civilisation was, after all, the epitome of durability. It spanned the period from the beginning of the third millennium BC to the second century AD.³ At the exodus of the Jews in 1500 BC,⁴ a seemingly remote time before even the Ten Commandments had been handed down, the pharaonic state was at the mid-point of its existence. Then it was already three times older

than the Greek or Roman civilisations would be in their prime.⁵ This was an ancient society even in ancient times. The Greek historian, Herodotus, who visited Egypt in the fifth century BC, was impressed by the nation's antiquity.⁶ When he toured the pyramids, Herodotus was looking at monuments that dated from two thousand years before his time. Their builders were almost as remote to him as he is to people today.

In describing his trip, Herodotus wrote about the astonishing number and grandeur of Egypt's monuments. This country was clearly far more accomplished than his own. Its geopolitical influence might have been on the wane, but Egypt's culture and institutions seemed set to endure.⁷ Egypt had weathered many crises in its long history. There was nothing to suggest that it could not cope with the ups and downs it might face in future. Over the previous two centuries, it had maintained its integrity despite being subjugated by Assyrians, Persians, and Macedonians.⁸ On each occasion it assimilated the conquerors to its own ways. Although it became progressively weakened, life carried on much as normal.

When something remains as a coherent entity for three thousand years – longer than any subsequent civilisation – one might reasonably suppose that it has found the secret of success. Its citizens would have been justified if they expected it to remain unassailable. Yet as Egypt became incorporated into the Roman empire in 30 BC, this expectation began to look decidedly shaky. Egypt was losing its long-established identity. The Romans treated Egypt much as the French and British would do, exporting its treasures and its obelisks for erection in their own public places.⁹ They saw it, no doubt, in the same sort of light – as a venerable but dead civilisation. Two centuries later, pharaonic Egypt, for all its advantages, was entirely defunct. How could this happen? What is more, if it could happen to the early-achieving and long-lasting Egyptians, could it happen again? Could it happen to the upstart countries that now dominate the world?

The gift of the Nile

As late as 3500 BC, there was little to distinguish the Nile valley dwellers from farming people elsewhere. They had no central political authority. Such chiefs as they possessed would have been limited to resolving disputes by negotiation and persuasion. Individual families, lineages and clans largely ran their own internal affairs.¹⁰ By 3100 BC, however, the entire Nile valley had become an integrated state under the control of a single pharaoh. It was a rather rapid rise.¹¹

While Egyptian society was undergoing this transformation, most contemporary societies remained much as they had always been. Many

societies were still living like the pre-dynastic Egyptians well into the twentieth century. That includes various groups of east African pastoralists, living further up the Nile, barely a thousand miles south of Egypt. In this light, the Egyptians' achievement surely demands respect.

The fact that it brought into a single unit some ten thousand square miles of fertile territory led the Egyptian state into complications that were not necessary for or achievable by those living more simply. It was in dealing with those complications that ancient Egypt came to appear so extraordinarily vibrant, talented and multifaceted. For a start, it encompassed a population in the region of three million or more,¹² and no individual could exert personal authority over so many people. From the beginning, Egypt was governed by an elaborate bureaucracy, which served as the backbone of a highly structured society.¹³

Taxes had to be raised to maintain the pharaoh and the hierarchy of specialist officials. They were also needed to support workers in the state-owned mines and quarries, providing materials for the monumental architecture that was the very visible and lasting symbol of Egypt's power and prosperity. Administering all this presented problems of accounting, storage and distribution that demanded sophisticated solutions. Writing was one of the most significant.¹⁴

Literacy allowed the Egyptians to accumulate a rich corpus of learning and transmit it from generation to generation in formal scribal schools. Much basic knowledge that is taken for granted today was first recorded in pharaonic times. While some social theorists deny that writing itself is responsible for intellectual achievement – and one should certainly not underestimate the capabilities of oral peoples – there is no doubt that the Egyptians could pursue their studies in a systematic manner which is denied to the illiterate. They produced treatises on topics such as mathematics, theology and medicine, as well as a substantial body of imaginative literature. It is unlikely that contemporary barbarians, such as those in north-western Europe, came anywhere near the same level of academic attainment.

The scale and order of pharaonic Egypt created an environment suitable for commerce. Powerful individuals established a demand for luxury items, which provided a living for artisans of various kinds. There were specialists such as sculptors, jewellers and makers of cosmetics, as well as scribes, soldiers and administrators. These people traded with each other and with the peasants in order to obtain the necessities and luxuries of life.

In some ways, the economy of the ancient Egyptians was fairly rudimentary by modern standards. For example, payments were mostly in kind rather than in currency.¹⁵ Yet as research has accumulated, historians have become increasingly

appreciative of Egypt's commercial sophistication. Professional merchants certainly existed and they made profits by buying and selling. Markets, speculation and lending at interest were all taking place in Egypt from early times.¹⁶ Initially, commodities like wheat and precious metals served as a form of money,¹⁷ but towards the end of the pharaonic era coinage was being introduced.

The most famous example of the Egyptians' organising capability comprises the three giant pyramids of Giza. These were built for the pharaoh Cheops and two of his successors. This was around 2500 BC, when Egypt had already been a great civilisation for half a millennium. Another two and a half millennia of global dominance lay ahead. The pyramids were a colossal undertaking. The great pyramid of Cheops remained the tallest building in the world until the construction of the Eiffel tower.¹⁸ In other ways, it has still not been equalled.

Napoleon estimated that the great pyramid contained enough material to build a wall ten feet high around most of France.¹⁹ Herodotus was told that men had worked on it in three month stints for a period of twenty years. That was after they had already spent ten years building the road along which the gigantic blocks of masonry were hauled up from the river, where they were brought by barge. Recent calculations suggest that a gang of about four thousand workers would have been necessary to do the work over that time.²⁰ This was well within Egypt's ability to supply, but it still represents some ten times the work force for a modern major road project.

The pyramids may look simple. However, the more they are studied, the more remarkable the technical expertise of their designers and builders becomes. It was clever enough just to get all the sides lined up and in proportion. The stones were not stacked up in any old how, but each one was slotted into position according to a sophisticated plan. No one really knows how they were raised to the higher levels. There is also evidence of various ingenious devices for protecting against intruders. Their operation is still not wholly understood but they succeeded in keeping Egypt's conquerors out of the pyramids until the middle ages. Even now that the pyramids have been breached, some of their secrets remain to be uncovered. Quite possibly, there is some remarkable treasure still hidden in there (none was found when the great pyramid was first opened – to the enormous chagrin of the Islamic general responsible).

Apart from the engineering issues, co-ordinating the labours of four thousand construction workers was a noteworthy feat in itself. The workers were arranged into companies of some thousand individuals, these being divided into four 'watches' which were further sub-divided into groups of ten to fifty.²¹ As well as being

supplied with tasks, all these people had to be fed and sheltered. This would stretch the skills of project managers and logisticians to this day. During a later building programme at Thebes, the government ran short of rations after a rise in grain prices, and the labourers went on strike for their pay.²² Egyptian administrators were clearly facing and dealing with many of the same problems as their modern counterparts. Their scribal training was a business school education as much as anything else, covering the arts of management as well as the mechanics of writing.

Urban centres were not very conspicuous in Egypt until relatively late. When the pyramids were being built, Egypt had no cities to compare with those of the Sumerians in ancient Iraq.²³ This is related to the fact that in Iraq there were numerous independent states, each of which was based around its well defended citadel.²⁴ In Egypt, by contrast, walled towns were a feature of pre-dynastic times but disappeared once the entire valley had been pacified under a single ruler.²⁵ Egypt's peaceful, populous countryside is therefore indicative of the degree of order that had been achieved. Nevertheless, Egypt's urban dimension still exceeded anything known to contemporary barbarians, and reflected the needs of administration and commerce. Tomb paintings and models depict streets, shops, market places, government offices, palaces and temples.²⁶ Towns with these features did not take shape in north-western Europe until after the arrival of the Romans. Even by the time of the Domesday survey, English towns were not as impressive as those of the pharaohs.²⁷

Cities cannot be left to their own devices. Urban life, with so many strangers living on top of each other, imposes all sorts of complexities that never concern tribal people and villagers. In ancient Egypt, formal mechanisms of social control, including legal codes, were needed to keep order. Food and water had to be brought in to the city and waste matter taken out. Egyptian engineers were constructing aqueducts and drainage systems hundreds of years before the Romans. These were every bit as sophisticated as the Roman ones and were scarcely rivalled even by those of medieval Europe.²⁸

Building the pyramids was therefore only the apogee of ancient Egyptian enterprise. On a more prosaic scale, the same skills constituted an integral and continuing aspect of their civilisation. Logistical and administrative problems were being solved not just in connection with the occasional one-off project but every day for three thousand years. The picture that emerges is of a society with a complex range of institutions, possessing many of the characteristic features of more recent civilisations, and addressing and overcoming many

of the same difficulties. It was doing all this well ahead of most other parts of the world.

Institutional complexity

To grasp the nature of the Egyptian achievement, it is important to be clear what it was not. In the first place, it was not simply a matter of technology. The Europeans tended to have as sophisticated technologies as the Egyptians²⁹ but just did less with them. The neolithic revolution, i.e. the transition from foraging to agriculture, was under way in Europe and in Egypt at approximately the same time.³⁰ Similarly, there was no sharp distinction with respect to the innovation of metal-working. Copper technology had reached Hungary by the middle of the fourth millennium BC,³¹ i.e. before the Egyptian state had even come into existence. It reached north-western Europe by 1850 BC, which was about a thousand years after it was adopted in Egypt.³² Bronze working reached north-western Europe by 1600 BC and that was only a few hundred years behind Egypt.³³ Neither bronze nor iron arrived in Egypt until hundreds of years after they had begun to be used in the neighbouring civilisation of Iraq.³⁴ Overall, there is little evidence of a straightforward link between technological complexity and institutional complexity.

The Egyptians' characteristic monumental architecture sprang from an original base that was similar to that of Europe. The Europeans were constructing plenty of large stone burial chambers and other megaliths at an early date.³⁵ Britain's West Kennet long barrow, for example, has been dated to the fourth millennium BC.³⁶ It resembles structures from Egypt around the same time. European burials from this period have also been found with rich assemblages of grave goods.³⁷ This indicates that in ancient Europe, as in Egypt, the dead were important to the living.³⁸

The most significant European structure from the period of Egypt's ascendancy is the circle at Stonehenge. This was constructed in several stages between 2100 BC and 1600 BC. While it may be dwarfed by the pyramids, the tools and techniques that it involved were neither more nor less primitive. It looks rather the worse for wear today, but Stonehenge was originally built of properly dressed stone that had been brought from several hundred miles away. A recent project to transport such a stone by traditional methods encountered disaster when the stone slipped and fell to the bottom of the Bristol Channel. As with the pyramids, the engineering and logistical issues of building Stonehenge would have required ingenuity, application and some kind of central direction.³⁹

It is not even as though the Egyptians had had an idea for complex social structures that simply did not occur to others. The Europeans actually had inchoate institutions of the requisite kind. Their

numerous earth monuments and hillforts, some going back to the fourth millennium BC, imply the existence of some kind of personal authority.⁴⁰ A distinction between luxury and everyday items in pottery and other artefacts points to the existence of hierarchy⁴¹ and social differentiation.⁴²

The north-west Europeans were in touch with pharaonic Egypt, and so must have known what could be done. Egyptian faience (a kind of synthetic lapis lazuli) was being traded into Europe at least as early as 2000 to 1500 BC.⁴³ Around 1000 BC, Egyptian hair rings were reaching Ireland and influencing styles of jewellery there.⁴⁴ Even in those early times, the world system was connected, though tenuously. Unlike ancient Egypt, the European societies of this era never elaborated themselves beyond the level of petty chiefdoms.⁴⁵ Social sophistication, unlike trade objects and new technologies, did not propagate by contagion. Europe remained, in modern parlance, underdeveloped.

Individually, the Europeans were not necessarily worse off because of this. The surface grandeur of the Egyptian state cannot be taken as a direct indicator of its people's actual standard of living or wellbeing.⁴⁶ The pyramid workers were not slaves, but they were not as free as the independent farmers living elsewhere. The latter had to think only about themselves and did not need to support a class of bureaucrats and nobles. When Herodotus visited Egypt in 450 BC, Cheops was remembered as a hated figure.⁴⁷ The Egyptians told him that Cheops had sent his daughter to work in a brothel. According to the story, she demanded a block of stone from each man she slept with in order to build her own pyramid (one of the smaller ones that also stand at Giza).⁴⁸ This is reminiscent of the insulting jokes that soviet citizens used to tell about their leaders. For such a story to be retailed down the centuries indicates the level of resentment towards those who lorded it over the common people.

It was as a whole that Egypt was more affluent than simple and unorganised barbarian societies.⁴⁹ The complexity of its institutions, and the way they structured people's behaviour, implied the ability to do more and make more of an impact upon the world. Differences in technology or subsistence method were minimal and certainly not crucial. Egyptians and Europeans both knew how to build structures or produce works of art. They were equally accomplished as farmers. Yet in Egypt people were also arranged in multi-layered hierarchies and diversified trading networks. The power of the ruler, along with the proliferation of specialist artisans and administrators, meant that the available effort could be co-ordinated and applied more effectively to produce buildings and cultural achievements that were more numerous, more ambitious and more enduring than elsewhere.

The rulers had enormous resources at their disposal and they could project their will over great distances.

This complexity of Egypt is responsible for its leaving a substantial visible legacy to subsequent generations. Europe of the same period appears as an obscure, undifferentiated place where nothing significant happened. In 2250 BC, when Egypt had four towns that contained more than 10,000 people,⁵⁰ the basic unit of settlement in north-western Europe was the dispersed homestead.⁵¹ The relatively rare European villages contained from 30 up to about 500 people.⁵² Such villages had no palaces or temples and they left little to be remembered by.

The literate Egyptians produced a direct record of their intellectual achievements. If the ancient Europeans were acquiring similar knowledge, no one can be sure because they left no account of it. Yet in Egypt even the deeds of individuals are remembered. Imhotep, chief adviser to the pharaoh Djoser, is credited with initiating the techniques of monumental architecture and improving the writing system,⁵³ and is essentially a historical figure. By contrast, historians know nothing of the names of people living in north-western Europe at around the same time. Individuals, like Boadicea or Caractacus, only begin to emerge from the mists of history with the arrival of the literate Romans. It was not until the early church took root that a truly indigenous literate culture arose in Europe and the transformation from barbarism to civilisation began to take effect.

The fundamental nature of the advantage which pharaonic Egypt possessed over north-western Europe lay in the intricacy of people's everyday interactions. Their achievement was to create and sustain a complex set of institutions that gave a rich pattern to life. This, rather than natural resources or technical prowess, is what made Egypt seem to be a wealthy and powerful society in comparison to the many obscure societies that were contemporary with it. Civilised Egypt was distinguished from backward Europe by the vigour and elaboration of its human relationships.

This relative advantage of institutional complexity was what Egypt had clearly lost by the time that Napoleon invaded the country in 1798. The French had by then created the institutions that allowed them to equip a modern army and project it overseas. The Egyptians, on the other hand, were insufficiently co-ordinated to resist. The French had a degree of sophistication that allowed them to dig up, transport and decipher an ancient tablet. The Egyptians, however, lacked the energy and the inclination for such an undertaking. The best they could do was to leave it lying in the ground.

A profound loss of prestige

Egypt has experienced a profound loss of prestige since pharaonic times. After the Romans

left, it was overrun successively by the Syrians, the Arabs and the Turks. Napoleon's short-lived invasion was ended in 1802 by the British, who subsequently occupied the country in 1882. Egypt regained independence in 1922, but did not rid itself of British troops until 1956.⁵⁴ It remains now a poor and underdeveloped country, whose national product is barely 3 percent of that of France.⁵⁵ The turnovers of many transnational corporations currently outstrip the income of the Egyptian state.

The United Nations Development Programme publishes an annual report, in which it ranks nations according to their Human Development Index. This takes into account such factors as life expectancy, educational attainment and gross domestic product. Egypt ranks somewhere round about 120 out of 175 on this score.⁵⁶ If a similar table had been prepared three or four thousand years ago, Egypt would have ranked as number one. This is how far its fortunes have slipped. Even within its region Egypt stands out as being in a bad way. Of all the countries of north Africa, only Egypt is classified by the World Bank as being in the low income bracket.⁵⁷

The Egyptian adult literacy rate these days is just 53 percent. This places it below Papua New Guinea, with 74 percent. In other words, one of the earliest countries in the world to possess writing now finds itself surpassed by a region which, until recently, was occupied by simple village-level cultivators and where writing was completely unknown.⁵⁸

Economically, Egypt seems to be struggling. The government has followed the prevailing international fashion for economic liberalisation. It has an ongoing programme of restructuring the economy, and is turning its loss-making public industries over to private hands. Such reforms may improve future prospects, but there are still profound short term problems, including unemployment, inflation and deteriorating public services.⁵⁹ What was once the wealthiest nation in the world is a chronic recipient of overseas aid (donated by the former barbarians).⁶⁰

Egypt is mostly going backwards relative to the more developed countries today. Obviously, in order to close the gap that currently exists between it and, say, the United States, Egypt must maintain a higher growth rate than the United States over a period of several decades.⁶¹ Yet in fact its growth is typically less than that of the United States.⁶² Even when the overall economy has been growing faster than that of the more developed countries, its people individually have been getting poorer due to a greater rate of population increase.⁶³

The decline in Egypt's fortunes is very clear. Yet Egypt is still a literate urban civilisation. In absolute terms, the country has gained greatly in wealth and capability. Contemporary Egyptians may not be building pyramids, but far more people

than built the pyramids are currently working for the Egyptian state. With its power stations, motor cars, aeroplanes and international hotels, modern Egypt functions at a level far beyond anything the pharaohs could have imagined. If there is a problem it is that other regions are doing even better. Egypt's profound loss of prestige amounts to a decline in its relative position rather than a decline in its overall sophistication.

A closer look at Egypt's history reveals that it has not been in a permanently depressed state since the demise of the pharaonic state. On the contrary, Egypt enjoyed its own renaissance during the early middle ages. A series of more or less powerful Islamic states was centred on Cairo. For a while, Egypt was arguably recovering the initiative from European civilisation. In its advantaged position between the Asian, African and Mediterranean worlds, Egypt was the focus for a considerable volume of international trade and grew wealthy in consequence. Egypt has a legacy of magnificent architecture from this period, including the tenth century Al Azhar mosque and university. More than two hundred years before the first universities were established in Europe, Al Azhar was the Islamic world's prime centre of learning, where scholars studied philosophy, science, mathematics and the arts.

More recently, during the late 1970s, Egypt experienced a miniature boom as its economy grew at rates touching 10 percent. Arguably, Egypt is simply continuing the pattern of the pharaonic era, when fortunes also waxed and waned over the centuries. At some times, the ancient Egyptian empire extended far south into Ethiopia and far to the north-east into the Levant (modern Israel and Lebanon). At other times, hostile people encroached within its borders, incorporating part of Egypt's traditional territory into their own empires. Occasionally, the entire country was subject to foreign rule. There were even a few brief interregna, when the country descended into anarchy until a strong dynasty restored order and prestige. These major upsets are reflected in the traditional division of pharaonic history into old, middle and new kingdoms.

Overall, Egypt's history during the last five thousand years has been characterised by fitful changeability. It stands out because of the precocity of its early achievements. Yet on the long view, the country has been going through reversals and reversals from the very beginning, experiencing both greatness and failure in their turn. Its situation is and always has been fluid. Today it may be close to a historical nadir, but this could be regarded as simply a particularly deep and long-lasting retrenchment.

At the start of the twenty first century, the countries of north-western Europe and North America are at the top of the United Nations'

league table of human development. Their populations enjoy the highest standards of living on earth. By and large, they take this state of affairs for granted, and they pay little attention to the question of whether or how long it can be expected to continue. Yet given Egypt's fate, it is legitimate to wonder if the world's most developed countries will always remain in the ascendant. Could it be instead that they, in their turn, will one day be languishing at the bottom of the table, their cultural achievements forgotten and buried in the ground, and the secret of their writing mislaid?

The fact that today's richest nations were the first to industrialise may seem to have given them a lasting edge. They built up capital and military capabilities that have allowed them to keep on shaping the world to their own advantage. In recent history, most latecomers have found it very difficult to catch up.⁶⁴ Yet Egypt's fate demonstrates that an initial advantage does not retain its force indefinitely. Indeed, the most cursory acquaintance with just the twentieth century makes that plain – some nations' circumstances have changed dramatically over the last one hundred years.

Ancient Egypt did not collapse in one sudden movement. Signs of the final dissolution may be discerned in the years following 650 BC when it had made its last brief play as a world power of the first rank. This was after the recapture of the southern part of the kingdom from half a century of rule by Ethiopian invaders. The country then became a second rate political force, struggling to retain its independence and prestige against neighbours who were eclipsing it. Though Egypt remained a civilised great power, it had suffered a real decline in its relative position within the international system of the day.⁶⁵ The countries of north-western Europe – Britain notably – have experienced a similar relative decline in the last hundred years. Who would be confident that this is as far as it will go? As with Egypt, it could be the writing on the wall. Another half a millennium of second-rateism might end in the same kind of final, extreme humiliation.

Durability in doubt

It is generally assumed that modern civilisations will never go into as complete and devastating a decline as that experienced by ancient Egypt. Several kinds of argument are put forward to explain why this must be so. Yet they are less than convincing in their attempt to establish that something is truly different about today.

One popular theme, for example, is that today's civilisation is global. Practically instantaneous communications link every country. Supranational institutions like the United Nations and the International Monetary Fund seem to limit the chances of any one country or region dropping out of sight. However, this point of view is illusory.

Ancient Egypt was part of a world system both before and after the pharaohs' demise. It did not fall in on itself in isolation but as part of a long drawn out sequence of geopolitical events that was, at the very least, regional in its scope and significance.

Another argument is that of Arnold Toynbee in his life's work, *A Study of History*, which analysed the reasons for the growth and decay of civilisations. He observed that decline could often be attributed to an absence of the economic institutions that would permit free enterprise to flourish.⁶⁶ This seemed to apply to Egypt, which did not develop a proper money economy until quite late, when it was introduced by the country's conquerors. Professor Toynbee speculated that the prevalence of private business, which is a legacy of the industrial revolution, may mean that modern global civilisation escapes the fate of previous regional civilisations.⁶⁷

Toynbee's conclusion can only really be defended on the assumption that Egypt declined due to this one cause. Yet that is something which no one who has studied the situation would seriously contend. Egypt's decline was a multifarious phenomenon whose proximate causes are generally uncertain but are certainly of more than one kind. There is also an implicit failure, or ultimate cause, which lies behind these proximate causes and itself demands explanation. If the ancient Egyptians really did fail because of business inefficiency, there remains the question of why. Why, after all their other achievements, did they did not develop an elaborate system of free enterprise and why did the European barbarians succeed in doing so?

There is little support for the apparently comforting hypothesis that Egypt declined because of a kind of cultural stagnation or conservatism, from which people today might be immune. Egypt cannot be written off as simply a dinosaur that failed to adapt to a changing world. During its long history, pharaonic civilisation was continuously innovating and evolving. For one thing, it lived through two technological revolutions – the arrival of the bronze and iron ages. Even in late times, Egypt remained vigorous. The Ptolemies established the Museum and great Library at Alexandria, attracting scholars of the highest calibre from the Hellenic world.⁶⁸ Far from being stagnant, Egyptian culture at that time was being enriched by sound and practical discoveries in science and engineering.

The discoveries made during Egypt's final centuries underpin all modern technical and scientific knowledge. Eratosthenes, working at Alexandria around 200 BC, provided an accurate measure for the radius of the earth. He also expressed the view that one could reach India by going west and he constructed a map which formed

the basis for Ptolemy's geography. Ptolemy's map remained current until the seventeenth century and so there is a direct link between these Alexandrian researches and Columbus's discovery of America.⁶⁹ Work was also being done at Alexandria on anatomy (some of it by the dissection of live prisoners!). This produced several important discoveries including the distinction between motor and sensory nerves.⁷⁰ The Alexandrian scholar, Aristarchus, developed the heliocentric theory of the solar system,⁷¹ which eventually influenced Copernicus. Hero and his colleagues produced the first steam engine along with a large number of sophisticated mechanical devices based on siphons and compressed air, including a clock.⁷²

The humanities were also advanced at Alexandria, with the preparation of a definitive edition of Homer's works and the translation of the Old Testament into Greek. Exploration was being encouraged, with a view to the trading possibilities that might be opened up, and in 100 BC Eudoxus attempted the first circumnavigation of Africa.⁷³ Towards the end of the Ptolemaic period, the behaviour of the Indian Ocean monsoons came to be understood and this created the opportunity for direct sea-borne trade to India.⁷⁴

For vigour and range of invention, the activities at Alexandria during Egypt's late period resembled the European renaissance, which led directly to the abundance and cultural richness of the modern era. Egypt's decline cannot be attributed simply to the want of ideas or to the lack of any ability to make practical discoveries, for there was no such want or lack. Egypt declined in spite of the success of its scientists and engineers. It follows that the apparent inventiveness of twentieth century civilisation is no guarantee of continued vitality during the twenty first century.

The plain fact remains that the world's foremost superpower can degenerate to the condition of being among the world's poorest countries. This can come about even after thousands of years of successful existence. Incorporation within a world system provides no permanent insurance against failure. Nor is failure attributable to any simple factor that people may be certain they have eliminated. The land of the pharaohs was not inherently less flexible and adaptive than countries today. Its demise places at least some doubt over the durability of today's advanced civilisation. If it can be established further that Egypt's case is by no means peculiar but is representative of a general phenomenon, this doubt may be turned into something more – a realistic assessment of whether today's civilisation could also come to grief, and if so how, and when, and perhaps even what may come afterwards. That means picking over the remains of history's many failures, seeking the underlying patterns and assessing how they all came to disaster.

Chapter 2 - What goes up...

The mighty are fallen

Some countries are today described as 'under-' or 'less developed' and belonging to the 'third world'. The implication is that, while other regions have developed themselves, these have not. With such terminology it is easy to delude oneself into supposing that these regions were always backward. Yet this is far from the case. Practically every part of the third world was high-achieving at some time in the past, and today's rich countries were then the less developed ones.

Consider the seven wonders of the world, all stupendous feats of engineering which would be considered impressive to this day. Apart from the great pyramid and fragments of the Mausoleum, they have been variously destroyed by fire, earthquakes and marauding Goths. None of the places where they were built – Egypt, Greece, Turkey, Iraq – would now count among the world's leading nations. Evidently, the land of the pharaohs is not the only one to have come down in the world over the last two or three millennia. On the contrary, its experience is commonplace.

Asia...

Iraq, for instance, is currently ranked at about 125 in terms of human development. It is impoverished and militarily weak, harried by the United States-led international community. Yet here, pre-dating even Egypt, the world's first sophisticated urban civilisation came into existence. Sumer and Akkad, two of its great ancient societies had a history going back to the earliest human settlements of the sixth millennium BC.⁷⁵ In an otherwise benighted world, people here were writing things down, paying taxes and going to school. Today these cities are just mounds of rubble set in a desiccated plain.

The area between the Tigris and Euphrates rivers, in modern Syria and Iraq, saw many different peoples reach record-breaking peaks of achievement during the first three thousand years of recorded history. These nations introduced the first legal codes and laid the foundations of mathematics and astronomy. When Aristotle visited, he was overawed by the densely packed cities and especially by Babylon, which dwarfed anything he was familiar with.⁷⁶ The Babylonian empire, however, was conquered by Aristotle's pupil, Alexander the Great, and the region then experienced a long slump in its status. Like Egypt, it enjoyed a revival in its fortunes under the Islamic caliphs, but went into decline again from about the twelfth century.

Iran is another country that is now on the fringes of the international community but has a very distinguished past. Arguably, the Persian empire that flourished here between 600 BC and 300 BC surpassed even that of Rome.⁷⁷ At its peak, the empire stretched from modern Pakistan to

Greece in the north and Libya in the south. It incorporated over fifty million people – half of the population of the world at that time. Iran today remains a giant country, comparable in size to the entire European Union.

The wider Islamic civilisation, to which Iran and Iraq now belong, generally occupies an inferior position in the world. None of the five permanent members of the United Nations Security Council are Muslim nations. Yet for a long period, the Christian civilisation of western Europe was under threat from Islamic peoples. In about AD 800, three quarters of the Iberian peninsula was under Arab rule and it was only fully recaptured as late as 1492. At the same time, the Ottoman Turks were establishing a powerful Islamic empire that stretched down the Levant and all across north Africa. They kept Europeans out of the overland spice trade and countered the developing Portuguese activities in the Indian Ocean. Twice they looked set to overrun Europe, only being checked at Vienna, the second time in 1682. The empire broke up after being on the losing side in the first world war.

Indochina is similarly today mostly depressed and out of luck. Yet here, in the jungles of modern Cambodia, is the temple complex of Angkor. When discovered in 1850, this was a set of stone ruins covered in lianas, the haunt of jaguars, its provenance unknown to the illiterate peasants living nearby. Once it was a flourishing centre of civilisation, the greatest of several in the region, with a population of about one million. Its finest building, Angkor Wat, is on a par with the European cathedrals, and there were apparently extensive libraries here. It was at a peak of prosperity and stability around AD 1300, but by the 1470s it had been completely abandoned.

China, encompassing about a quarter of the world's entire population, is today in a paradoxical position. It is so big that it can hardly be ignored. It has been given permanent membership of the United Nations Security Council. However, it is in many ways backward. Its citizens are poor. Its industries are inefficient. Its army is huge but ill-equipped. Nevertheless, China is the most venerable civilisation in existence, going back to around 1600 BC,⁷⁸ well into the era when ancient Egypt and Iraq were leading the world. One high point of Chinese history was around 200 BC with the completion of the Great Wall, when China was probably more advanced than Rome. Another consisted of the few centuries after AD 1000 when the Chinese made tremendous progress in science and technology and were well ahead of Europeans. During the twelfth and thirteenth centuries, the Chinese knowledge of botany surpassed that which Europe would achieve in the fifteenth and sixteenth centuries.⁷⁹

Another great power in the modern world by sheer weight of numbers is India. This only became free from centuries of European domination in 1947, and remains plagued by huge social problems. Yet India had its own precocious civilisations. Under the Mauryan kings of 321 BC to 185 BC, India was particularly advanced in mathematics, medicine and metallurgy.⁸⁰ Between the sixteenth and nineteenth centuries, part of India was ruled by the Mogul emperors, whose name has become a byword for those who possess enormous wealth. The Taj Mahal is just one of many magnificent buildings attesting to India's riches in this era.

Africa...

Sub-Saharan Africa, as everyone knows, is home to the world's greatest concentration of failing states. However, as most people are not so well aware, Africa outside Egypt was formerly home to well-ordered, urban and sometimes literate societies, long before the arrival of European colonisers. In AD 1400, the continent had some 36 cities with more than 20,000 inhabitants, comparable to the number in Europe. Nearly half of these were south of the equator. The problem is that civilisation in Africa was going backwards at the time that it was gathering pace in Europe. By 1800, the number of large cities had shrunk to 21.

The continent has by no means always lain open, helpless and backward, for foreigners to exploit. When Muslim armies were overrunning Spain in the early middle ages, they were being successfully kept out of the Sudan. Europeans did not initially find it easy to make inroads either. Even in the nineteenth century, the Ashanti put up strong resistance to British colonisation, and fought several wars before being overcome. Ethiopians defeated and repulsed Italy's attempted conquest in 1896 (Mussolini succeeded in 1936).⁸¹

The area of the Sudan and Ethiopia is nowadays associated with famine and tribal conflict. However, there were cities here by 1500 BC and Africans from the region were sufficiently well organised to invade and hold southern Egypt for a period of some 200 years at the beginning of the first millennium BC. The city of Meroe on the mid-Nile had such fame that it was known to Herodotus.⁸² It had its own writing and traded extensively with Egypt.

Later the Ethiopian state of Axum traded with the Roman empire and was one of the first places to adopt Christianity as its official religion, doing so in the fourth century AD. It too had its own writing, a coinage and urban centres with multi-storeyed buildings. The kings of Axum could speak Greek and their capital was endowed with stone palaces, temples and obelisks.⁸³ In the sixth century, Axumites conquered the southern part of the Arabian peninsula.⁸⁴ Under them, Ethiopia was a stable, civilised society at a time when Britain

was a war-torn ex-colony of the Roman empire overrun by feuding Saxon warlords – essentially the reverse of the present situation.

The Sahel, or southern edge of the Sahara, is today one of the most desperate regions of the world. Yet one or two thousand years ago, it supported large, thriving cities, including Timbuctoo. One of the seven holy cities of Islam was located here, as well as the important Islamic university of Oudane. This region, which is now chronically dependent upon international aid and relief work, was described by a native in the middle ages as rich, blessed and favoured by the Almighty. Iron was in use in this part of Africa by 500 BC, i.e. not much later than in Europe.

In western Africa, at a time when Europe was characterised by serfdom, famine, disease and petty feudal conflict, there arose a succession of large and sophisticated empires supported by rich countryside. The kingdom of Ghana flourished here between the fifth and thirteenth centuries, and inspired the modern nation (not in the same place) to adopt its glorious name.⁸⁵ It was succeeded by the fourteenth century Mali empire and the even greater Songhai empire of the fifteenth and sixteenth centuries. These were admired throughout the Islamic world for their expanse, wealth and good order. When the Mali emperor Mansa Musa made a pilgrimage to Mecca, he brought so much gold that the value of the metal in Egypt was appreciably debased. News of his sumptuous progress reached contemporary Europe, where Mali and its lord were recorded on a map of 1375.⁸⁶ West African gold circulated within the medieval European economy, after being exported to Spain via the ports of north Africa. The city of Benin grew rich on this trade, reaching a peak of prosperity at the beginning of the sixteenth century. When the Portuguese arrived they found it comparable to major European cities of the time.⁸⁷

On the east African coast, there arose an urban, mercantile and literate Islamic civilisation. It was prospering by the eighth and ninth centuries. Gold and ivory from the interior were shipped via Sofala in modern Mozambique to Oman and thence to India and China. An Arab visitor in AD 1331 described the east African town of Kilwa as among the most beautiful in the world. Portuguese sailors arriving in 1514 were equally impressed, remarking upon the stone and mortar buildings and the luxuriance of the surrounding countryside. Mogadishu and Mombasa were also early cities that have remained important to the present day.

The most well known site of early urbanisation in Africa is the rather mysterious ruin known as Great Zimbabwe. Although early researchers found it hard to believe that it could be the work of Africans, this was entirely a local development and was occupied from the end of the first millennium AD. It had a population of 18,000 and there is

evidence for a complex administration and social hierarchy. It seems to have come to an abrupt end, and was already in ruins by the time that the Portuguese came to hear of it in the early sixteenth century.

Much of the history of institutional complexity in Africa remains unknown and unexplored. The vast region of central Africa is particularly neglected. Nevertheless, oral traditions and the reports of early European travellers indicate that this region also had large and wealthy settlements at one time. The view of Africa as a 'dark continent' only recently 'opened up' by Europeans does a gross disservice to the true history of its many once talented peoples.

America...

America is today a continent that has been thoroughly invaded by Europeans. In the north, the indigenous peoples are totally subjugated. In central and southern parts, they tend to be peasants marginalised by a European-derived elite. Nevertheless, the new world was the scene of experiments in civilisation that to a considerable degree matched those of the old world. Numerous different societies and cultures grew up, flourished and declined in the couple of millennia before the arrival of Europeans.

The first American civilisation to come to the attention of the Europeans was that of the Aztecs in the valley of Mexico. Its ancient capital, Tenochtitlan, is today the site of Mexico City. It was founded on an island in the middle of a lake and, like Venice, was threaded by numerous waterways. This was undoubtedly a great city. It encompassed 2500 acres, comparable to the 3500 acres of Rome in its imperial heyday, and it had a population of 90,000 when that of London was only 40,000. The city was joined to the mainland by a giant causeway over a mile long. Along this fresh water was brought by an aqueduct six feet wide. The city's sanitation systems were far in advance of anything available in Europe until the end of the eighteenth century.⁸⁸ The Aztecs were also fearsome warriors who held sway over a large part of what is today southern Mexico, an area the size of modern Germany. Their empire yielded the Spanish conquistadors huge wealth, largely in gold, which was soon being shipped off to Europe.

The Inca civilisation of South America was another one of the great empires of all time, stretching over 350,000 square miles. The capital city of Cuzco had efficient systems of drainage and water supply.⁸⁹ Metals were mined and worked on a considerable scale. This included not just bronze but apparently also platinum, which is beyond the capabilities of primitive furnaces and was unknown in Europe until about 1730.⁹⁰ The Inca royal road extended a total distance of 3250 miles, longer than the longest Roman road (from Hadrian's wall to Jerusalem) and longer than any road anywhere until

the nineteenth century. Besides this there was the 24-foot wide coastal road of 2520 miles and numerous lateral roads. The city of Quito was a magnificent example of urban planning and far surpassed what the Europeans were doing at that date. The Incas excelled militarily and, between 1100 and 1500, they absorbed more than five hundred small tribes into the empire. They were also advanced in surgical techniques and performed bone transplants.⁹¹

Europe...

Some regions in Europe were much more accomplished in the past than they seem today. The seat of the Roman empire is a clear example. Italy today remains a wealthy and significant country. However, during its heyday, the empire that arose here dominated the Mediterranean and large parts of Europe. It exceeded in reputation any state that existed or had ever existed. When the western half collapsed, having been an enormous fact of life for seven or eight hundred years, it created huge shock-waves that have reverberated down the centuries. Italy may have recovered its prosperity in renaissance and recent times, but this has more to do with the Lombards and other Germans who settled in northern Italy than with the original ethnic Romans.

Greece is another prime example. During the fifth and fourth centuries BC, it was in the vanguard of European civilisation. The Hellenistic culture represents a point of departure for European politics, philosophy, mathematics, science, literature and historiography. However, these achievements are long over and Greece is now regarded as a kind of poor relation within the European community.

Europe as a whole has also seen better days. In 1914, Europeans occupied or controlled 84 percent of the earth's surface.⁹² The continent is still far richer and more powerful than Africa, Asia and South America. Cultural traditions that originated in western Europe retain a considerable hold on the world. Nevertheless, Europe no longer dominates as effortlessly as it did a hundred years ago, when the rest of the world's fate could be said to be decided in London, Paris and Berlin.⁹³

Australia and Oceania...

In Australia and the Pacific islands, complex societies never arose. All the same, these regions seem to have been more accomplished in the past than they were when Europeans arrived. There is some evidence that agriculture was attempted in prehistoric Australia, but eventually abandoned. The heyday of the Pacific civilisation was apparently between about 1500 BC to 500 BC. By AD 500, Polynesians had abandoned the use of pottery and were no longer regularly making the daring long-distance voyages by which they settled the ocean's far-flung islands.

The forgotten ones

It appears that not only is it possible for high-achieving societies to degenerate to third world status, but it is actually extremely common. Civilisations have sometimes gone even further than this and passed entirely into oblivion.⁹⁴ In Herodotus's day, for instance, the names of Sumer and Akkad were no longer familiar to the people of ancient Iraq.⁹⁵

Until the 1880s, the Hittites were little more than a name in the Bible.⁹⁶ Their history and culture have only been reconstructed relatively recently by the efforts of archaeologists. The Hittite state emerged in Asia Minor around the beginning of the second millennium BC. It showed considerable advancement in the fields of military tactics, political institutions, legislation and the administration of justice.⁹⁷ Hittites helped destroy various civilisations in ancient Iraq and were well known to the Egyptians. By 1200 BC, however, Hittite civilisation was itself overcome and disrupted, only continuing in the empire's south-eastern provinces. Here it enjoyed a second lease of life lasting five centuries.⁹⁸ It is this relocated Hittite nation that appears in the Old Testament, with no indication that its origins lay further to the north and that it had had a whole other history before descending into Palestine. In the last decades of the eighth century BC, these remaining Hittite kingdoms became Assyrian provinces.⁹⁹ By the time that Greek travellers reached the original Hittite homeland in Asia Minor, its very name had been forgotten.¹⁰⁰

At the other end of the Tigris-Euphrates basin, the city of Dilmun lapsed into even greater obscurity. This important entrepôt rose on the island of Bahrain around 2000 BC¹⁰¹ and came to dominate the trade route from Iraq to India.¹⁰² Around the time of Christ the city was abandoned¹⁰³ and its former site was given over to nomadic camel-herders. Dilmun only became known again in the last hundred years,¹⁰⁴ after references were found in Assyrian and Babylonian inscriptions. It is just one of many other forgotten cities waiting to be discovered. They include: Sodom and Gomorrah; Tursa, the putative homeland of the Etruscans; Wasukanni, the capital of the Mitanni empire; Kussara, the seat of Anitta, first king of the Hittites; Nesa in eastern Anatolia; and Arzawa, a kingdom which flourished in western Anatolia around 1400 BC.¹⁰⁵

Another civilisation that was all but completely forgotten was that which flourished in the Indus valley of modern Pakistan from 2500 to 1500 BC. Until an Indian archaeologist began to unearth the Indus city of Harappa in 1921,¹⁰⁶ it had generally been believed that there were no buildings in India earlier than 500 BC.¹⁰⁷ Yet the Indus civilisation was as accomplished as any, with drains, bathrooms, latrines and shops all in

evidence.¹⁰⁸ Its cities were laid out in the form of a Manhattan-like grid, indicating the existence of a centralised authority capable of complex planning. Besides the two great centres of Harappa and Mohenjo-Daro there were numerous smaller settlements, and the total area of the Indus valley civilisation exceeded that of either Egypt or ancient Iraq.¹⁰⁹ The Harappan culture changed little over its thousand years of existence. For some reason the cities were eventually abandoned and buried in the mud. The region reverted to a simpler, decentralised way of life and it was another millennium at least before civilisation re-emerged in this part of India.

Central America also hosts a lost civilisation – that of the Maya, whose cities have only re-emerged one by one from the jungle.¹¹⁰ In travelling to the Aztec heartland, the conquistadors passed right through the region where Mayan civilisation had flourished, without even suspecting its existence. Most of the facts about the Maya are still obscure.¹¹¹ Their writing has only been tentatively deciphered in the last few decades and seems to give no names of kings or other details that might bring their past to life.¹¹² What is known is that the Mayan city states spread across the Yucatan peninsula and the highlands of southern Mexico, and were connected by an extensive road network. This civilisation lasted about as long as pharaonic Egypt, but after AD 1000 the cities seem to have been abandoned.¹¹³ By the time Europeans arrived, the descendants of these city builders were simple horticulturists living in scattered, socially undifferentiated communities. Their conquest yielded none of the rich treasure that was plundered from the Aztecs.¹¹⁴

A never-ending saga

To survey the incidence of societal decline is, it turns out, to survey some five thousand years of history across all six inhabited continents. This is a recurrent and global phenomenon.¹¹⁵ It is not just a question of some underprivileged nations having had happier times in the past. The world has seen repeated comings and goings. Everywhere and as far back as one can tell, there has been a continual turnover of dominant nations. This is a saga that never ends.

For example, the rise and fall of Rome is familiar to all. Yet Rome was just the most spectacular of a whole series of societies that rose and fell around the shores of the Mediterranean. Before the Romans, during the eighth and seventh centuries BC, the Etruscan people established an extensive empire on the Italian peninsula. Around 600 BC, however, they stopped expanding and came to suffer a series of defeats at the hands of the Romans. Their culture was absorbed into that of Rome and Etruscan identity was extinguished entirely with the award of Roman citizenship in 89 BC.¹¹⁶

The Greeks were another society whose rise and fall preceded that of Rome. They had powerful provinces in the south-west of the Italian peninsula extending as far as Naples. From the fourth century BC, however, the Greek city states went into an uneven decline. They were forged into a Hellenistic empire under Philip of Macedon and his son Alexander the Great. By the beginning of the second century, this empire was in a severely weakened state and the Romans took over. Meanwhile, the city states of the classical period had themselves been preceded by the Mycenaean civilisation, which flourished between 1600 and 1200 BC and laid siege to Troy.¹¹⁷ Its dimly remembered exploits were the basis of Homer's poetry.

Also ascendant in the Mediterranean long before Rome was the Minoan civilisation. This began to take shape in Crete from about 2600 BC.¹¹⁸ The Minoans had luxurious palaces and storehouses for the grain collected in taxes. There was extensive trade with Egypt, Iraq and Mycenae. The Minoans suffered some sort of disaster in the mid-fourteenth century BC. Their society persisted for a few centuries in a weakened and decadent form, but finally died out. Crete was taken over by the Dorians in the sixth and fifth centuries BC and became a Greek island.

The Phoenicians were yet another people to anticipate the Romans in constructing a great Mediterranean civilisation. They originally founded a series of cities along the Levant from about 1500 BC onwards. They were highly accomplished merchants and traded in such products as purple dye and paper. The Phoenician city of Byblos was especially famous for the latter, and gave its name to the Greek word for book and English 'Bible', 'bibliography' etc. The Phoenicians established overseas bases around the rim of the Mediterranean, the most famous being the ninth century BC city of Carthage in modern-day Tunisia. After repeated attacks in its homeland, by one empire-builder or another, the focus of Phoenician civilisation shifted to the western Mediterranean, with Carthage its leading city,

In its first international treaty, the Roman republic recognised the Carthaginian trade monopoly in the western Mediterranean, in return for being allowed to pursue its own military agenda on the Italian peninsula. As Rome's power grew, the restrictions on its trade were increasingly intolerable and conflict became inevitable. The Romans defeated Carthage twice but remained fearful of its potential. In 150 BC, the pretext for a new war arose and the Roman statesman Cato urged that 'Carthage must be destroyed'. His wish was granted. Carthage was utterly razed to the ground. There were and are no more Phoenicians. Even their language is lost.

The saga of rise and fall has continued as much after the end of the western Roman empire as it did before its beginning. The first significant new empire to take shape in Europe after Rome's demise was that of the Merovingian kings in France. These decayed after a century or so and were replaced by the Carolingians. Their greatest scion, Charlemagne, extended an empire into Germany and northern Italy. On Christmas Day AD 800 he had himself crowned Holy Roman Emperor by the pope, a choice of title that shows the prestige still possessed by the long defunct Roman empire. Charlemagne's domain was partitioned thirty years after his death, and the resulting kingdoms were themselves partitioned two or three times before the ninth century was out.

The concept of a Holy Roman Empire, based in central Europe, persisted and eventually became associated with the Habsburg family. By the early sixteenth century, the emperor Charles V ruled over territory that included Burgundy, the Netherlands, Austria, Hungary, Bohemia, Spain and southern Italy. The Habsburg empire was far and away the dominant force in contemporary Europe. For a time it seemed likely to establish a pan-European empire.¹¹⁹ However, the Netherlands were lost by the mid-seventeenth century and Spain's glory faded. The Austrian end also became weaker over time, and the Holy Roman Empire ceased to exist from 1807. The Habsburgs continued to rule over an Austro-Hungarian empire, but this was afflicted by chronic economic and political problems. It lagged behind in industrialisation and survived largely because each of Europe's more powerful states was reluctant to see it fall to one of the others. The Austro-Hungarian empire finally became a casualty of the first world war and the long-lived Habsburg dynasty was no more.

The rise and fall of European nations was also played out on a wider stage. Spain's power, for instance, spread around the world. In 1494, the Spanish and Portuguese partitioned the globe between them, with the pope's approval. At the time, this seemed only natural. Both countries were far ahead of the rest of Europe in their explorations. It quickly proved an empty gesture, as the French, British and Dutch joined the hunt for riches in America and the far east. Prince Henry of Portugal (the Navigator) stimulated improvements in seafaring that made the European maritime expansion possible. Yet it was not his country that benefited the most in the end. The Dutch won the battle for maritime south-east Asia and the British that for India. The Portuguese retained just a few outposts (including East Timor and thus storing up trouble to come). By 1821, the Latin American states had broken their links with Spain and Portugal,¹²⁰ and thereby largely terminated the once

grand and far flung empires of these two Iberian states.

The Dutch and British may have eclipsed the Iberians, but their empires turned out to be no more permanent. The Dutch East Indies, a significant overseas property of the Netherlands for over 200 years, eventually achieved independence as Indonesia in the decades following the second world war. Before this, the Dutch found themselves being overtaken by the British. The latter's empire came to stretch right round the planet and involved the acquisition of whole continents. Britain industrialised more quickly than the rest of Europe and, with its extensive overseas trade, became the richest nation in the world. At the Battle of Waterloo in 1815, British supremacy was convincingly emphasised and the country reached its zenith in 1860-70.¹²¹ In those days the shops of Oxford Street stunned foreign visitors. They were elaborately furnished, brilliantly lit and crammed full of goods from every corner of the earth. It was said that in England someone who had only potatoes to eat was considered starving, while in Germany someone who had potatoes was well off.¹²²

Britain's heyday was as short-lived as any. In 1905, a journalist asked whether the empire that was celebrating the first centennial of the Battle of Trafalgar would survive to celebrate the second.¹²³ The answer was that it would not, by a long chalk. Beginning before the second world war, and continuing apace thereafter, the British empire broke up. Today, Britain is still among the richest and most powerful members of the United Nations, but it is no longer a superpower. Once it controlled a quarter of the surface of the earth but now it is largely confined to the British Isles. Once its navy was as powerful as the next three or four navies put together.¹²⁴ Now it is itself of the third or fourth rank. Once it had the highest per capita income in the world. Now it has slipped to somewhere below tenth place. In every relevant indicator, Britain's relative decline is sizeable and obvious.

Europe has seen nations rising and falling, one after the other, like the cars on a Ferris wheel. The same is true of everywhere else. The history of the whole region of Peru, for instance, is one of changing fortunes of various groups. The pre-Inca cultures of Chavin, Paracas and Mochicas flourished from about AD 400 to 1000. The Ica-Nazca culture produced massive figures and lines on the Nazca plain, only for the Incas to drive their coastal road right through them. An empire based upon the cities of Huarí and Tiahuanaco rose to prominence over the course of three centuries, only for the cities to be abandoned by AD 1000.¹²⁵ The Chimu empire also predated the Incas, lasting between AD 1000 and 1466. From the city of Chan-Chan it ruled over 600 miles of the coast and engaged in mass production of trade goods.

The Aztec empire was just the latest of a succession of great societies in central America, and was barely 200 years old when the Spaniard Hernan Cortés destroyed it. Various tribes were building temples and cities in the region from 1000 BC. They included the Olmecs, who had a distinctive form of art and architecture and flourished from 800 BC to AD 600 but then declined into obscurity. From about 200 BC, the city of Teotihuacan rose to prominence, its huge pyramids dwarfing everything else in Mexico. Its mastery then waned and in AD 900 it succumbed to the Chichimecs. By the time that the Aztecs rose to prominence, Teotihuacan was a forgotten ruin.

In North America, there was a similar saga of rise and fall, although the last complex societies died out shortly before Europeans arrived. The earliest civilisation in the region was brought by the Hohokam people who arrived from Mexico about 300 BC and built cities in the south-western region. The Hohokam developed sophisticated irrigation systems, and there is evidence for government and social stratification by about AD 1000. Yet the Hohokam's descendants, the Pima Indians of historical times, were simple cultivators devoid of hierarchy.

The Mogollon people emulated the Hohokam by taking up agriculture and urban living, as did the Anasazi, who underwent a similar flowering in the north. At Chaco Canyon, the Anasazi built eight towns that were connected by roads nine metres wide. These supported a total population of around 115,000. They were abandoned during the first half of the twelfth century, leaving just a 10-mile long, silt-filled and barren valley. The Mogollon culture seems to have collapsed at about the same time. By the end of the thirteenth century, the whole area was deserted and its population moved to the south and south-east, where there arose simpler communities that continued into historical times.

Another centralised society emerged at Casas Grandes in what is today northern Chihuahua, a state of Mexico. Casas Grandes had a population of 2,200 people, and seems to have been the economic and administrative centre for a region of some 50,000 square miles. It too was abandoned by the fifteenth century.

In the south-eastern part of the United States, the picture resembles that of the south-west. The Hopewell culture arose here around 100 BC, built giant earthworks, traded over a large region, and then went into decline around AD 400. Institutional complexity re-appeared by AD 700, with the emergence of the Mississippian tradition. The town of Cahokia, which was one of several urban centres, became the capital of a full-blown state. It included 2000 acres of houses and had a population of some 30,000. This society went into terminal decline in the sixteenth century.

On the shoulders of giants

Over the last five thousand years, no society has remained permanently in the ascendant and few regions have remained permanently in a backward condition. Highly accomplished societies have gone into decline and been overtaken by others, not once, nor a few times, but over and over again. Conversely, no civilisation, not even the very first, has sprung up entirely spontaneously. They have all built on the achievements of other peoples, inheriting much from the past, and suckling at the breast of those whom they later vanquish.

Rome, for instance, took much from the Etruscans and the Greeks whom it then eclipsed. Rome was actually ruled by the Etruscan Tarquins in its earliest history, eventually expelling them and becoming a republic. Romans were always somewhat fascinated by this venerable people and the emperor Claudius wrote an Etruscan history. Similarly, the Romans acknowledged the enormous intellectual debt that they owed to the Greeks, even as they conquered and subjugated them. Some Roman commentators actually protested at the extent of borrowings from Greece.¹²⁶ While Romans excelled in the practical arts of warfare, industry and government, they made precious few original and important additions to the Greek intellectual tradition.

What is true of Rome is true of all. For example, the Persian empire was built upon the ruins of an earlier empire of the Medes. Similarly, the Incas inherited techniques from many cultures that preceded them in South America, even though they re-told history so as to emphasise their own originality.¹²⁷

In exactly the same way, European civilisation owes a colossal debt to the past. It builds on its predecessors as they built on theirs. Europe's accomplishments can be traced back to many non-European peoples.¹²⁸ The link to Rome, for instance, means a link to Greece and the Etruscans, who were in turn derivative of other civilisations in the ancient middle east. The letters with which this book is written developed from the Phoenician alphabet and hence from the writing of ancient Iraq. The numerals are Arabic. The zero is an Indian invention. Time and angle are measured in divisions introduced by the Babylonians. Huge swathes of Greek science were lifted wholesale from earlier civilisations. By the second millennium BC, the ancient Iraqis had calculated $\sqrt{2}$ correctly to one part in two million, knew how to calculate cube roots, and were aware of Pythagoras's theorem, 1200 years before Pythagoras was born.

The European way of life has subsequently been enriched by contact with many other peoples, including Arabs, south Asians and Chinese. Much Greek knowledge, for example, did not pass to north-western Europe directly but came via the

Islamic world where it was expanded and improved upon. Even something like the wheelbarrow was a Chinese invention. In the eighteenth century, prominent thinkers like Leibniz and Voltaire looked to China for guidance on moral and political issues, appealing to Chinese examples as they advocated such causes as benevolent absolutism, meritocracy, and the intensification of the economy.¹²⁹

Europe's recent achievement is firmly rooted in the common achievement of humanity and there is no reason to credit it with unique gifts. There is no reason to suppose that it has escaped the long-running saga of the turnover of ascendant societies. Nevertheless, that certainly is the common view in the rich countries today. Few people seriously believe that some Somali general will one day be sponsoring archaeological investigations into the former achievements of the British state. Something like this may have happened to the Egyptians, but people now tell themselves that things are different. This or that reason means that the experiences of every past civilisation are no longer relevant.

The truth is that ascendant societies have always shown a remarkable amnesia about where they came from and a remarkable insouciance about the fates of those who have gone before. They readily overlook the role that other peoples have played in their success. They are easily persuaded that their accomplishments are all their own doing and involve some special factor that removes any chance of failure. The Akkadians, for example, deduced that their dominance was natural, and therefore permanent, because of their location at the centre of the world's three conjoined continents. The Greeks believed that Delphi lay at the exact centre of the world.¹³⁰ The Chinese consider theirs to be the 'middle kingdom' and uniquely civilised. In their heyday, the Venetians pointed to the fact that Venice is located at 45 degrees latitude, i.e. halfway between the equator and the pole, as the guarantee of an ever-glorious future. Sir William Herschel proved to many people's satisfaction that Britain's hegemony was inevitable given its position at the centre of the world's land mass.¹³¹

Similarly, the classical Athenians reasoned that their democracy gave them a conclusive edge over all other peoples. For medieval Arabs, it was Islam that assured their rightful mastery. The mid-Victorians thought that they had discovered the secret of permanent prosperity and world harmony in the principles of classical political economy.¹³² Further, it was supposed that by being 'the first frog to jump out of the pond' Britain had achieved a position of unassailable dominance.¹³³ Darwin's ideas on natural selection seemed to provide additional justification for this view. European thinkers argued that they had essentially won the

competition for survival between human societies.¹³⁴ All such opinions may now be recognised as misguided fantasies, yet people continue to entertain the latest versions of them. They seldom countenance the possibility of future reversals as thoroughgoing as those which dispatched the Egyptians, Hittites and Sumerians.

A busy, busy world

One of the greatest conceits of today's leading countries is to view the world as having been fragmented into isolated regions until the point that their own sailing ships, railways and jet airliners went out to begin knitting it all together, thereby producing today's global civilisation. Nothing could be further from the truth. This is a busy world and it has been such for a long, long time. Other regions of the world have never been waiting passively to be discovered and enlightened by Europe. They have been inventing, evolving, trading and exploring for as long as they have been in existence. East Asia, for example, was engaged in large-scale international commerce well before Europe was. In 1680, a director of the East India Company observed that India had ten times as much trade with other eastern nations as did any European power. Seen on the broadest temporal and spatial scales, humans everywhere have been moving forward on a common front. The view that Europe or America has brought special benefits to the world is as parochial and as tunnel-visioned as would be that claim from anywhere else.

The world has been interconnected for millennia and it has seen an extensive traffic in both ideas and material goods. Information has been getting through, even if more sparsely and slowly than today. People have always taken an interest in news from abroad. Thomas Pakenham, visiting a remote part of Ethiopia in the 1950s, was surprised to find that the locals had a good knowledge of world affairs. They acquired it from the old London newspapers wrapped around imported goods.¹³⁵

The ancient Iraqi and Egyptian civilisations were very much in contact. They fought each other, conducted trade and maintained diplomatic relations. The Indus civilisation had trading contacts with Iraq.¹³⁶ In 1600 BC, the horse-drawn chariot emerged almost simultaneously in Egypt and China,¹³⁷ which suggests that east and west were exchanging cultural ideas at least 3500 years ago.¹³⁸ Artefacts and inscriptions associated with the city of Dilmun and dating from around 3000 years ago have been found all the way from Greece to Myanmar (Burma).¹³⁹ Long before the emergence of the Roman empire, the Phoenicians were dealing in tin from Cornwall and iron from China.¹⁴⁰

Many Egyptian texts reveal the sophisticated international relations of long ago.¹⁴¹ Hittite documents have been found in the ruined palace of

the pharaoh Akhenaten who reigned around 1350 BC.¹⁴² They include a letter from the Hittite king Suppiluliamas, congratulating Akhenaten on his succession.¹⁴³ When Akhenaten's successor, Tutankhamen, died, the young widow wrote to Suppiluliamas asking to be sent his son as a husband. Suppiluliamas complied but the Hittite prince was murdered on arrival in Egypt – apparently by a powerful courtier who subsequently married the Egyptian queen instead.¹⁴⁴ The Egypt of this era was also in contact with Mycenae.¹⁴⁵

Even the rather remote states of Africa were connected into the global system of their day. Meroitic society, for example, was essentially a part of world Hellenistic civilisation.¹⁴⁶ East Africans fought alongside Indians and Persians in Xerxes's army that marched on Greece in 480 BC. The Axumite state of Ethiopia played a significant role in international politics during the first millennium AD.¹⁴⁷ An Ethiopian embassy visited Rome and Avignon in 1309, and Ethiopian delegates attended the Council of Florence in 1441. In 1428, the king of Aragon received an ambassador from the Ethiopian ruler proposing an alliance against the forces of Islam.¹⁴⁸ Even aboriginal Australia was tenuously connected into the world system. There were periodic expeditions from Indonesia to the Cape York peninsula, which then provided a gateway to trade routes that criss-crossed the continent. Some Indonesian words entered the local aborigine language before Europeans 'discovered' the continent.

In America, it is generally considered that the northern, central and southern parts developed independently. Nevertheless, they all share certain cultural traits and trade surely took place between the central American civilisations and those of south-eastern and to a lesser extent south-western North America. One of the most intriguing questions concerns contacts between the old and new worlds, prior to the voyages of Columbus. It is now conventionally assumed that there was no regular contact, particularly given the lack of synchronicity in cultural developments. Yet there is increasingly strong evidence for at least sporadic contact from both east and west, including clear indications of Japanese expeditions to South America long before those of the Europeans.¹⁴⁹ If the connection with America has expanded the horizons of the world system, it has certainly not changed its basic nature. People have been trading and conducting international politics all the way back to the obscure beginnings of the first complex societies.

It is quite misleading to depict the current progress of east Asian and other nations as due to a process of westernisation, i.e. the borrowing of European knowledge and techniques. The fact is that all parts of the world have been borrowing

from each other since time immemorial. The Eurocentric view of history depicts Europeans as going out to the world and carrying to it commercial and industrial revolutions. Yet in most cases Europeans were only carrying forth what they had earlier received from those very regions. The three things that Francis Bacon lauded in the sixteenth century as transforming the science and technology of his day – namely paper, gunpowder and the magnetic compass – all came originally from China.¹⁵⁰ The same is true of porcelain ('china'), which played an important role in early industrialisation. The efforts of Josiah Wedgwood and others were stimulated by a desire to reproduce the imported far eastern wares that were then highly admired and sought after.

Europe lay behind other parts of the world in terms of technology until at least the eleventh century. It was a backward, barbarian region, brutal and ignorant, that did not compare at all favourably with the sophisticated, well-lit cities to the south and east. In the tenth century, when Paris was still a village, Baghdad was a metropolis of 1.5 million inhabitants.¹⁵¹ Here Ibn Al-Haytham produced a treatise on the principles of optics and perspective that would influence renaissance artists and lens-makers five hundred years later. Muslim engineers devised all sorts of water and wind machines with valves, cranks and pistons, many of which influenced the development of European machinery. Pilgrims to the holy land, which was then under Muslim control, were amazed by its high sophistication and the luxurious standard of living available to European settlers.¹⁵²

China was scientifically and technologically far in advance of Europe during the first millennium AD and remained ahead until about 1500. China's astronomers calculated the distance to the sun, while technologists developed arch bridges, the stern-post rudder, some ingenious pumps and numerous other machines.¹⁵³ Cast iron was introduced and, at the end of the eleventh century, China's output of iron per head exceeded the figure for Europe in 1700.¹⁵⁴ The Chinese were mining coal in considerable quantities since Roman times.¹⁵⁵ They also drilled wells to tap natural gas, while the people of Myanmar were sinking oil wells in the tenth century.¹⁵⁶ It has been said that the Chinese of this era came close to anticipating Europe's industrial revolution by some four hundred years,¹⁵⁷ only their society underwent retrenchment before these developments came to fruition.

Other regions have equally made considerable contributions to humanity's shared endowment. More than half the foods that the world eats today were developed by Andean farmers,¹⁵⁸ including the potato, tomato, chilli pepper and maize. Some of these presented significant challenges to early cultivators, exceeding those of old world plants.

Africa too was responsible for many fundamental innovations, if one goes further back, covering such areas as stone working, food preparation and perhaps also the manufacture of pottery. There is nothing special about Europe, or the north Atlantic, or America. Technological inventiveness is not something that Europeans exclusively discovered in the industrial revolution. Many nations have been inventive and vigorous in the past. They continue to be so today.

Just as there is nothing special about Europe, there is also nothing special about this era. People's basic concerns and experiences have not changed very much. Today's fads and foibles are often only the fads and foibles of the day before yesterday. The health food phenomenon, for example, was alive in the first century AD, when Petronius extolled the virtues of wholemeal bread in his *Satyricon*. This was old news then, since Hippocrates had given the same message six centuries earlier.

Similarly, whereas it was once argued that ancient societies did not possess market institutions, recent scholarship has revealed an astounding amount of evidence for full-blown commerce, taxation, and even a real estate market, from thousands of years ago. The differences between capitalist and command economies that seem to have so characterised the twentieth century and contributed to its many tensions also existed in ancient times. The Marxist notion that capitalism was a new form of economic institution arising from feudalism, and that communism would be a newer form still, is simply wrong.

People are too willing to believe in differences between their ancestors and themselves. After all, information is sparse, and societies did not necessarily write down or emphasise things that they took for granted.¹⁵⁹ This may give a distorted impression of what the people of the past thought and did. In fact, they were human beings, with the same analytical skills and creativity as people today. They faced many of the same problems and they arrived at the same solutions. The Egyptian peasants who built the pyramids were not much different from those who built the Suez canal. The dwelling sizes of ordinary people have not changed much in five thousand years. The essential features of a city existed in the first city as in the latest one. There are differences between modern times and past times, but they are mostly surface differences, not differences in the inner nature of society. They are mostly quantitative rather than qualitative differences. It is very difficult to sustain an argument that the era of American and European dominance has introduced something fundamentally new, still less that it is something which ensures their dominance will continue.

On any realistic, non-self-deceiving view, the greatest certainty about the present state of affairs

is that it will not last.¹⁶⁰ The world has never stood still in the past and it will not do so in the future. The arrangement of nations in the world today is a transient one. The rich countries will be eclipsed in

the long run, and that will inevitably be by people who are today regarded as incompetent and inferior.

Chapter 3 - Imposing order

The enforcers

Pharaonic civilisation was the product of a war of conquest, in which the entire Nile valley was brought under a single ruler. This illustrates one of the major themes in creating an ascendant society, which concerns the existence of a powerful elite, capable of enforcing its will at home and abroad. Imperialists like the Romans are considered great precisely because they were willing and able to impose their dominion on a whole host of other peoples. Some civilisations, including those of Harappa¹⁶¹ and the Incas,¹⁶² give the appearance of out and out totalitarianism, with their subjects being highly regimented and controlled. This kind of coercion, or the habit of imposing order, can be identified as one of three characteristic dimensions of institutional complexity. (The other two will be described in following chapters.)

One historian has enumerated the factors that affect a nation's standing in the international community. They include the capability of its armed forces and the economic and technological resources on which this capability depends. Also important are the resolution and effectiveness with which foreign policy is conducted, and the ambition and discipline of the people. Finally, all these factors must be considered relative to the capabilities of other nations.¹⁶³ They boil down to one essential notion. This is that a society's status depends upon the credible threat and, if necessary, the reality of physical violence. From the earliest times, that has been the gold standard on which rulers have based their authority.

The reputations of mighty empires have always been based upon military zeal and prowess, and that is usually associated with a highly motivated elite which sets out to achieve a position of dominance. The Hittite empire, for example, was largely carved out by the great military leader Suppiluliamas around 1380 BC.¹⁶⁴ The early rulers of the Persian empire were similarly men of violence who did not shrink from brutal treatment of those who stood in their way. Cambyses II murdered his brother on ascending to the throne and generally behaved in the way that dictators have done to this day.¹⁶⁵

In south-east Asia, the durability of the local states, or mandalas, depended upon the energy and ambition of the overlord.¹⁶⁶ Jayavarman II, who founded Angkor, laid the foundations of its greatness through military conquest of rival mandalas.¹⁶⁷ The Chin dynasty of China was established by a general who had been heavily involved in the fighting of the Three Kingdoms period and who restored order to China after decades of turmoil.¹⁶⁸ The Etruscans achieved their early dominion over the Italian peninsula by conquering and absorbing local tribes. They had to subdue the warlike Sabines before establishing

their monarchy at Rome.¹⁶⁹ The Aztecs rose to prominence by engaging in a series of violent and bloodthirsty conquests down the Pacific coast, as far as Guatemala.¹⁷⁰ Captives were shown no mercy, their still-beating hearts being cut from their chests in frequent rituals of mass sacrifice.¹⁷¹ The success of the Incas was similarly based upon military action. They never lost an important battle after AD 1437.¹⁷² The British succeeded in establishing their raj in India not because of their moral superiority but because of their deadly small arms and adroit handling of horse artillery.¹⁷³

The attitudes that cause rulers to try and dominate other societies are the same as the attitudes that lead them to dominate within their own borders. Internal control and external assertion are two aspects of the same phenomenon. They both stem from the eagerness of some people to coerce and rule over others. Dynasties are often established by invaders, who come in a violent manner expressly to harry and subjugate a sedentary population. The Etruscans, for example, came to the Italian peninsula, probably from Asia Minor, around 1000 BC.¹⁷⁴ The Western Chou, who established China's first major empire, seem to have been invaders from the barbarian west. They were less sophisticated than the Shang whom they conquered and displaced.¹⁷⁵ Two thousand years later, China was conquered by the barbarian horde of Genghis Khan. The resulting Mongol dynasty ruled for a hundred years.¹⁷⁶ The Hittite elite appears to have come from elsewhere in order to rule what became the Hittite nation.¹⁷⁷ The Aztecs were a barbarian people who arrived in the Valley of Mexico around AD 1200 to found an empire. The Inca rulers were another group of foreign invaders. They first brought the Quechua Indians under their control,¹⁷⁸ and then went on to extend their dominion up and down the Pacific coast of South America.

When formerly ascendant societies go into decline, weak or poor leadership is in evidence. In ancient China, for example, the royal house of the Western Chou began to lose its authority from 934 BC and this eventually culminated in the state's collapse.¹⁷⁹ Impotent rulers may similarly have been a factor in the Harappan collapse,¹⁸⁰ while the problems of the Etruscans were probably exacerbated by domestic political instability.¹⁸¹

The decline of the Roman empire has been linked to degeneration in governmental effectiveness.¹⁸² The senate seemed more concerned with personal squabbles than with running the affairs of the empire.¹⁸³ Edicts were given out left, right and centre but they proved useless in the absence of an executive strong enough and credible enough to enforce them.¹⁸⁴ Furthermore, there was no clear rule of succession to the empire. The principle had been established

of auctioning off the empire to the highest bidder and the emperors who came to the throne in this way proved to be mostly mediocre.¹⁸⁵ Barbarian pressure on Rome also revealed the weakness of the centre. The more distant provinces became vulnerable to secession or conquest as it was made clear that the empire no longer had the vigour necessary to defend them. Bede linked the collapse of Roman rule in Britain to the shock created by Alaric's sack of Rome in AD 410, which drastically undermined the empire's aura of invincibility.¹⁸⁶

Lack of leadership is often manifest in squabbles over who should occupy the supreme position. For example, after 2200 BC, there were quarrels among rival claimants to the Akkadian throne, and the empire fragmented as a result.¹⁸⁷ Similarly, a sequence of palace murders and intrigues led to a drastic weakening of the Hittite state. Its fortunes were only restored by the emergence of a strong king named Telipinus around 1525 BC.¹⁸⁸ One can trace the downfall of the Persian empire under the successors of Xerxes via a fatal series of murders and assassinations.¹⁸⁹ Palace revolutions also became increasingly frequent prior to the collapse of China's Han dynasty, at the same time that army generals were strengthening their power bases. In AD 220, even the appearance of a central government was no longer maintainable and China collapsed into anarchy.¹⁹⁰ In 1527, the Great Inca Huayna Capac died without naming a successor. There followed a dispute for the Inca-ship between rival claimants, Huascar and Atahualpa, resulting in a five year civil war.¹⁹¹ The lack of an uncontested leader was a key factor in the phenomenal success of the Spanish in subduing the empire in 1532.

The weakness of the authorities in a declining society is supplemented by a reduction of military vigour. In late classical Greece, for example, citizens lost their enthusiasm for military service and armies were recruited from foreign mercenaries. Political decay in the later Roman empire was also linked with a decline in the strength of the army, which again came to consist of barbarian mercenaries. The Romans made committed legionaries when they were defending their homeland against its enemies, but military service was a less inspiring prospect when it became more a matter of keeping the peace in remote regions for people not long risen above the state of savagery. In desperate circumstances, even slaves were enlisted,¹⁹² and they would hardly have been willing and trustworthy soldiers. It is not surprising that Rome lost its standing in the international system and became incapable of imposing its will on the Mediterranean world. The Assyrian empire also brought soldiers of subject nations into its armies, which produced a decline in the quality of the fighting force and in the long run worsened its position.¹⁹³ Egypt and China similarly

came to enlist foreign mercenaries when they were in decline and called on neighbouring peoples for military help.¹⁹⁴ The demise of the Habsburg empire is linked to problems of pay and supply that made its armies increasingly inefficient.¹⁹⁵ The rather more capable Germans had to step in repeatedly to bail out the Austro-Hungarian empire in its military adventures.¹⁹⁶

The hierarchs

However forceful they may be, a handful of individuals cannot directly control hundreds of thousands or millions of people. If conquest and domination are to prove lasting, complexity is inevitably required in the form of political hierarchies, whereby more powerful individuals control less powerful ones, who control less powerful ones still. Societies in which an elite rules through such coercive institutions are commonly referred to as states. The Incas implemented a particularly formal hierarchy of almost military precision, which descended down to the elementary group of ten households headed by a community leader.¹⁹⁷ This type of stratification may be regarded as diagnostic of an advanced society with a political elite, distinguishing it from institutionally simpler societies, where either no one is in charge or where such leaders as exist have no definite powers. Debates about the political complexity of the Anasazi, for example, revolve precisely around this question of whether some Chacoan burials are more opulent than others and give evidence of status differentiation.¹⁹⁸

Elites find it easiest to establish hierarchical structures where there are large numbers of people confined in a relatively small space. Such structures are never found among scattered tribes. All the regions of African state formation, for example, seem to have had high population densities.¹⁹⁹ Mexico, where the Mayan, Olmec and Aztec civilisations arose, was actually more populous than Europe when Columbus arrived.²⁰⁰ The population of Harappa at the beginning of the second millennium BC was over 200,000,²⁰¹ an extraordinary number for a city of that era. The first state in China began to take shape around 2500 BC, at the same time as what had previously been an empty land began to support a large and busy population.²⁰²

On the other hand, the Ibo of the west African forest have interested anthropologists because, despite having long had a high population density, they did not develop formal institutions of government until recently.²⁰³ Similarly, a full-blown bureaucratic hierarchy did not arise in the Mississippi region, despite the presence of a large number of people in a confined space.²⁰⁴ Nevertheless, some evidence suggests that the Ibo actually did have coercive elites in the past.²⁰⁵ Mississippian society may also have been more politically complex than is thought, with Cahokia,

its largest settlement, representing the capital city.²⁰⁶ The correlation between a large, static and relatively dense population and the emergence of political authority is generally a reliable one, even if there is more to complexity than this single factor.

By the same token, when population density declines, elites tend to disappear, or when elites disappear, population declines. The introduction of bean cultivation has been linked to the dissolution of Mississippian society, because it allowed people to spread out. Beans are a good protein source, which meant that the Mississippians stopped being dependent on fish and could set up farms far from the river, to which they had previously been tied.²⁰⁷ Similarly, after the Mayan collapse, the population in the immediate vicinity of the city of Tikal dropped to just 10 percent of its original size.²⁰⁸ This was probably not due to the slaughter of the other 90 percent – there is no evidence for that – but rather due to its dispersal into the surrounding region.

It is significant that the early empires formed along river valleys, such as those of the Nile, Tigris/Euphrates, Indus and Yangtze. Here a narrow strip of fertile land provided a focal attraction confining people to a definite region. In Egypt, the fertile region is just ten to fifteen miles wide and is surrounded by near total desert.²⁰⁹ The Valley of Mexico represents a similar naturally circumscribed region of fertile land, which attracted successive waves of migrants. It was after the population had grown to fill the valley, around 1000 BC, that rulers appeared and the central Americans began to build their first temple cities.²¹⁰ Later, the newly arrived Aztecs found the best lands already long since occupied²¹¹ but that presented them with a sitting target. The large, industrious and prosperous population had far too much invested in the valley to consider abandonment and dispersal, even in the face of relatively heavy demands from the aggressive newcomers. Confinement of the population was also a factor in the rise of complex societies along the coastal region of Peru. The climate of South America's Pacific seaboard produces a series of narrow fertile valleys that are separated by hundreds of miles of desert.²¹² As on the Nile, the people who subsisted in these valleys had nowhere to go when aggressive elites like the Incas descended to dominate them. In the eastern woodlands of North America, a religious movement called the southern cult may have served as the centripetal force that attracted people between the thirteenth and fifteenth centuries, elevating population density and promoting state formation.²¹³

The correlation between coercive elites and high population densities is reflected in the phenomenon of urbanism. From the earliest times,

political hierarchies and cities have always been found in conjunction with each other. In Sumer, the rise of advanced societies and the growth of cities amount to the same thing. The Mycenaean civilisation was based on prominent cities at Mycenae and Tyris, as well as lesser cities elsewhere.²¹⁴ As soon as the Etruscans began their rise to prominence on the Italian peninsula, they started founding cities.²¹⁵ Whenever the Romans acquired a new territory, one of the first things they did was to begin dotting it with cities. Gaul, Spain and Italy were the chief beneficiaries.²¹⁶ The same predilection for cities was typical of complex societies in pre-Columbian America. The city of Monte Alban was occupied from as early as 1000 BC, right up to the Spanish arrival in 1522. It appears to have been occupied by the successively ascendant societies of the Olmec, Maya and finally Zapotec.²¹⁷ In the Valley of Mexico, where central American civilisation was focused, the city of Teotihuacan was very impressive by contemporary world standards and had some 100,000 inhabitants.²¹⁸

Having said this, some civilisations, such as pharaonic Egypt, had comparatively few cities and those that did exist were primarily for nobles, officials and their retinue. Similarly, the Maya left a staggering quantity of building work,²¹⁹ but only two or three of the urban complexes of the classic period are true cities with markets, houses, sewers and other signs of a significant permanent population.²²⁰ Other centres tended to be mainly ceremonial in nature. Despite this variation, cities remain utterly characteristic of civilisation and, quite simply, they are not found at all among simpler types of society.

One of the reasons for people to gather in cities is to seek the protection of the overlord. When the ruler's authority does not extend very far into the countryside, cities tend to be well defended. The original Hittite capital, Hattusa, was a massive walled town. It included a tunnel under the defensive rampart²²¹ presumably to allow secret access when the city was under siege. Walls or, more generally, defended borders indicate the extent of an autonomous political unit. When Athens was defeated by Sparta in the Peloponnesian war, it was forced to tear down the city walls, emphasising the loss of its independence.²²² As societies mature and extend their authority over a wider area, the city walls become less important and may even disappear entirely. Conversely, when societies decline, the walls are apt to reappear. There was a tremendous amount of military construction in and around the cities of Roman Britain from about AD 350, as the political situation there deteriorated.²²³

Just as urbanism is associated with ascendancy, so an exodus from the cities seems to be a characteristic consequence of a society's

collapse. Immediately after the fall of the western Roman empire, there was widespread abandonment of urban life.²²⁴ Once the Roman armies left Britain, the towns were soon deserted. Some may still have been occupied in a degraded fashion,²²⁵ but municipal functions all but ceased. The life of Saint Cuthbert tells of him visiting the ruins of Roman Carlisle in AD 685.²²⁶ Even the names of many Roman towns were forgotten and they became referred to with the suffix -chester, from the Latin word for a camp. The names of Leicester and Chichester, for example, or simply Chester contain no trace of what the Roman Britons used to call them.²²⁷

Whether coercive institutions can emerge depends not just on the absolute numbers of population but also on the speed with which potential rulers can move across their dominions. The strength of the Hittite empire, for example, was founded on the light horse-drawn chariot.²²⁸ Elites need to shrink the distance between settlements and thereby increase the effective concentration of the population. They need to secure up-to-date intelligence and must act swiftly to assert their authority wherever it is challenged. For this reason, states have been great builders of roads and canals.²²⁹ The Maya, for example, built land causeways between their cities to make trade and travel easier.²³⁰ The Aztec roads were particularly fine, and the conquistadors found them generally better than the ones they were used to in Europe.²³¹ The Incas carried their roads across rivers and ravines using bridges of stone and wood, suspension bridges, and cable and basket. The Inca coastal road was banked with high clay walls to keep out sand. The rulers of Angkor showed a similar concern with effective communications, and built an extensive network of canals in the area of the Mekong delta.²³² The Chinese also placed great emphasis on canals.

To ensure that their word goes in every part of their domain, elites have tended to establish quite sophisticated information networks, even in ancient societies. A public postal service was part of the machinery of government of the Sumero-Akkadian empire. The far-flung organisation of the postal system of the Persian empire greatly impressed Herodotus. Along the road from Susa to Ephesus, there were stations every 15 miles, between which relays carried mail at the rate of a horse's gallop.²³³ Private letters might be sent but were read by officials for security reasons. This communications network later helped Alexander the Great to impose his own rule on the Persians.²³⁴ A similar extensive system existed in early China.²³⁵ The Roman emperor Augustus established a public courier service, with the couriers doubling as spies. The same dual use of mail carriers and spies was practised in the Abbasid Caliphate of medieval Iraq. The Inca messenger network could carry

reports over a distance greater than that from Paris to Dakar in extraordinarily quick time,²³⁶ and included the use of smoke signals, which were probably no less efficient than the semaphores of early nineteenth century France.²³⁷

The more forceful and mobile the rulers, the larger and more sophisticated the political unit that they can control. At the low end of the scale are chiefdoms, in which a ruler and a few officials dominate a handful of villages. Authority is relatively informal and personalised, and indeed chiefdoms are not even recognised as proper states. At the other end of the scale are huge empires, encompassing multiple ethnic groups. The Alexandrian, Roman and British empires, for example, all involved the extension of rule over people with quite different customs and beliefs from those of the conquerors. The Inca empire also incorporated societies with diverse ways of life, covering three different ecological zones – mountain, coastal valley and rainforest.²³⁸ To forge a unity from multiple ethnic groups with little affinity for each other demands a very great capacity for domination, and these empires represent the most ascendant of all ascendant societies.

A highly characteristic experience of a state or empire in decline is that it should break up into smaller units. The greater the decline, the more far-reaching the break-up. Heterogeneous empires are likely to disintegrate more readily than individual nations sharing a common language and culture.²³⁹ However, in some cases, not even individual cities can hold together. In parts of west Africa, weak rulers were unable to suppress conflict and maintain unity within their cities for more than a few generations.²⁴⁰

Periods of decline in the history of China are those in which the region was divided into multiple states, and periods of ascendancy are those in which it was united into a single empire. Division can be taken to be diagnostic of decline. The collapse of the Western Chou empire led to the so-called Spring-Autumn and Warring States periods, when China was fragmented.²⁴¹ During this time, from 770 to 256 BC, the imperial domain became very small,²⁴² the emperor's power waned and that of the feudal lords waxed.²⁴³ At one point, as many as 24 feudal states were battling it out.²⁴⁴ Advanced civilisation was restored in China when the various independent states were again combined into a single empire. However, the subsequent collapse of the Han dynasty saw China again divided, this time into three kingdoms.²⁴⁵ During a later period of decline, between AD 304 and 535, fragmentation was once more the order of the day as seventeen dynasties contended with each other in the north.²⁴⁶ The Five Dynasties period was another period of turmoil within China, when at least ten independent

states asserted themselves concurrently with the official dynasties.²⁴⁷

The association between societal failure and political break-up is equally evident in the complex political history of ancient Iraq and Syria. During episodes of decline, such as the periods from 2200 to 2100 BC, or from 2000 to 1800 BC, the region was fragmented, at war with itself and plundered by outsiders.²⁴⁸ In Egypt, the kings of Dynasty VI experienced declining power and wealth, while the provincial nobility gained in power and independence.²⁴⁹ The result was that the pharaohs lost control for a while, and feudal lords waged war against each other, until strong pharaohs re-emerged with Dynasty XI and reasserted the unity of the Egyptian state. In tenth century France, as the Frankish kings lost control, power shifted first to the great counts and then even further downwards to a number of new noble families who claimed authority in more limited areas, where they built castles and recruited knights.²⁵⁰ The demise of the Habsburg dynasty in the first world war led to the emergence of a cluster of new lands in place of the former empire.²⁵¹ There were twenty seven governments in Europe, after the war, instead of the fourteen that had existed before it.²⁵² Such political fragmentation can be linked to Europe's loss of power and prestige in the world as a whole.

During the periods that Hittite civilisation was in decline, the various parts of the empire reasserted their independence.²⁵³ When imperial rule finally collapsed, the Hittite provinces in the Levant found themselves broken up into many independent petty kingdoms.²⁵⁴ The Mycenaean civilisation was completely disrupted when it collapsed; there was no political unity in Greece thereafter.²⁵⁵ The Etruscan decline was characterised by widespread restlessness and self-assertion among the peoples who had formerly been subordinated within its empire.²⁵⁶ In central America, when Teotihuacan lost its dominance at the end of the classic period, the Valley of Mexico saw a far-reaching fragmentation of power. Similarly, the fall of the dominant Mayan city of Mayapan around 1450 resulted in the ending of central government and its replacement with multiple independent chieftainships.²⁵⁷ In the case of Angkor, as the state declined, peripheral parts of the kingdom broke away and were attracted into the rising Thai mandala.²⁵⁸ Some African states, such as those of Ashanti and Kumasi, disappeared when peripheral cities revolted against the capital.²⁵⁹

In some cases, a prior lack of unity has been cited as a contributory factor in the rather rapid demise of some civilisations under relatively slight pressures. For instance, the failure of the Greek city states to unite into a single nation, except in the face of immediate crises, rendered them vulnerable to sustained attack by ambitious imperialists such as Philip of Macedon.²⁶⁰ The Etruscan cities were

independent in the same way and this seems to have hampered them in resisting Rome's rise.²⁶¹ The Aztecs also did not rule over a strongly integrated state, having failed to forge their conquered lands into a true political unity.²⁶² It has been said that they had domination rather than dominion over the lands that they conquered.²⁶³ This proved their undoing when the conquistadors arrived and found that they could easily exploit the resentments of the Aztec vassals.

The management

In a pun on Marx's observations about elites controlling the means of production, the anthropologist Jack Goody has pointed out the importance for ruling authorities of controlling the means of destruction.²⁶⁴ Elites are extremely jealous of their monopoly over threats, coercion and restraint. Challenges to this monopoly and resistance to the very principle of their right to dominate are usually dealt with particularly harshly and seemingly out of proportion. The Hittites, for example, reserved the direst penalties for those who violated the decisions of their courts.²⁶⁵ In recent times, it is noteworthy how many African leaders spent time in jail for sedition before their constituencies gained political rights, including Hastings Banda, Jomo Kenyatta and Nelson Mandela. There can only be one authority within a given region, and colonial governments displayed little tolerance for those who contested their monopoly of force.

Ruling authorities reserve for themselves the conduct of international relations. They do not allow their subjects to deal independently with external authorities. When a nation incorporates other nations into its empire, it tends to take over their foreign policies. Hittite treaties used to take quite different forms depending on whether they were concluded with great powers, like Egypt, or with minor local rulers. In the latter case, the Hittites allowed the vassal kings to remain sovereign within their own territory and promised not to attack them, but they forbade them from maintaining a dialogue with any rival power.²⁶⁶

Elites also extract a living from those they dominate. At the simplest level, this is a question of mere plunder based on whatever the elites can get away with. The Aztecs made no attempt to administer the affairs of conquered peoples but simply collected tribute from them in a rather arbitrary manner. The Hittites required each vassal king to supply tribute and make an oath of allegiance to the Hittite emperor in return for little other than a promise to protect the vassal from any enemies.²⁶⁷ The vassal king, of course, would be in no position to refuse such an arrangement. With higher levels of authority and coercive sophistication, tribute becomes regularised into a system of formal taxation, and this requires an elaborate bureaucracy to assess and collect it.

Taxes are as old as civilisation. Sometimes, people have provided work or goods directly. Rulers of all kinds, from the pharaohs to paramount chiefs on Hawaii, have drawn on *corvée* labour to work their estates and build their tombs and palaces.²⁶⁸ In the Western Chou state, Chinese farmers had to work so many days a month on their lords' fields.²⁶⁹ In pre-Columbian Peru, tax consisted partly of service on the fields of the Inca²⁷⁰ or in the imperial mines,²⁷¹ and partly of products from the peasants' own workshops or farms. The Maya also paid taxes in service or in surplus produce.²⁷² Where coinage has been introduced, tax obligations tend to be converted into monetary terms, a move that is often preferred by taxpayers as much as by governments.

In monopolising force and extorting money or other goods, elites may seem to be nothing other than bullies and parasites. However, they can also claim to bring some benefits to the people that they dominate. For a start, when the rulers are strong, they are able to impose order and keep the peace. An Arab chronicler who visited the Mali empire in AD 1352-3 wrote of the merciless treatment of miscreants and the resulting fact of complete security in the country, where neither traveller nor inhabitant had anything to fear from robbers or violent thugs.²⁷³

Successful rulers tend to regularise their enforcement of order by formulating sets of explicit laws. The world's first legal code is often said to have been that of the Babylonian king Hammurabi around 1700 BC. However, this was actually based on earlier versions and the association of systems of law with the existence of political authorities is of very long standing. It should be emphasised, though, that peace and order devolve from the power of the authority who made the law rather than the law itself. The Roman republic had an advanced legal system, but people suffered during its last days because the law was being irregularly enforced. For this reason, there was little hostility towards Augustus when he made himself the first emperor, since he was a strong ruler capable of restoring the state's credibility.²⁷⁴

When rulers are weak and lose the monopoly of force, the result is civil unrest. In declining societies, people become more likely to assert their independence and resist the demands of the state. During Rome's civil wars of the first century BC, pirate activity that had previously been suppressed underwent a resurgence, encouraged by dissatisfied Roman vassals.²⁷⁵ Later as Roman authority collapsed in the final years of the western empire, wealthy landowners became the targets of attack.²⁷⁶ Bands of brigands wandered the countryside largely out of control.²⁷⁷ The Etruscans experienced internal unrest as their society's status deteriorated.²⁷⁸ When the son of Shih Huang Ti, builder of China's Great Wall, proved ineffectual,

revolts broke out almost immediately.²⁷⁹ Disturbances also became increasingly frequent during the last stages of the Han dynasty, and there was a concerted peasant revolt in AD 184.²⁸⁰ As India's Mogul empire fell apart, anarchy spread and local usurpers grabbed power.²⁸¹

The disappearance of central rule on Easter Island, in the Pacific, was associated with the rise of endemic warfare. The society became organised into two opposing groups with power having been seized from the priest-kings by a secular warrior caste. The warriors were violent and bloodthirsty and virtually enslaved those that they conquered. Even cannibalism seems to have been practised. The island's various communities became like predatory bands and much of the older, more ordered way of life vanished.²⁸² When Admiral Roggeveen arrived there on Easter Day 1722, he found a war-torn and debilitated society.²⁸³

The general breakdown in law and order in a weakened state has ordinary people as its victims, and may well be worse than the demands of a successful elite. The mercenary armies of late classical Greece roved the country, thieving, abducting and murdering.²⁸⁴ At the beginning of the fifth century, St Jerome and others called Britain a province of tyrants or warlords.²⁸⁵ The last documented contact between Britain and the authorities in Roman Gaul, after the withdrawal of the imperial armies, comprises a desperate request for aid against the lawless barbarians who were plundering the former Roman colony. The appeal failed.²⁸⁶ Britain became completely overrun by both local hoodlums and Anglo-Saxon invaders.²⁸⁷ An increase in brigandage is also associated with the deteriorating position of the Chinese imperial government throughout the seventeenth century AD.²⁸⁸ During France and England's hundred years war in the fourteenth century, large areas were left without effective rule. Wandering gangs preyed on the peasantry, who in Picardy were reduced to living in secret tunnels.²⁸⁹

On this basis, taxation can be seen as something of a *quid pro quo*. The elites provide the public good of a lawful milieu, protecting their subjects from arbitrary attack and plunder. Not only does this imply a generally more assured quality of life but it also makes possible commercial activity and the accumulation of wealth. Arguably, it is reasonable that the elites should take some share in the resulting profits. The British East India Company used to defend its stiff taxes on the ground that the payers got public order and personal security in return for their outlay.²⁹⁰

Powerful, dominant nations tend to produce peace in the international community in the same way that strong rulers keep order at home. For example, for many centuries after 3000 BC, the evenly matched Sumerian city states were almost constantly at war, with first one then the other

gaining ascendancy.²⁹¹ However, when Sargon of Akkad conquered the cities and incorporated them into his empire around 2350 BC, Sumer became a far more peaceful part of the world.²⁹² Similarly, while the Roman empire was at its height the Mediterranean area experienced a general absence of war for long periods. Later, during the heyday of the Ottoman empire, the eastern Mediterranean experienced a peace that lasted many centuries.²⁹³ There was also an absence of war between the great powers of Europe from 1815 to 1914, the time when Britain was internationally dominant.²⁹⁴

Conversely, when an imperial power is in decline, there is a general increase in conflict in the international community. The last five hundred years in Europe have been characterised by a series of periods when one nation was ascendant, punctuated by episodes of heightened war as that nation weakened and was challenged.²⁹⁵ One of the most devastating causes of war is when a failing superpower attempts to reassert its authority and suppress the ambitions of an emerging rival. The Greek historian Thucydides explained the Peloponnesian war in precisely these terms. He said that Sparta had to go to war with Athens in 431 BC because of the latter's growing power. The Greek peninsula was being left without a clear leader. This resulted in an unstable situation in which the altering perceptions and aspirations of the various peoples could only be resolved through open conflict.²⁹⁶

Fighting of one kind or another became endemic as the Roman empire fell into decay. Greece dissolved into petty warfare after the collapse of the Mycenaean civilisation in 1200 BC.²⁹⁷ The multiple feudal states that arose in China after the collapse of the Western Chou were constantly at war with each other.²⁹⁸ After the Han collapse, the three kingdoms were in a condition of permanent hostilities.²⁹⁹ During the later stages of the Mayan civilisation, there was a shift towards militarism as the civilisation began to falter.³⁰⁰ After the fall of Mayapan, there was an intensification of intertribal warfare, and this became almost continuous.³⁰¹ During the late period of the Anasazi towns in south-west America, there seems to have been an increased concern with defence, presumably due to the growing frequency of attacks by one pueblo on another.³⁰² Some buildings show evidence of violent attack before their final abandonment. There may also have been an increased incidence of warfare prior to the collapse of the Hopewell culture.³⁰³

Besides supplying peace and order, elites perform another useful function that might justify their bullying tactics. This is that they initiate and manage large-scale projects. Sometimes these projects, like the Egyptian pyramids, merely serve to aggrandise the leaders. In other cases, they bring real benefits to the ordinary people. A city is more

than a collection of private houses.³⁰⁴ Elites take responsibility for the public buildings that serve the community in various ways. At Angkor, for example, the rulers built hospitals, guest houses and bridges,³⁰⁵ and they ensured that these institutions were properly staffed and maintained.

Elites often take pains to promote productive activity. They co-ordinated the construction of irrigation schemes in places like Sumer, China and the Indus valley. The Incas caused extensive terraces to be built upon the hillsides, with the aim of increasing agricultural output.³⁰⁶ The rulers of Angkor ordered the construction of reservoirs to improve the reliability of wet-rice farming.³⁰⁷ Their efforts may explain why Angkor proved more prosperous and durable than other mandalas. This recurrent interest in production is naturally in the rulers' enlightened self interest, since an abundant subsistence base is responsible for maintaining the viability of their own comfortable lifestyles.

Elites have also helped their societies by using taxation receipts to create a sort of communal insurance. Grain or other goods amassed during times of abundance can be dispensed during times of hardship. On many Pacific islands, the chiefs stored their tributes of yams and other food in special pits where it could last for several years, in case of agricultural disaster.³⁰⁸ The Incas implemented a full blown system of social security, including old age pensions, which was ahead of anything seen in Europe for another three or four hundred years.³⁰⁹

Those who choose to dominate others bring advantages to those over whom they extend their authority, sometimes accidentally but also sometimes quite knowingly and responsibly. Their very existence spawns a variety of complex institutions, from postal systems to legal codes, and their capacity to coerce their own and foreign populations is a key ingredient in the ascendancy or decline of the societies to which they belong. The following table encapsulates these measures of ascendancy.

Table 3-1: *Political factors associated with the rise and fall of complex societies.*

Ascendant	Declining
Strong leadership	Lack of leadership
Powerful military	Weak military
Unity	Fragmentation
Order	Disorder
Peace	Warfare
Dense population	Dispersed population
City dwelling	Abandonment of cities

Chapter 4 - Creating wealth

The division of labour

When European explorers first penetrated into the remote regions of highland New Guinea, they found that European goods had got there some thirty years ahead of them. These had been traded from tribe to tribe across hundreds of miles, usually for a tidy profit. Simple societies can participate in quite extensive trading networks. The Yir Yoront aborigines of Australia's Cape York used to barter spears for tool-making stone that came from quarries four hundred miles to the south. Among the foragers of palaeolithic Europe, stone axes were traded over hundreds of miles and passed through as many as ten different pairs of hands.

People everywhere have long shown considerable aptitude for commerce. However, in states and empires this activity takes place on a particularly intense scale. It represents a second major theme within the phenomenon of ascendancy. While one dimension revolves around power and coercion, the second revolves around production and commerce. With large numbers of people in a confined space, producers and merchants can reach far more potential customers. Concerted production for the market, rather than exclusive use of home made goods, is a key component of institutional complexity.

In the Nile valley, for instance, pottery began being mass-produced just before the emergence of the pharaonic state. By early dynastic times, a single workshop might be trading its vessels throughout the country.³¹⁰ In the states of pre-Columbian Peru, there was mass-production on an ambitious scale.³¹¹ Some Mayan workshops were based on the principle of the assembly line, anticipating Henry Ford's innovation by some six centuries.³¹² Even in the relatively modest states of Ethiopia, manufacturing activities were on a large scale by the first millennium BC and continued so into early Christian times.³¹³

Capitalist institutions are not a recent invention but have always been a feature of ascendant societies. In Athens around 400 BC, there was a privately owned factory employing 120 workers.³¹⁴ Over the next hundred years, the Greeks made considerable progress in commercial and banking techniques.³¹⁵ The Romans had facilities for transferring credit through bankers and set up joint stock companies that possessed considerable staffs.³¹⁶ The Roman statesman Seneca describes people waiting anxiously for the mail, hoping for news of their investments and financial interests in distant cities. Long before this, the Sumerians conducted joint stock enterprises, with rich patrons providing venture capital for traders and taking a share of the profits. In other cases, merchants borrowed money to fund their commercial activities.³¹⁷ Hence the two basic forms of business

financing – loans and shares – were already present in the world's earliest cities.

The long medieval boom from the eleventh to the thirteenth centuries saw sophisticated financial and business practices emerging in Europe. Partnership and loan contracts were copied from those already in use in the advanced Islamic countries of north Africa,³¹⁸ and large manufacturing companies were set up. Workers, meanwhile, hit on the notion of striking for higher wages.³¹⁹ The view that the medieval economy was in any way primitive, though widespread, is without foundation.³²⁰ Some multinational companies based in Italy had hundreds of employees and branch offices in towns across Europe. These eventually crashed and disappeared in the 1340s as Europe entered a century of decline, but the Medicis and others later recreated large corporations in a different form.³²¹

The mass market permits extensive specialisation. In simpler societies, people must be mostly self-sufficient and all adults tend to make their living in the same way. In complex societies, many different types of skilled craftspeople are active. By the Egyptian first dynasty, the royal court was already employing large numbers of artists and artisans, who were capable of turning out a wide variety of luxury goods. In Sumer, specialist trades included potters, weavers, leather workers, carpenters, masons, smiths, jewellers and a host of others.³²² Hittite documents reveal a similar range of occupations.³²³ In its Minoan heyday, Crete supported a phenomenal diversity of activity. This included: ordinary craftsmen such as coppersmiths, carpenters, and potters; food producers such as farmers, herdsman, shepherds, hunters and fishermen; distributing agents such as merchants, boatmen, carters and muleteers; and luxury craftsmen such as gem cutters, fresco painters, ivory carvers, gold and silversmiths, faience manufacturers, and makers of stone vases. Such an array of industries is more extensive than Crete can boast to this day.³²⁴

The rise of civilisation in central America has been linked to the enforced specialisation that was a consequence of environmental diversity. Farmers in different areas, with different soils and climates, formed a mosaic of communities, raising different crops and meeting at periodic markets.³²⁵ Their extensive trade networks promoted institutional complexity. In a similar way, Europe's emergence as the pre-eminent mercantile continent from the sixteenth century onward has been linked to its differentiated climate and the availability of diverse products for trade.³²⁶

In the Inca empire, markets were frequent and officials continuously travelled the road network to ensure that goods could be moved and exchanged.³²⁷ In this case, commerce was mostly

local,³²⁸ but many complex societies trade routinely over considerable distances. One of the reasons why civilisation first arose along great navigable rivers like the Nile, Indus, Tigris-Euphrates and Hwang Ho may be that these provided for fast, cheap transportation of goods and merchants. The interlinked lakes in the Valley of Mexico may have played a similar role in promoting social complexity there.³²⁹

It is not only internal trade that takes on a particularly purposeful appearance in ascendant societies, but also the whole business of importing and exporting over thousands of miles. The Egyptian, Sumerian and Harappan peoples all had trading contacts with each other.³³⁰ Two and a half thousand years ago, one could get a ship to any destination in the Mediterranean within three days.³³¹ Carthaginian sailors are thought to have explored the African coast as far as Sierra Leone by 500 BC, and they may even have attempted to circumnavigate the continent. The Romans routinely visited Africa's coast as far as the Canaries in the west and Dar-es-Salaam in the east, and they were in contact with west Africa via the trans-Sahara caravan routes.³³² Roman merchants also established permanent trading stations in India, including one on the Bay of Bengal, and Roman products and occasionally even Roman subjects reached south-east Asia and China.³³³ A thousand years ago, Somalis and Kenyans were importing Chinese and Thai ceramics. A Chinese ethnographer of the ninth century accurately described the contrast between east Africa's different peoples, indicating that his country was in direct contact with the region.

During Scandinavia's great expansion between 800 and 1100, Viking traders travelled to Byzantium and Baghdad, via the Russian rivers. More than 85,000 Arabic coins from this period have been found in Sweden.³³⁴ The Maya navigated their way around the Caribbean in 80 foot canoes made from giant cedars.³³⁵ Many early Spanish accounts mention the tremendous amount of sea traffic along the coast from Tabasco to Panama.³³⁶ On a larger scale, worldwide ocean trade routes became vital to European prosperity from the sixteenth century onward.³³⁷

Sometimes, intensive trade can take place despite the absence of a strong political authority. The collapse of the Mauryan empire did not seem to inhibit commerce in India.³³⁸ For the most part, though, these two aspects of ascendancy go together. Travel and communications, essential for well developed business networks, tend to be easier under powerful governments. The primary purpose of the Roman road system may have been to permit the swift movement of the legions, but a major by-product was enormous growth in the volume of long-distance trade. The system was extremely comprehensive. In the 1930s Roman roads were

still the principal highways in northern Albania,³³⁹ and some Roman bridges are still being used to this day.³⁴⁰ Other powerful societies have similarly created suitable conditions for commerce. Urbanism is associated with the expansion of trade everywhere from Chaco Canyon to the African savanna.³⁴¹

Despite this relationship, governments may differ in their overt attitude towards commerce. Merchants were highly honoured among the Maya and the Aztecs, for example.³⁴² The Aztecs conquered and pacified other regions just to secure new trading opportunities.³⁴³ Yet other states have regarded commercial activity as potentially subversive and have sought to discourage it. The Ming emperors, for example, restricted trade, especially overseas trade, and opposed the accumulation of private capital.³⁴⁴ In late medieval Japan, merchants and bankers were denied the kind of social prominence that they were able to enjoy in Europe.³⁴⁵ Under the Ottoman empire, merchants were preyed upon in a vindictive, grasping and arbitrary fashion.³⁴⁶ This very attitude, however, has been considered a factor behind the failure of such societies to maintain a dominant position on the global stage.

Trade and prosperity

Trade is associated with prosperity. People, societies and regions that engage in vigorous commerce present an impression of affluence and vitality. At Angkor, for example, imported items for sale included silks, ceramics, iron and copper receptacles, silver and gold.³⁴⁷ This list clearly suggests a high standard of living – at least for some. It is typical of the bills of lading of merchants throughout history. The Egyptians of early pharaonic times obtained large amounts of timber from Syria and Lebanon, as well as jars of olive oil from Palestine and exotic items from even further afield.³⁴⁸ They were able to live more luxuriously than people elsewhere, and it was this that made them seem ascendant by comparison.

In Britain, the centuries of Roman rule saw a massive increase in the numbers and prosperity of the population, thanks to the growth of trade.³⁴⁹ There was a similar widespread development of material well-being in Sudan of the pharaonic period, after the government was secularised and private enterprise was allowed to develop.³⁵⁰ This Meroitic civilisation grew rich by supplying the outside world with products such as ivory, slaves, rare skins, ostrich feathers, ebony and possibly gold, all drawn from a wide region of inner Africa.³⁵¹ The Axumite Ethiopians derived substantial benefit from trade in the Red Sea and were in contact with people from southern Arabia to Armenia.³⁵²

The east Africans showed how commerce can support a rich lifestyle even in regions of apparently meagre potential.³⁵³ Many societies

have grown wealthy despite an almost total lack of natural resources, simply by acting as trade intermediaries. The Nabateans, for instance, built their capital city of Petra in the mountains between the Dead Sea and the Gulf of Aqaba. This desert region had very little inherent promise but was strategically situated between the Tigris-Euphrates basin and the Hellenistic cities, on whose trade the Nabateans grew rich. Petra was a city of great opulence, remarkable for the fact that its buildings were carved directly out of the rock. The city of Dilmun also thrived for two thousand years on the strength of its trade rather than the natural wealth of its immediate environment. Conversely, many peoples have been sitting on valuable resources but have realised little benefit from them until they became incorporated into substantial trade networks.

While long-distance trade brings otherwise unattainable luxuries, the widespread occupational specialisation of institutionally complex societies also implies a great increase in the number and types of goods on offer. For example, once a sizeable woodworking industry had developed in Egypt, the furnishings of wealthier houses came to include beds, chairs, stools and numerous chests and boxes. Metal bowls, dishes and other vessels were also more plentiful and more sophisticated.³⁵⁴ Specialist craftsmen engaging in mass production could churn out far more than could amateur part-timers working largely for themselves.

The undertakings of societies that are in their prime give a visible demonstration of prosperity. They are impressive because of their luxury and grandiose scale. Any thought of skimping or economising seems far away. Not only do people live well and pay themselves well, but they produce art and architecture that is uncompromisingly splendid, as shown by everything from the pyramids to the Parthenon. The elaborately decorated buildings at Angkor were highly labour intensive, the stone being brought from quarries twenty miles away.³⁵⁵ In pre-Columbian America, numerous cities and temples were built in grand style. The Olmecs built colossal heads³⁵⁶ and even the less developed states of North America went in for giant earthworks. Their supreme achievement was Monk's Mound at Cahokia, which took three hundred years to build and was once crowned by a massive building.³⁵⁷

Decline, and the implied loss of institutional complexity, means a fall off in internal and international trade. This in turn implies a general impoverishment. The society's way of life becomes less ostentatious and less luxurious. In Etruria, for example, times of falling trade and times of poor quality in Etruscan architecture were virtually synonymous. Similarly, in the middle ages, Ethiopia's trade fell drastically. The country

became somewhat isolated and this was associated with a marked decline in prosperity.³⁵⁸

In Britain, the last quarter of the fourth century, when Roman rule was crumbling, saw a marked recession in commercial activity. Markets ceased to operate and the pottery industry dwindled. Living conditions became less comfortable and less satisfactory. When the drains were blocked, they were no longer repaired and the towns stopped being pleasant places to live in.³⁵⁹ The specialists who had previously performed vital occupations began to disappear. Such an unravelling of commercial activity meant that people no longer had access to what they had come to regard as the modern conveniences. As the economy lost vitality, life became less sophisticated. The life of St Tatheus describes him being entertained in a dilapidated Roman villa, whose owner was struggling to maintain the heating of his bath-house, if only at weekends.³⁶⁰

Economic decline is also associated with a widening gap between rich and poor. In late classical Greece, the majority of the freeborn were eking out an increasingly meagre living while the really wealthy were building ever more fantastically opulent private houses.³⁶¹ In a similar way, Athens continued to be relatively prosperous during the second century BC, even while the rest of the Hellenic world was slipping into extreme penury.³⁶² The same scenario was repeated in Rome as the western empire drew to its close.³⁶³ Those who already had power and wealth used it to plunder and exploit the disadvantaged.³⁶⁴ The everyday utensils of the masses became as cheap and nasty as possible, while luxury articles for the elite were more sumptuous than ever before.³⁶⁵ In the more recent history of Europe, countries like Spain and the Netherlands have experienced growing wealth differentials shortly before their commercial fortunes plummeted.³⁶⁶ The continent as a whole experienced retrenchment during both the fourteenth and seventeenth centuries, when in each case the rich got richer and the poor got poorer as prices rose and real wages fell.³⁶⁷

When decline turns to collapse, trade ceases altogether so that people must subsist on what they can produce for themselves. In the heyday of Roman Britain, mass-produced pots, foodstuffs and other goods imported from the continent were a part of everyday life. However, when the legions left and civil society collapsed, this trade was disrupted by brigands and barbarian pirate fleets.³⁶⁸ Commercial goods of pottery and glass disappeared,³⁶⁹ and people began to use home-made items of wood and leather.³⁷⁰ International commerce may have continued in some form,³⁷¹ but this was on a vastly smaller scale.

Inventiveness and entrepreneurship

What distinguishes the trade of institutionally complex societies from that of people like the Yir

Yoront aborigines is not just the volume of trade but also the intricacy of the trading networks. When the Phoenicians turned up in Cornwall, say, looking for tin, they had to bring with them goods that the natives would find desirable. Similarly, they must have had some idea of where they would find purchasers for the tin they carried away. This was just one of the many trading connections in which the Phoenicians were involved. They conducted a Mediterranean-wide trade in diverse products, obtaining a satisfactory balance of imports and exports at each port. Such a task clearly requires imagination, hard work and a willingness to take risks. In a word, it requires entrepreneurship.

Ascendant societies are therefore characterised by the existence of professional merchants, who are talented at planning and managing commercial activity and who devote considerable effort to it. Originally, they may be just the owners of farms and workshops, trading in their own products. However, with increasing complexity, full time intermediaries are likely to emerge. Already in Sumerian times a guild of professional merchants was in existence.³⁷²

The expansion and diversification of trading networks implies considerable inventiveness, since it entails the proliferation of new products, services and techniques. The growth of the carpentry industry in early dynastic Egypt, for instance, involved improvements in the methods of joining, carving and inlay.³⁷³ At one time, these were all new ideas that had to be thought up, tried out, adopted and passed on. Europe's increased prosperity during the high middle ages was associated with a whole new array of machines. If this is not widely recognised, writes one historian of the period, it is because the work of the engineer has long been under-appreciated in the academic world. Leonardo da Vinci is still celebrated more for his painting than for his many ingenious inventions.³⁷⁴

Backwardness has usually meant a lack of inventiveness and entrepreneurial ability. During the eighteenth and nineteenth centuries, Russia lagged behind the rest of Europe in industrialising. Improvements in production and commerce were severely hampered by a general lack of capital, low consumer demand, a minuscule middle class, and a government that was highly suspicious of any free activity.³⁷⁵ These things conspired to suppress business initiative and Russia entered the twentieth century as an economic laggard, redeemed only by its sheer size.

When societies go into decline, the qualities of inventiveness and entrepreneurship tend to disappear. For example, the Greeks were once noted for their vigour in international trade, but by the end of the classical era, their motivation seemed to have been softened by their very prosperity.³⁷⁶ It

is also common to see resources being increasingly diverted into the bureaucratic system where they become less effective for stimulating further growth. In Rome, the overall Roman tax burden tended to increase with time,³⁷⁷ and the currency was debased, causing inflation, so that commerce eventually became no longer worthwhile.³⁷⁸ China's Yuan dynasty got into similar trouble in the mid-fourteenth century, when the public finances were in great disorder.³⁷⁹ It collapsed not long after.

One aspect of the loss of entrepreneurship is a failure to adapt to changing circumstances in the outside world. Around AD 200, for instance, the inhabitants of Petra seem to have lost the resourcefulness that produced their original success. Their prosperity diminished as markets shifted and rival traders stepped in. The city was abandoned after Arab attacks in the sixth century. The Chacoan system may have collapsed because it failed to adapt to re-aligned trade routes whereby commerce was diverted through the new centre of Casas Grandes, which lay 400 miles to the south.³⁸⁰ A switching of trade routes may also have been a factor in the decline of Dilmun and of Harappa.³⁸¹

It is as though ascendant countries stop being able to compete with marginal regions that then steal the commercial initiative. Rome's trade suffered as its industrial techniques spread and it was undercut by factories springing up in less developed regions.³⁸² During its late period, the Minoan civilisation saw its market with Egypt being captured by Mycenae.³⁸³ The Etruscan civilisation faltered when its trade grew sluggish and intermediate ports saw their business fall away.³⁸⁴ The diversion of the Indian Ocean gold trade into European hands after 1500 similarly caused the demise of previously prosperous towns on the east African coast.³⁸⁵

Another aspect of declining inventiveness is a failure to take up technical innovations that are then exploited by other or later societies. Historians sometimes look back on classical civilisation and ask why the ancients never really developed such technologies as the steam engine or the waterwheel. The point is that they actually knew of these things, but somehow neglected to bring them into widespread use. The skills displayed by Hero and his colleagues at Alexandria were squandered on trivial devices that opened and closed temple doors in an apparently magical manner, or made mechanical birds sing. Roman engineers discovered not only the simple horizontal type of waterwheel but also the more efficient undershot and most efficient overshot types. There was even a Roman factory at Arles in France, where 16 waterwheels were used to power machinery for milling flour on a large scale.³⁸⁶ Yet the Arles factory seems to have been an exception and waterwheels never became a significant element in

Roman technology. Despite knowing all about them, the Romans simply failed to exploit the potential of waterwheels for improving productivity in industry and agriculture.

Prior to the fall of Rome, there was a complete cessation of technological progress throughout the Mediterranean.³⁸⁷ By the fourth century, scholarly writing in engineering, architecture and other such subjects had virtually ceased. One tract that did appear around this time suggested a thoroughgoing mechanisation of the army, recommending a whole series of reforms and mechanical contrivances, but the ideas were never taken up. Buildings, ships and war machines were still being efficiently produced but there were no significant new discoveries in any of these fields.³⁸⁸ The Romans also ignored the potential of the screw press and of fossil fuels, which had been familiar from ancient times in their middle eastern provinces.

The failure to make breakthroughs that were left to later centuries has been attributed to the institution of slavery. Supposedly, with widespread cheap labour, there was little incentive to mechanise. Yet even slave-owners could have benefited from better energy sources, raising production and perhaps reducing the number of mouths to feed in the workforce. In any case, slaves were disappearing from the industrial and rural scene towards the end of the western Roman empire.³⁸⁹ It simply seems to be the case that people in declining societies often do not realise the potential of their inventions, perhaps because life has become comfortable enough.

This syndrome may lie behind some intriguing but isolated finds of unexpectedly sophisticated equipment from the ancient world. The Phaistos disk, for example, appears to show the use of moveable type, a key innovation behind the printing press. The Kythera mechanism seems to consist of precision-engineered cogs that were part of some kind of calculating machine. A find at Baghdad has been interpreted as an ancient electric battery, and certain pieces of ancient jewellery look as though they have been electroplated. Evidently, people long ago were making some extraordinary advances yet, because of an apparent failure within their societies, these innovations turned out to be dead ends.

The global nature of decline

The logic of an exchange means that when one partner withdraws, for whatever reason, the other also loses out. For instance, when the Yir Yoront began to obtain steel axes from missionaries, their trading partnerships with other aboriginal groups became superfluous. The fiestas during which trading used to take place declined and all the groups belonging to the trading networks found their traditional supplies of various commodities were cut off.³⁹⁰ On a much larger scale, the Wall Street crash of 1929 and the consequential

reduction in US lending instigated a chain reaction that is regarded as responsible for the severe, world-wide depression of the 1930s.³⁹¹

In the past, when one society has gone into decline, others that are connected to it through their international trade have tended to do so at the same time. The ancient world experienced two episodes of decline that were regional in scale, around 2100 BC and 1200 BC respectively. In each case, turbulence and bankruptcy struck many countries together. The concentration in time of the failures indicates that they must have been related and not due to separate processes within each country.³⁹² In the second episode, problems that began in Iraq were followed by the collapse of the Minoan, Mycenaean and Hittite empires, as well as disturbances in Egypt.³⁹³ As a result of this calamity, whole populations migrated on a scale hitherto unknown, bringing the Dorians to Greece and the Etruscans to Italy.³⁹⁴

Later, the decline of Etruscan civilisation was itself part of a general trend. The fall of the Tarquinian monarchy and its replacement by the Roman republic was just one of a series of incidents in which local Italic tribes expelled their Etruscan overlords.³⁹⁵ The decline in Etruscan funerary architecture during the period known as the Italic middle ages was reflected at other western Mediterranean sites including Carthage.³⁹⁶ Then, during the final deterioration of the Etruscan civilisation, the Greek colonies of southern Italy were also stagnant and declining.³⁹⁷

The Roman world experienced similarly synchronised periods of public disturbances and trade recession. These may have even reached China, since it was connected to Rome via the silk roads that were in use for 2000 years up to AD 1500. Problems affecting the silk route could cause financial panics in Rome. When the western empire finally fell, the shock was far-reaching and not only in Europe. The eastern half may have survived, but it went through some very troubled times in the immediate aftermath of events in Italy.³⁹⁸ Rome's fall may have accelerated the final disintegration of the Meroitic state in Sudan, which took place around this time.³⁹⁹

In South America, the Huari and Tiahuanaco empires collapsed within a short time of each other, around AD 1000,⁴⁰⁰ while in North America the Mimbres people experienced decline at about the same time as the Anasazi, around AD 1130 to 1150.⁴⁰¹ The interdependence of multiple centres has also been suggested as a possible factor in the collapse of Chaco Canyon. Withdrawal of a few members of the regional trading system may have made the position of the others ultimately untenable.⁴⁰² After the Angkor collapse in south-east Asia centres at Banteny Chmar, Banteny Srei and Phimai were also abandoned. This was similar to the abandonment of Tikal, Quirigua and other

centres of the Mayan civilisation during the ninth century.⁴⁰³

The fourteenth century, which in Europe saw the hundred years war and the black death, was a time of troubles around the world. China's Sung dynasty collapsed at this time. The Mali empire was toppled by nomadic warriors and commerce with Europe was interrupted. The Delhi sultanate fell apart, and in the Pacific the Polynesian civilisation finally stopped expanding.⁴⁰⁴ The seventeenth century involved a similar wave of disruption world-wide. Many rulers, from the Ottoman emperor to the king of England, met violent ends. The Ming dynasty collapsed and Shah Jahan, builder of the Taj Mahal, was deposed and imprisoned. The Persian empire began to contract and a number of African states met their end. There was also persistent unrest in Europe's American colonies.⁴⁰⁵

In principle, instances of simultaneous decline could be due to a common factor operating over a large area. It has been argued that crises affecting the whole of Europe in the mid-1600s may have been due to the common experience of a harsher climate and successive plagues,⁴⁰⁶ and also that the ancient world's problems in 2100 BC may have been due to a regional decrease in rainfall.⁴⁰⁷ Yet such explanations would not account for a collapse like that of the Maya, where the sites did not fall exactly simultaneously.⁴⁰⁸ In this case, activities at the various cities ceased one by one over the period AD 800 to 900.⁴⁰⁹ This seems to have proceeded in a domino effect going eastward,⁴¹⁰ lending support to the notion that problems in one area propagated to all its trading partners. The Mayan decline was preceded by the fall of Teotihuacan. This suggests that the region of simultaneous collapse could have been even broader, with unrest starting in the Valley of Mexico and eventually spilling over to the Mayan highlands and Yucatan.⁴¹¹

Decline therefore tends to be a worldwide phenomenon, especially when it is severe. The only thing is that the world was not so wide in ancient times. The old and new worlds were not in contact to any significant extent, and neither cultural developments nor episodes of decline were synchronised between them. In 200 BC, when Rome was beginning its magnificent career, the new world gave only a glimmer of high civilisation. Six hundred years later, as Rome crumbled and the old world fell into chaos, the new world was resplendent.⁴¹² If past collapses were at all localised – and they were not that localised, as already indicated – it was because communications were still relatively meagre and slow.

Money and writing

There are two social institutions that seem to be so valuable for orchestrating complex commercial activity that they are almost universally

associated with states. These are money and writing.

While a money economy was already appearing under the more advanced British tribes in the century before the Roman conquest, it developed enormously after the country became fully civilised under the Romans.⁴¹³ Virtually every society in which there has been well-developed commerce has found the need for money in one form or another. The Shang Chinese reckoned in cowrie shells.⁴¹⁴ For the Maya it was cacao beans,⁴¹⁵ and on the middle Nile beads of glass were possibly used.⁴¹⁶ The Hittites employed silver in the form of bars and rings, along with lead for smaller denominations, while they also sometimes reckoned in measures of barley.⁴¹⁷ On the east African coast, copper ingots were in use during medieval times.⁴¹⁸

Some states are supposed to have got by without money. For example, it has been suggested that no money was used at Angkor,⁴¹⁹ among the Aztecs,⁴²⁰ or in Egypt until quite late. However, it is difficult to take these assertions at face value. It is known that there were Aztec markets, for example, and at Tenochtitlan they took place in a great square in front of one of the finest buildings.⁴²¹ A clay model of an Aztec market has been found, which suggests that they were conducted with considerable animation.⁴²² It is hard to believe that markets could really have been so vigorous and important or that professional merchants – who certainly existed in Aztec society – could have functioned effectively without some kind of medium of exchange, albeit an informal one. Similarly, pharaonic Egypt may not have had a coinage as such but it had capitalist institutions. The letters of the eleventh dynasty mortuary priest, Hekanakhte, reveal a tight-fisted and irascible official who rented land, lent substantial amounts of grain, and kept surplus copper, oil, and cloth for trading purposes.⁴²³

The institution of writing is usually invented to keep track of the state's finances, though it is often turned to other purposes such as the recording of literature and academic scholarship. In medieval Europe, the business community was the one group other than the church that recognised the value of literacy. For a while, the clergy found a niche as drafters of commercial documents, but by the fourteenth and fifteenth century most men and women of the merchant class could read and write.⁴²⁴ The three great river valley civilisations of the Nile, Tigris-Euphrates and Indus all developed their own distinctive scripts. In China, writing first appeared with the Shang dynasty, the region's earliest civilisation, on so-called oracle bones.⁴²⁵ The Hittite state, as the first Indo-European civilisation, produced the first written Indo-European language.⁴²⁶ In America, the Monte Alban culture had developed glyph writing by 500

BC.⁴²⁷ The Maya produced books as well as monumental inscriptions.⁴²⁸

Thinking of certain African societies, one author has suggested that it is wrong to say civilisation requires writing.⁴²⁹ However, the African states in question were of an extraordinarily simple nature, and their fragility only emphasises the value of writing. The truth is that all reasonably advanced civilisations, including those of ancient Sudan and Ethiopia, have had some form of writing. The only exceptions are the South American societies of the Inca, Chimu, Mochica and Tiahuanaco,⁴³⁰ which used professional rememberers instead and an intricate system of knotted strings, called quipu. Quipu performed the same basic function as writing, i.e. to maintain records, and its use may be attributable to a lack of suitable materials for pen and paper.⁴³¹

Money and writing make it straightforward for people to function in elaborate ways that would otherwise be very difficult. They should be contrasted with things like metal-working or the wheel, which have often been regarded as markers of accomplishment but which are not nearly so critical to the achievement of complexity and are thus far less relevant to the issue of ascendancy. None of the American civilisations made use of the wheel, for example, yet it is far from clear that they can therefore be condemned as in some way backward. For a start, they made toys with wheels,⁴³² indicating that they understood the concept perfectly well. Beyond this, the wheel would have served little purpose without useful draft animals, especially in the mostly mountainous regions where these civilisations took form. Yet America's indigenous mammals were generally unsuitable for the purpose. There were no horses, bovines, domestic pigs or goats. The nearest that any pre-Columbian group came to a domestic animal was the llama, which was tamed on the Peruvian coast.⁴³³

Hence, the absence of the wheel was not a sign of intellectual deficiency but merely an indication of what was appropriate for the particular situation. Tenochtitlan was threaded with canals like Venice, and the Aztecs got around in canoes, which were far more useful to them than the wheel would have been.⁴³⁴ All the American civilisations showed fantastic accomplishment in many other areas. Some of the South American buildings, notably those of Cuzco, were fitted together with a precision that has never been duplicated anywhere in the world.⁴³⁵ Their expert stonework was raised without draft animals, fitted without cement and shaped with stone tools.⁴³⁶ The key point is that a city without metal or the wheel can and has functioned as well as those with, but a city without markets or administrative record-keeping would not really be recognised as a city at all. Contrary to some views,⁴³⁷ the advanced pre-Columbian

societies of America count as true states. It is the sophistication of the institutions governing human relationships rather than knowledge of particular processes and techniques that constitutes complexity.

When societies go into decline, money and writing, these markers of institutional complexity, are abandoned or lost entirely. In Britain, the coin-using economy seems to have been in severe recession by the late fourth century. By the start of the fifth century, not only did all supply of coin from the imperial mints cease but money was so out of favour that there was no longer even any counterfeiting to make up the shortage.⁴³⁸

The scripts of many ancient civilisations were unknown when first investigated by archaeologists. Hittite texts had to be deciphered just like those of the Egyptians.⁴³⁹ The Etruscan language is only now being rediscovered through painstaking work on tomb inscriptions.⁴⁴⁰ The writing of the Harappan civilisation remains essentially undeciphered.⁴⁴¹ A similar situation prevails with the Phoenicians, despite their considerable intercourse with well-documented historical civilisations. The writing of the Meroitic state of the Middle Nile is no longer understood.⁴⁴² The Maya forgot how to read their own hieroglyphs.⁴⁴³ After the Mycenaean collapse around 1200 BC, the art of writing disappeared from the Greek peninsula.⁴⁴⁴ It was only as civilisation was re-established there, from 800 BC onward, that writing began to return.

Somewhat against this trend, the inscriptions at Angkor could still be read when it was discovered.⁴⁴⁵ However, Angkor was not completely self-contained but was an outgrowth of a general south-east Asian civilisation, which continued to exist after Angkor fell. The important thing is that, as a given society declines, so the writing that is peculiar to it goes into abeyance, even though writing itself may continue. For instance, as Etruscan civilisation declined, so Etruscan writing died out. Being absorbed into the Roman sphere, the Etruscans took up Roman writing instead. Similarly, under the Hellenistic Ptolemies, the indigenous Egyptian hieroglyphs and Coptic script were replaced by Greek.

Education

All societies must educate their young. However, in ascendant societies schooling becomes formal and specialised, while well-educated people are virtually guaranteed secure positions with good rewards. Archaeologists have discovered an ancient Sumerian schoolroom whose teacher's seat and rows of benches would not look out of place even today.⁴⁴⁶ Here, in classes of twenty to thirty, the pupils did sums and writing exercises, and carried reports home to their parents. In addition to the three Rs, the curriculum included literature, grammar, geometry and music.⁴⁴⁷ If children

misbehaved, they could be set 50 or 100 lines. One text from the period, over four thousand years ago, tells of a boy reluctantly leaving for school with his packed lunch in the morning, dawdling on the way, and, on account of his lateness, being threatened with the cane.

The Aztecs had a compulsory education system,⁴⁴⁸ while the Chinese, from ancient times, operated a system of state examinations that were taken by applicants for positions within the imperial civil service. The Chinese system was supported by a university, and special honours were awarded by the emperor to prominent scholars.⁴⁴⁹ Admittedly, only the children of an intellectual elite were likely to receive a proper education in ancient civilisations, but in simpler societies there is no such opportunity at all.

Besides the schooling of children, ascendant societies are also active in research and what might be called higher inquiry. Instead of just using numbers, say, some scholars begin to explore the properties of numbers. In other words, they develop mathematics out of arithmetic. Between the fourteenth and sixteenth centuries, when Mali and Mauritania were booming on the trans-Saharan trade, their great mosques and schools enjoyed an international reputation.⁴⁵⁰ The Aztecs had linguists who studied the grammar of their language.⁴⁵¹ The Maya produced books dealing with subjects such as mythology, astronomy and history. In AD 765, they called a congress of experts at Copan to adjust the calendar in compensation for accumulated errors.⁴⁵² Clearly, astronomy had become a veritable discipline and resolution of this kind of complex issue required discourse within an informed population, much as today.

Conversely, learning is an important area that declines as societies undergo retrenchment. The community of academic specialists shrinks or disappears, fewer people are enrolled into the education system, the value of abstract knowledge is no longer emphasised, and the quality of knowledge is reduced. In classical Greece, *paideia*,

or education, was originally recognised to be the hallmark of a civilised person. To possess *paideia* was to possess manners, culture and sophistication. As Greek civilisation waned, respect for *paideia* declined accordingly. Contemporary commentators lamented that ignorance and rudeness were no longer any cause for embarrassment. Academic standards also deteriorated in late imperial Rome. Only jurisprudence saw any real development. All other branches of knowledge, from poetry to science, were stagnant.⁴⁵³ Similarly, the prestige of the Chinese civil service examination – for which scholars once spent years in preparation – declined as the Chinese state lost its authority. It tended to be abandoned during times of trouble.⁴⁵⁴

Thus, the existence of specialisation and specialist knowledge is a key characteristic of ascendancy. It is part of the creation of elaborate commercial networks through inventiveness and entrepreneurship. Such networks then support elevated standards of living. These themes are encapsulated in the following table.

Table 4-1: *Economic factors associated with the rise and fall of complex societies.*

Ascendant	Declining
Highly elaborate exchange networks	Disruption of exchange networks
Mass produced goods	Home produced goods
Inventiveness and entrepreneurship	Failure to realise potential
Specialist occupations	Self-sufficiency
Institutions such as writing, money	No such institutions
Education formal and valued	Deterioration and cessation of education

Chapter 5 - Asserting a moral way

Aesthetic standards

The techniques of ancient Egyptian sculpture showed overall growth during the three thousand years of pharaonic civilisation. However, within this growth there occurred a series of up and down movements in terms of artistic merit. These pulsations were echoed in other cultural spheres, and they coincided to a remarkable degree with the fluctuations in Egypt's power and prosperity.⁴⁵⁵ During times of disruption, cultural products displayed a marked reduction in talent and a concern with less lofty subjects.⁴⁵⁶ This experience illustrates a third major theme within the phenomenon of ascendancy, to be set alongside the roles played by coercion and commerce. Aesthetics and morality constitute the third dimension of institutional complexity, and vary in a consistent way with a society's changing fortunes.

Societies that are in terminal decline are regularly distinguished by the degenerate nature of their art. Students of the Maya describe their art as becoming generally shoddy and ugly as this civilisation collapsed. The carving of the classic period is recognised as beautiful, but the sculpture of the post-classic has been said to be downright bad and pitifully crude. Some of the sculptures are almost bizarre and seem to be the product of a distinctly unhealthy creative spirit.⁴⁵⁷ The pottery is simply dull.⁴⁵⁸ Ceramic art had turned into a mass product and with that had become lifeless.⁴⁵⁹ Building construction also became devoid of beauty in late Mayan times.⁴⁶⁰

Exactly this pattern is reproduced at Teotihuacan in northern Mexico, where the city's final flowering was followed by degeneration in the arts.⁴⁶¹ The slow decline in the city's political and economic prowess was mirrored by a decline in its pottery.⁴⁶² The Harappan civilisation also exhibited a general degradation of art and architecture as it neared the end.⁴⁶³ Late Minoan pottery has been described as tasteless. Decoration was based on degenerate versions of motifs from earlier centuries, these being plastered all over the vases in a haphazard fashion that was devoid of balance or subtlety.⁴⁶⁴ In African states, like those of the Yoruba, statuary was at its finest during the period of greatest order and prosperity, and became cruder with time.

Roman art declined in quality during the fourth and fifth centuries, just before the collapse of the western empire. Busts of the emperors became colossal and roughly carved. The vanishing of artistic skill is apparent even to non-experts. The busts have a primitive appearance, as though the artists were unable or unwilling to render the individual traits of the persons represented. These late sculptors failed even to reproduce accurately the anatomy of the head and other parts of the human body.⁴⁶⁵ The decoration on the Arch of

Constantine, dating from the early fourth century, shows dumpy, imperfectly realised figures with plebeian heads and crudely carved clothing.⁴⁶⁶ Rome seems to have plunged from a world of high artistry to one that was devoid of it.

While ugliness characterises the stage of terminal decline, the seeds of artistic degeneration seem to be sown much earlier, following a pattern that recurs quite consistently. When a society is still growing and developing, its art tends to deal with formal, universalist and idealist themes. However, once the society has achieved a high level of military and material security, artists turn their attention to the concerns of ordinary people and everyday life. As the Mayan classic period unfolded there was a move from religious to secular architecture.⁴⁶⁷ In the ceramic arts, decoration became increasingly concerned with secular themes.⁴⁶⁸ In the Egyptian old kingdom, there was a trend towards naturalism in art and a growing taste for representations of craftsmen at their tasks as opposed to the more traditional themes of gods and great persons.⁴⁶⁹

Roman reliefs in Belgian Gaul and lower Germany, dating from the second century AD onwards, appear to take delight in depicting events of everyday life, such as a school, a lady's toilet and peasants paying their taxes. This marks a departure from the restricted thematic repertoire of earlier times.⁴⁷⁰ Greek art of the fourth century BC exhibits a growing concern with crowds, mobs and the common run of people. Pathological types, such as prostitutes, criminals, and street urchins, came to be of greater fascination than the old heroes. One critic has said that the art of this period set out to portray men rather than Man. While mortals had formerly been depicted like gods, the gods were now depicted like mortals. The idealised female figures of former times gave way to portraits of real women, in which they appeared as sexual figures or as realistically flawed.⁴⁷¹ The same trend is to be found in drama. Instead of dealing with the great political and philosophical questions, playwrights found their material in private and domestic life, in everyday experiences and the problems of the housewife.⁴⁷²

As well as being increasingly secular and prosaic, creative activity also becomes more flamboyant over time, something that is widely recognised by art historians as indicating the seeds of decay.⁴⁷³ This is accompanied by a proliferation of styles, as though artists are making personal statements rather than adhering to well rehearsed themes. During the late phases of the Mayan civilisation, pottery became more ornate and dynamic⁴⁷⁴ leading up to the final drastic reduction in quality.⁴⁷⁵ The same applied to the Harappan civilisation. As the end approached, there was increased heterogeneity of pottery and other

artefact styles within an area where they had once been highly uniform.⁴⁷⁶ Similarly, pottery in the Delmarva peninsula of the eastern United States became increasingly flamboyant, until the social collapse that occurred around AD 1000 brought a return to a much simpler style.⁴⁷⁷

It might be argued that judgements about the quality of art are suspect because they are too subjective. While a concentration on prosaic themes may be recognised unambiguously, what one person considers to be ugly or degenerate may seem to another to be refreshingly avant garde and provocative. In fact, it has been suggested that aesthetic value can be quantified mathematically as a product of complexity and order. High aesthetic value means intricate patterning and symmetry, while low aesthetic value means lack of symmetry and the limited arrangement of a few elements. Such a definition would certainly allow the late art of many societies to be identified as ugly and debased.

The need to defend aesthetic judgements can be side-stepped altogether by considering what artistic representation says about changing attitudes and capacities. Flamboyance, for example, means artists becoming less trammelled by tradition and freer to express themselves. As for art being said to be ugly and shoddy, this generally boils down to the fact that it absorbs less effort and less money. During periods when Egyptian sculpture is said to have declined in quality, it was also frequently executed in wood instead of stone. In other words, sculptors resorted to a cheaper and more easily worked material.⁴⁷⁸ What may be perceived as ugliness can be cast more objectively as skimping on the resources, both human and material, that go into creative activity. In short, the changing nature of art in declining societies involves a movement towards style diversification, secularism and cheapness.

Moral standards

Changes in a society's fortunes are reflected in the moral as well as the aesthetic sphere. Although 'moral' seems to be a subjective term, like 'aesthetic', it too can be considered objectively, provided it is understood that 'moral' means conforming to the 'mores' of a society, i.e. to its customary beliefs and practices. Behaviour is moral if it conforms to these mores and immoral if it does not. The term amoral describes individuals or societies that do not recognise a clear set of mores at all. None of this relies on assumptions about absolute ethical standards.

In this light, it can be said that ascendant societies exhibit strong morality. Aztec society, for example, was remarkably puritanical; drunkenness could be a capital offence. The Aztecs demanded moral conformity from each other. Violators of the code, as well as criminal offenders, were dealt with firmly. Similarly, Rome, in the days of the republic,

was most moral. Everyone observed the ancient pieties of the traditional religion and adopted uniform dress and manners. Those who offended against these customs were not treated lightly.

When the sense of a clear moral way pervades a society, people exhibit a high degree of civic responsibility and loyalty to their fellow citizens. There is a sense of service. During the heyday of classical Athens, youths swore an oath at the age of 18, stating 'I will hand on my fatherland, not diminished but larger and better'. Similarly, in the early days of the Roman empire, Roman citizenship was a rare privilege and something to be proud of. This generated a high level of patriotism. Citizens were very willing to serve in the legions and there was considerable public generosity.

Ascendant societies are characterised by a firm self-belief, i.e. a conviction about the rightness of their particular sets of values. This is what lies behind the supremacist fantasies of those such as the fifteenth century Venetians or nineteenth century Britons, who supposed that they had exceptional qualities ensuring their permanent ascendancy. Given their strong self-belief, ascendant societies exhibit a ready acceptance of the status quo. They celebrate and support the achievements of their leading members. They are also confident about exporting their values to the rest of the world. When new provinces were brought into the Roman empire, emphasis was placed on assimilation to Roman culture and customs. Spanish officials were encouraged to wear the toga and speak Latin. The Roman way of life was also transplanted wholesale to the formerly uncivilised regions of Gaul and Britain.

Once a society is past its peak, these habits of conformity and uncritical loyalty are gradually eroded – in a moderate way, at first, but accelerating as the state of decline becomes obvious. The late Athenians, for example, abandoned the practice of swearing oaths. They also became increasingly inclined to evade their responsibility for making contributions to the public finances. Formal compulsion had to be introduced, with the defaulters being pursued at law.⁴⁷⁹ The Athenians also stopped volunteering for the city's once formidable navy and crews had to be conscripted.

Contemporary Romans despised the Greeks for their dissolution but, many centuries later, they were to go through exactly the same process. During the empire, Rome's standards became progressively relaxed and Romans were more tolerant of non-conformity. Citizens lost their pride in military service and did everything to evade it. The erosion of Rome's sense of a clear moral way coincided with the gradual abandonment of its state religion. In early times, public officials presided over regular communal ceremonies. These served

to affirm Roman values, and encouraged loyalty to Rome and its traditions. Other religions were abhorred and discriminated against. However, the Romans steadily lost respect for their traditional paganism and began going over to new faiths. Christianity, once a capital offence, was increasingly tolerated.

As it became apparent that Rome was losing its moral purpose, calls went out to renew the traditional religion. Several polemics were published in the second and third centuries AD, denouncing Christianity as a barbarian outrage and corrosive influence on the civil order.⁴⁸⁰ The emperor Diocletian intensified persecution of the Christians and left a newly prosperous and vigorous empire when he abdicated in AD 305.⁴⁸¹ His co-emperor Maximian ordered temples to be erected in every city and called for the sacred groves to be speedily restored.⁴⁸² However, these moves were too late and the trend could not be reversed. Soon afterwards, Constantine became the first Christian emperor. He attempted to use Christianity as a substitute for paganism capable of binding the empire together, and in that he succeeded to some extent.⁴⁸³ However, the adoption of Christianity was not total, and even the Christians disagreed among themselves on points of doctrine. The defiant espousal of Monophysite Christianity in north Africa, for example, has been interpreted as a form of deliberate defection from the declining empire.⁴⁸⁴ In any case, the new religion signalled the end of a tradition that had encapsulated what was truly Roman about Rome. Thereafter the empire's self-confidence and mastery really began to wane.⁴⁸⁵ In 361, the emperor Julian the Apostate attempted a wholesale reconversion of the empire to paganism, but he died only two years into his project.⁴⁸⁶ Alaric's sack of Rome in 410 – a huge blow to the Roman self-image – also led to a resurgence of paganism, in a last ditch effort to recover Rome's former confidence. However, this proved short-lived and ineffective.

The diminishing self-belief of declining societies is reflected in a defeatist mentality and even active hostility towards those who strive for the former ideals of excellence. When the world of classical Greece was past its prime, there grew up a milieu in which quality was scorned and vulgarity was encouraged. It seemed that mediocrity was preached almost as a cult. Similarly, the rulers of descendant societies attract little respect and are apt to be held up for public criticism. During the Egyptian late period, the pharaoh's fallibility came to be acknowledged and it was suggested that pharaonic disharmony with the divine will might be responsible for Egypt's misfortunes.⁴⁸⁷ This was a significant departure from earlier times when the authority of the pharaohs had been sacrosanct and not subject to open scrutiny. In a similar way, civil

servants of the late Roman empire showed an unobtrusive but persistent defiance of their rulers.⁴⁸⁸

Far from promoting conformity to a moral way, opinion-makers in declining societies challenge the very idea that rigid moral standards are even appropriate. In late Greece, the Sophists taught that ideals such as truth and justice have no absolute validity but are merely relative.⁴⁸⁹ Philosophers argued for toleration, pointing out that there could be no unambiguous definition of what was virtuous. Socrates, in particular, argued that the traditional morality of his nation had no logic. He was put to death in 399 BC, after the Athenian defeat in the Peloponnesian war, on the grounds that he had been corrupting the city's youth. This was a time of moral and religious crisis, when the worship of the city's gods was being neglected.⁴⁹⁰ The execution of Socrates has gone down in history as a crime against reason, but some might think his accusers had a point.⁴⁹¹ Those that came after Socrates took the relativist philosophy to extremes. Diogenes, founder of the Cynic school, argued for the complete freedom and self-sufficiency of the individual, advancing the notion that individuals owe loyalty only to themselves and not to the community. As the Athenians' belief in tradition was destroyed during the fourth century, with nothing put in its place, the fortunes of their city continued to descend. Soon enough, it fell to Philip of Macedon, and the next two thousand years were spent under the yoke of one foreigner or another.

The challenge to a people's self-belief and moral way can come from outside as well as inside, though the effect is the same, which is to destroy a previously effective society. Many indigenous peoples around the world are destitute and demoralised, their traditional way of life having failed to survive the encounter with European invaders. In Australia, when Europeans began doing missionary work, as well as distributing trade goods, and enforcing strange laws, the aboriginal world view was severely damaged. Its transmission to the next generation was profoundly disrupted, and aboriginal lifestyles now appear as dissolute and degenerate.

A similar crisis of confidence probably played a part in the conquest of the pre-Columbian civilisations of America. By itself, it is extraordinary that the mighty Aztec empire could have succumbed so easily to Cortés's force of a thousand Spanish soldiers. Certainly, the Aztecs lacked metal, the wheel, and draft animals, and they were technologically disadvantaged compared to Cortés with his horses and firearms. Yet these firearms were still relatively clumsy and required lengthy reloading. They could hardly have guaranteed success in a real war, where Cortés might have been outnumbered by as many as

twenty to one. A key element in the Aztec downfall was the unexpectedness of the Spaniards' arrival. This psychological shock undermined the Aztecs' conviction of their right to dominate and hastened their downfall.

The feat that Cortés pulled off in subduing the Aztec empire while heavily outnumbered was remarkable enough. However, it was surpassed barely a decade later when Francisco Pizarro, with just 130 foot soldiers, 40 cavalry and a single, small cannon, subdued the whole kingdom of the Incas, one of the great empires of all time. Here too blows to mood were far more important than military might. As Pizarro arrived, a five year civil war was just being concluded, which must have done some damage to the society's confidence. Furthermore, vague rumours about white people's activities in the north had probably been reaching Peru so that a sense of unease already lay over the land of the Incas.⁴⁹² Then Pizarro tricked the Incas' new leader, Atahualpa, first capturing him after inviting him to parley, then executing him after he had supplied the ransom demanded for his release. This crisis finally unnerved the Inca empire and it passed into history. Pizarro had demonstrated that self-belief is crucial and that without it even a flourishing militarised society can collapse at the slightest of pressures.

The anthropologist Colin Turnbull has documented the most extreme rupturing of bonds of loyalty, and its drastic consequences, in his description of the Ik (pronounced 'eek'), a people among whom not even the institution of the family continued to function.⁴⁹³ Turnbull's account of the eighteen months or so that he spent with the Ik during the 1960s may rank as the most depressing chronicle in the entire history of ethnography. He describes the Ik, who lived in the mountainous north-east corner of Uganda, as being the most unfriendly, uncharitable, inhospitable and generally mean people as one could expect to meet. The simple problem was that the Ik were starving. They had been banned from their former hunting ground in Kidepo National Park and encouraged to become farmers, but the uncertain rainfall of the region and the Ik's general lack of aptitude ensured that their fields provided a worthwhile return at best one year in three. The result was extreme selfishness, with the Ik foraging alone and keeping for themselves whatever food they might find. Parents disowned their children, who learned food collecting techniques from each other and from the baboons. When Turnbull tried to intervene in a small way by provisioning some of the older and weaker Ik, he was condemned for wasting food on people who would die anyway. Among the Ik, there simply was not room for such luxuries as family, sentiment and love. One young girl, Adupa, seemed not to have learnt the basic principles of survival and would bring food to her parents. They, however, only

laughed at her when she asked them for food in return. In the end, when her incessant demands became intolerable, they shut her in a compound to starve to death. After a few days, they threw her body out into the bush like so much garbage. When Turnbull tried to help one man who had been fatally injured in a fight by giving him a cup of hot sweet tea, the man's sister stole the mug from his hands and ran away laughing with her trophy. On another wretched occasion, Turnbull saw the young son of a man who had just died trying to tear the lip plug from him as others fought over the body for the man's meagre possessions. Turnbull suggests that Ik society had degenerated to the point that its members had lost any sense of a moral way and with it any kind of commitment to their fellows. Arguably, they no longer had a society at all.

From religion to cultism

Declining societies can present an apparent paradox. On the one hand, religion seems to be dying out. Secular themes take over in art, for example, and the traditional pieties are neglected. On the other hand, interest in religion appears to be on the increase, with new faiths proliferating and their adherents showing intense commitment. In the late Roman empire, the traditional gods were abandoned, but people flocked instead to alternative belief systems offered not only by Christians but also by Jews, Gnostics, Stoics, Neo-Platonists, Neo-Pythagoreans, Manichaeans, Mithraists, and even Hindu mystics.⁴⁹⁴ There was also renewed interest in magic, and the wearing of amulets, for example, became widespread.⁴⁹⁵ Similarly, as the Mayan civilisation entered its decadent phase, various new cults were introduced, including the worship of Quetzalcoatl from northern Mexico.⁴⁹⁶ The Egyptian first intermediate period appears to have been a time of prophets and Messianism.⁴⁹⁷ As American Indians came under increasing pressure from European settlers, they spawned various cults, including the Dreamers, the Ghost Dance and Peyotism.⁴⁹⁸ In contemporary Melanesia, cargo cults have arisen in response to the sudden shock of exposure to technological civilisation.

The solution to the paradox is that the former, shared, civic religion, which people followed out of convention, becomes replaced by many different sects and cults, among which people choose according to their own conscience. The religions that take root in declining societies typically emphasise a personal relationship between adherent and deity, thus bypassing the institutions by which moral conformity used to be enforced. Mithraism, for example, was not a civic religion, and had no public ceremonies or professional priestly class. It was a secretive cult that revolved around intimate communion between the adherent and his god.⁴⁹⁹ It did little to promote a sense of community in society as a whole. For a while,

Mithraism was the most successful of the new religions in later Rome. However, it had no place for women, who actually provided the largest numerical support for the new faiths. It eventually lost ground to cults such as those of Isis, Cybele and Christ, which were more woman-friendly although no less personalised.

In the same way, after the fall of the Han dynasty, the people of China turned to Buddhism, an other worldly religion, while the more humanist Confucianism went into decline.⁵⁰⁰ During Europe's crisis of the fourteenth century, when traditional values gave way and the civic spirit was lost, new sects appeared and mysticism gained ground.⁵⁰¹ On Easter Island, an esoteric bird man cult appears to have arisen during the late decadent phase, as the island descended into anarchy.⁵⁰² At Angkor, a new interpretation of Buddhism came to replace the traditional one during the late period and has been implicated in the rapid decadence of the Khmer empire.⁵⁰³ Angkor's traditional Buddhism was nationalistic and involved a cult of the king, thus emphasising the role of the state and community in religious experience. The new sect, on the other hand, was more populist, and it opposed individual personality and the concept of deities. It appealed directly to the common person and obviated the need for a sacerdotal apparatus.⁵⁰⁴

New religions often explicitly challenge or contradict the traditional values of the society in which they take root. In this way, they achieve precisely the opposite effect to the outgoing religion, whose role is to affirm those same values. For example, St Augustine of Hippo, a hugely influential figure in the early Church, argued strongly that Rome's interests conflicted with and should be subordinated to those of Christianity. 'Please pardon us if our country, up above, has to cause trouble to yours', he said in his book, *City of God*.⁵⁰⁵

Religious believers in declining societies are particularly fervent and out-worldly. In the late Roman empire, Christians developed a passionate obsession with doctrinal issues, and especially with promoting or opposing various theological positions concerning the Holy Trinity. Gregory of Nyssa observed that, in the heyday of vehement debate over the Arian heresy, shopkeepers seemed more interested in arguing about whether the Father was superior to the Son than in telling customers the prices of their wares.⁵⁰⁶

These controversies illustrate that the Christianity of these times was itself fragmented, reflecting the extreme atomisation of Roman society. It was only as heresies were stamped out that Christianity became able to unite people in a Europe that was recovering from the Roman collapse. This was not achieved lightly. Many people were burned and tortured to create an unadulterated, community-based Christianity. In

the Albigensian crusade of the early thirteenth century, the inhabitants of this region in southern France were slaughtered by the tens of thousands, in order to eradicate the Cathar heresy that had taken root there.⁵⁰⁷ Through such methods, Christianity became unified and at the end of the middle ages it was in a position to take over the role once played by Rome's paganism. It permeated society with a sense of shared purpose and imbued the explorers and thinkers of the new age with confidence and vigour.⁵⁰⁸ In a similar way, Rome's original religion that served it during its heyday had been forged in Greece in the aftermath of the Mycenaean collapse.

The christological controversies of the later Roman empire were also a reflection of underlying human problems and aspirations.⁵⁰⁹ People felt impotent within a society that was clearly in crisis. They turned to religion as a kind of displacement activity and because it offered the vision of an alternative world in which things could be put in order through the agency of human will. While the supernatural has never been far away from human concerns, the cults of declining societies have a particularly eschatological flavour. That is to say, they are concerned with final things, with decay and with termination. They reflect a sense of things drawing to a close, or of the ending of an era. They are concerned with preparing for a culminating event, such as the day of judgement, which is believed to be imminent, and they seek legitimacy elsewhere than in the status quo.

Innovators and imitators

Theoretical discussions of state formation sometimes distinguish between pristine and secondary states, i.e. between those that arise autonomously and those that are stimulated into existence through contact with pre-existing ones. Such a distinction, however, seems spurious. No state has developed entirely in isolation.⁵¹⁰ They have all built on the achievements of others, whether of predecessors or contemporaries. The point is, however, that nascent civilisations show they have something fresh to offer to history. The Romans, for example, took much from Greek culture, but they made it Roman. Inferior peoples, on the other hand, merely imitate. The conquered Britons uncritically took over the whole Roman way of life.

The borrowings made by ascendant societies can be regarded as healthy. Steeped in self-confidence, they transform whatever they inherit, forging from it something new and distinctive. The ancient Egyptians, for example, were in contact with Sumer during pre-dynastic times, and they must have had the Sumerian achievements as some kind of model. Yet, in the details, pharaonic civilisation was unique. Its hieroglyphic script, say, looked very different from the writing of its neighbour.

Societies that have failed to reinvigorate themselves with foreign ideas have stagnated and been disadvantaged in the long run. Its relative isolation gave the Mayan civilisation the freedom to erect impressive temples and cities.⁵¹¹ Yet Mayan society also remained very stable over the centuries, with essentially a stone age technology, so that it was left vulnerable to later invaders. Likewise, Japan up to the mid-nineteenth century abjured overseas expansion and prevented almost all contacts with foreigners.⁵¹² In consequence, technological progress in Japan proceeded at a snail's pace. When an American expedition sailed into harbour in 1854 to force Japan open for commerce, the country could put up no credible resistance.

As they go into decline, societies become steadily less innovative. Creative poverty occurs on every front. The last six centuries of Mayan history involved decline in all aspects of material culture.⁵¹³ The Harappan civilisation displays a record of progressive deterioration in virtually every indicator.⁵¹⁴ The Romans stopped expanding, building and innovating. Things that several hundred years earlier the Romans seemed to do effortlessly now seemed to be beyond all reasonable expectation. The late Romans could not even maintain their heritage, let alone add to it. Before them, the people of Etruria, and the Italic world generally, had seemed to lose their vitality in a similar way. In comparison to the great strides being made by the Greeks and their colonies, the Etruscan civilisation of the fifth century BC became backward and provincial.⁵¹⁵

Instead of absorbing and transforming foreign ideas, declining societies become passive imitators of cultural advances that are being made elsewhere. The late Etruscans, for example, developed a predilection for eastern fashions. Similarly, Mycenaean influence became increasingly important in Crete from 1500 BC, in the time leading up to the final demise of Minoan civilisation.⁵¹⁶ In central America, the gradual decline of the Olmecs has been linked to cultural inroads made by Teotihuacan and the Maya.⁵¹⁷ Later, the Maya themselves seem to have been emulating Toltec culture immediately prior to their collapse.⁵¹⁸ During the Mayan post-classic period, the whole way of life was reoriented under the influence of alien gods and alien rulers.⁵¹⁹

Declining societies are especially likely to start taking a lead from the lesser cultures that have existed almost unnoticed on their periphery or even within their borders as economic migrants. The late Romans, for example, emulated the German barbarians who had infiltrated during the centuries of imperial rule. Romans eventually gave up the toga in favour of the German habit of wearing trousers, while the army adopted German swords.⁵²⁰ Declining societies can also come under

the rule of foreigners. These may seem to take over out of the blue but they have often been present as peaceful immigrants for some time beforehand. The middle kingdom of ancient Egypt, for example, is said to have been brought down by rather mysterious invaders, known as the Hyksos, whose rule represents one of the low points of pharaonic civilisation. Before the irruption of these foreign kings, migrants from Nubia and Palestine seem to have been already present in significant numbers.⁵²¹ Some pharaohs were taking Semitic names, such as Joam and Jakbaal, indicating that foreign ideas were gaining a considerable hold.⁵²² Similarly, when the German Odoacer deposed the last western Roman emperor, he did so in a land that was already chock full of his compatriots.

Community and individual

In inchoate and vigorous societies, the community takes precedence over the individual. Once societies are well established, the individual increasingly takes precedence over the community. People's behaviour becomes more overtly self-interested. Their rights are more explicitly defined. The state becomes more concerned with alleviating misery and improving well-being. These trends accelerate with decline, so that from the perspective of the ordinary person, things seem to be getting better in many ways.

A writer at the time of the collapse of the Egyptian old kingdom lamented that people's hearts had become greedy.⁵²³ Ordinary Greek citizens of the fourth century BC proved to be more interested in their private affairs than in the needs of the state. They looked to the city as a source of benefits rather than as something that demanded their loyalty and service. There was apparently a feeling that responsibility flowed in one direction only, from state to citizen.⁵²⁴ The Athenian statesman Demosthenes had a hard time persuading people to spend less money on subsidised theatre performances and more on national defence against the Macedonians.

Senators of the late Roman empire stood aloof from public life, their sense of civic duty having become almost wholly deficient. Many held no office of state, preferring instead to remain at home and enjoy their properties at leisure. They lived idly on their estates and were apparently oblivious to any wider claims on their time.⁵²⁵ Even when the barbarians were invading, late Romans showed no instinct except for their own individual interest.⁵²⁶ A growing number of people effectively dropped out of civil society altogether, becoming anchorites and contemplatives.⁵²⁷

Throughout the history of the Roman empire, citizens achieved a progressive accumulation of rights, to an extent that came to hamper the very functioning of the society. The categories of people exempted from military service grew cripplingly numerous – senators, bureaucrats, clergymen and

many others were entitled to opt out. Those who were not exempted found other ways to avoid conscription. Various laws were introduced to improve the situation but they all proved ineffective in the long run.⁵²⁸

The accumulation of rights in Rome also meant a process of democratisation and status equalisation, which began early. Already in the time of the republic, the offices of consul, praetor and censor, which had previously been reserved for patricians, were made open one by one to plebeians. The plebeians demanded a written law code and legal equality with the patricians. This was denied at first, but attitudes subsequently softened and the demands were granted. At the same time, prohibitions against intermarriage between the two classes were abolished.

Bit by bit, the imperial state continued the process of elevating the rights of the individual and improving the lot of ordinary people. The emperor Hadrian revoked the power of owners to kill their slaves. Then Alexander Severus revoked the (already obsolete) right of fathers to kill their sons. After that Justinian humanised the law all round, replacing capital punishments with lesser sentences. Later Constantine set limits to the punishment of slaves and made it illegal to separate slave families. He also increased the rights of women, making unilateral divorce more difficult and banning concubines.⁵²⁹ Some jurists of these times argued in a remarkably enlightened fashion. Ulpian, for example, proclaimed that all human beings are born free and that slavery is unnatural. While striving to maintain the fundamental institutions of Roman law – i.e. family, private property, and sanctity of contracts – these jurists modified the concepts in a philanthropic and democratic direction, suggesting a new sensitivity for human rights.

There was also an acceleration of already existing tendencies to assist the poor, weak and defenceless. The protection and rights of Roman citizenship were steadily extended to cover virtually the entire population of the empire, barring slaves, though the motivation was arguably expansion of the tax base as much as philanthropy.⁵³⁰ The emperor Septimius Severus introduced many initiatives to reduce discrimination against non-Italians and non-citizens. The provinces were no longer to be just exploited but developed through long term economic planning.⁵³¹ Constantine provided a form of social security, for example granting assistance to poor families with children. He also improved the lot of debtors and the conditions in which prisoners were kept.⁵³² Valentinian, a Danubian barbarian who came to the throne in AD 364, felt an unusually strong sense of duty to the poor, and tolerated differences of religious opinion.⁵³³ The bloodthirsty games at the colosseum, which had

been built during the first century AD, became increasingly less acceptable in late Roman society. The practice of throwing criminals to the beasts was ended in 326, and gladiatorial combats, even those between volunteers, were abolished in 404, seventy years before the deposition of the last western emperor.

During the decline of Athens, rights to participate in the assembly, and possibly even vote, were extended to women, foreigners and even slaves.⁵³⁴ Ordinary people also gained in rights and assertiveness as the Egyptian old kingdom neared its end. In the funerary religion, concepts and symbols that were originally devised for the exclusive use of the pharaohs became more widely adopted. This 'democratisation of the afterlife' was probably a reflection of what was happening in the society of the living. A literary work of the time, the Tale of the Eloquent Peasant, makes clear that the state ought to meet the aspirations of its ordinary citizens as well as those of more elevated individuals.⁵³⁵ The societies of ancient Iraq and the Hittites also showed a growing sensitivity to individual welfare, for example with decreasing severity in the penalties for crime.

The anti-social ones

The self-centred elevation of the individual in declining societies can be linked to a growth in crime, corruption and generally anti-social behaviour. When Rome was still young, one Greek author commented on the lack of corruption there, compared to his own homeland, which was already past its prime and where corruption was now endemic. By 59 BC, though, Julius Caesar was introducing laws to control declining standards. The poorly paid and increasingly numerous civil servants of later Rome were notoriously inhumane, self-serving and corrupt.⁵³⁶ An anonymous pamphlet writer in the second half of the fourth century complained to the emperors of the day about the dishonest and extortionate provincial bureaucracy of the empire. The writer was also bothered by the degenerate legal system, in which the administration of justice had become plagued by the problem of bribery. He ended his pamphlet with a plea to ban all frivolous and dishonest suits, which were a growing problem in an increasingly litigious society.⁵³⁷ Classical Athens had similarly become a 'lawyer's republic' as it headed for decline.⁵³⁸

Crime generally was on the rise during the late Roman empire. The laws of Theodosius II, published in AD 438, show the curious nature of a descendant society's response to this problem. They were based on a paradoxical combination of mounting severity and growing tolerance. Some of the late Roman legal code reflects increasingly humane and enlightened attitudes. However, other parts display almost hysterical repressive violence, presumably partly for deterrent effect and partly as

an expression of outrage against the spiralling criminality of a society that was losing its way. The whole criminal justice system was evidently proving ineffective. The laws of Theodosius II are monotonously repetitive, suggesting that they were circumvented, disobeyed and ignored.⁵³⁹

Rising crime was also reported from the periods of Egyptian turmoil. In late Ptolemaic Egypt, when the society was nearing exhaustion, robbery was widespread and the constabulary was losing the battle with criminals. Similarly, on Easter Island, there seems to have been a decline in standards after the collapse of the powerful chieftom that formerly existed there. The first Europeans found that the natives were inveterate pickpockets, who habitually hid their own belongings to stop them from being stolen. This certainly indicates a major breakdown of any sense of community.

An ascending society sets itself high standards, in behaviour and in the things it produces. As it moves towards decline, standards deteriorate on every front. The society becomes dominated, at its best, by an enlightened concern for human suffering, and, at its worst, by squalid self-interest. These measures of ascendancy are encapsulated in the following table.

Table 5-1: *Social factors associated with the rise and fall of complex societies.*

Ascendant	Declining
Labour-intensive art using costly materials	Art cheap, flamboyant and secular
Moral certainty	Tolerance and relativism
Civic responsibility	Diminishing commitment to the public good
Admiration of and striving for excellence	Celebration of ordinary people and their ordinary lives
Shared civic religion	Proliferation of cults based on personal commitment
Religion positive and in-worldly	Religion pessimistic and out-worldly
Creative forging of influences into a unique culture	Passive imitation of the culture of others
The community is more important than the individual	The individual is more important than the community

Chapter 6 - The human ferment

The inevitability of change

There have been many great civilisations – many vigorous societies boasting riches and power on a scale previously unimagined – and they have all experienced cultural decay and military reversal. Even after the most brilliant achievements, a people can wind up in misery.⁵⁴⁰ Adversity is no respecter of a society's age, nor of its wealth or its privileges. Nowhere has proved to be forever blessed, no matter how magnificent its temporary situation.

On the other hand, no society or people can be judged as permanently written off, however backward it may seem and however inauspicious its circumstances. The great civilisations of the past all came up from obscurity. It was never obvious in their early days that they would achieve so much. Before their ascent began, societies destined for greatness did not distinguish themselves in any way. Others often seemed at least as well placed to succeed. In the fourth century BC, Rome was just an insignificant town on the Italian coast, growing stronger but not as illustrious as the city states of southern Italy and Sicily.⁵⁴¹ The future of the Latin people looked no brighter than that of the Greeks, Etruscans or other Italian tribes.⁵⁴² It was only in 290 BC, after Rome's victory in the third Samnite war, that its unusual momentum became discernible.⁵⁴³ In the long run, Rome would itself be overtaken by places that none could have expected to present a challenge – including North America, of which the Romans had never even heard.⁵⁴⁴

In the early 1500s, England's financial and commercial infrastructure was crude in comparison to those of France and Spain.⁵⁴⁵ Observers would have been hard pushed to predict its subsequent emergence as the political and industrial capital of the world. Equally, Germany's dominance of the great power system after 1870 would have seemed unexpected just decades before, when it was a fragile and disunited entity in central Europe.⁵⁴⁶ A similar comment may be made about Europe generally. Around 1500, it was by no means obvious that Europe would come to dominate the world. If anything, the Islamic Ottoman empire seemed to be threatening to achieve this.⁵⁴⁷ Meanwhile, less than fifty years ago, the World Bank judged that the Philippines and Myanmar had the best prospects in south-east Asia, and Taiwan and South Korea the worst. The Philippines was then the richest country in the region and Hong Kong women flocked there as maids.⁵⁴⁸ Today these tables have turned.

Some societies have succeeded with such unpromising backgrounds that no one could ever have guessed their destiny. Sweden's cold climate does not seem conducive to the creation of an advanced society. Yet in the eighteenth century Sweden grew rapidly to become a major European

power⁵⁴⁹ and today it remains one of the most prosperous nations. Indeed, the very first civilisation, that of Sumer, rose in the far from ideal conditions of southern Iraq, with its hostile temperatures and steaming swamps surrounded by desert.

A country's fate has never been entirely in its own hands. Even if it maintains a steady course, its relative position is affected by the fact that societies are rising and falling all around. In the sixteenth and seventeenth centuries, Habsburg military pre-eminence was undermined as its rivals expanded their armies on a large scale.⁵⁵⁰ In the nineteenth century, Britain headed a world-dominating empire, but since then it has lost enormous prestige despite growing in absolute prosperity almost every year.⁵⁵¹ The problem was that other countries industrialised and caught up.⁵⁵²

A society's misfortune can allow others to rise. The demise of the Etruscan and south Italian coastal cities may have helped Greece to reach its apogee in the fifth century BC.⁵⁵³ After the Harappan downfall, power shifted to the Ganges.⁵⁵⁴ The Hittite king Suppiluliamas extended his empire by taking advantage of the weakness of the Egyptian pharaoh, Akhenaten, and conquered territory down to the Lebanese border as well as the whole of Asia Minor.⁵⁵⁵ Later, the fall of the Hittites made way for the Assyrians,⁵⁵⁶ who also benefited from the ebbing of Babylon's fortunes after the death of Hammurabi.⁵⁵⁷ The origins of the Nubian state of Napata lay in the vacuum left by the collapse of Egyptian power towards the end of the second millennium BC.⁵⁵⁸

The configuration of the world's different regions at any time is inevitably a transient thing. Disadvantaged countries come forward. Powerful ones lag behind. In doing so, they each affect the chances of others. So it goes round, ensuring that change is certain and neither good fortune nor ill fortune will last for ever.

The constancy of change

The typical history of a south-east Asian mandala has been characterised as a kind of regular cycle: establishment by the founder, expansion under the heir, decline and contraction under the heir's heir, and finally conquest by another mandala at an earlier point of the cycle. This is a neat picture of the way that societies' fortunes change. It is related to the idea that civilisations are born, mature and die, which was discussed by Plato and Machiavelli, among others. The truth is, however, that civilisations do not generally conform to a simple lifecycle, or parabolic trajectory of rise and fall. Nor do most of them simply become senescent and then die out in the manner of biological organisms.⁵⁵⁹ Typically, they experience repeated episodes of retreat and recovery, and their termination is often a messy

affair, with parts of the society living on in other forms and sometimes with long-delayed renaissances.

The Sumerian civilisation, for example, was gloriously restored in the shape of the third dynasty of Ur, after a lengthy period of decline.⁵⁶⁰ This neo-Sumerian period was just the last and greatest of several similar revivals.⁵⁶¹ Later the Babylonian civilisation, after its initial fall, was restored under Nebuchadnezzar and then, after conquest by the Assyrians, was restored a second time.⁵⁶² Equally, as far as classical Greece is concerned, the idea of a continuous downhill movement is wrong. After the Peloponnesian war, the situation of Athens looked quite desperate. Yet the city's fortunes revived quite dramatically in the ensuing decades and it even recovered its Aegean empire.⁵⁶³ The Macedonian conquest subsequently caused the great city states to lose enormous prestige, but their decline was uneven in both time and space, and there were bursts of recovery along the way.⁵⁶⁴

Etruscan society, after 150 years of decline, underwent a marked resurgence during the second half of the fourth century and it was as vigorous as ever throughout the entire Hellenistic era.⁵⁶⁵ Even during the deep Etruscan recession, the crisis was resisted in some areas,⁵⁶⁶ and decline did not afflict all parts of the Etruscan world equally or at the same time. The whole Etruscan relationship with Rome shows a series of reversals rather than an inexorable progression towards the final outcome. After initially being overthrown, Etruscan rule returned to Rome with the reign of Tarquinius Superbus from 534 to 509 BC. He fell in his turn, but this was still not the end.⁵⁶⁷ Lars Porsena of Clusium, another Etruscan king, briefly imposed his rule at Rome around 505 BC.⁵⁶⁸

Change is often rapid. Major developments can occur in less than a generation, and are interspersed with longer periods of more or less equilibrium. Empires tend to be acquired in spurts under great leaders and they fall apart equally quickly under weak ones. Between inheriting the Macedonian throne at the age of 20 and dying in Babylon at the age of 33, Alexander the Great constructed an empire stretching from Egypt to India. His warring successors immediately divided the empire up into half a dozen kingdoms. One of them, Hellenistic Greece, was conquered by Rome in the second century BC. Another, Ptolemaic Egypt, succumbed in 30 BC.

The idea of a lifecycle is inadequate as a metaphor for the complex histories of real societies. The evidence everywhere is for a continual ferment of changing status relations between nations, rather than for a simple process of first accumulating and then dissipating status. When they are rising, societies experience setbacks. When they are falling, they experience periods of recovery. The history of the Tigris-Euphrates basin is littered with

the decline, resurgence and eventual demise of several nations, stretching over three thousand years. The Assyrian empire, like pharaonic Egypt, went through old, middle and new periods, these being separated by chaotic episodes.⁵⁶⁹ After 1600 BC, the region's political history becomes very complicated with frequent realignments even though the region as a whole was increasingly unified.⁵⁷⁰

The Hittite kingdom presents a vivid saga of alternating advance and retrenchment. Beginning with the reign of Labarnas, their first great king, the Hittites expanded to the south and east, conquering north Syria and the Amorite kingdom of Babylon around 1600 BC. However, this proved only temporary and the territory was soon lost again.⁵⁷¹ Around 1525 BC, the king Telipinus restored the Hittite state.⁵⁷² This period of renewed vigour was followed by another period of impotence when the Hittites were sacked in their own lands.⁵⁷³ Later, Suppiluliamas's empire proved to be the apogee of the Hittite experience. These were just the broadest changes in the Hittites' fortunes and behind them lay an even more complex pattern of advance, decline and resurgence.

The kingdom of Arzawa in western Asia Minor had a similar history of fluctuating fortunes. Having first been conquered by the Hittites, it reasserted its independence during the period of Hittite decline. It was then reconquered by Suppiluliamas, only to rise again in revolt.⁵⁷⁴ Finally, Arzawa was crushed by Suppiluliamas's successor.⁵⁷⁵ Later, after the Hittite demise, a Phrygian kingdom was established here around 800 BC. It achieved great wealth and Midas, with his golden touch, was a Phrygian king. Before long, this society failed, and civilised life vanished from the region until the emergence of the Lydian kingdom, whose king Croesus also has a proverbial association with wealth. In the mid-sixth century BC, the region lost its independence altogether and became a province of Persia.⁵⁷⁶

The cities of classical Greece exhibit a kaleidoscope of changing power relations. Athens, Sparta, Thebes, Corinth and others were continually vying with each other, winning and losing in trade and war. Greece as a whole experienced two great flowerings: the Mycenaean civilisation and the city states, these being separated by some five or six centuries. The city of Mycenae itself, abandoned during the twelfth century BC, was resettled only to be destroyed again by the city of Argos in 468 BC.⁵⁷⁷

The history of Rome illustrates the way that decline can be arrested and reversed. During the third century, the empire was sliding into anarchy. It was racked by civil war, financial chaos and outbreaks of bubonic plague. In the space of fifty years, there were twenty emperors, all but two of

whom died violently. In AD 260, the emperor Valerian was captured by Persians and spent the rest of his life as a human footstool and mounting block for their king. When Diocletian became emperor in 284, he retrieved the situation with a series of reforms. Crisis was averted and the empire exhibited a new stamina and solidity during the next hundred years.⁵⁷⁸ In a similar way, the Indian mutiny of 1857-9 might have been expected to finish off the British raj, which had become complacent and overexposed. Yet the British succeeded in quelling the rebellions, which were often vicious and spread like wildfire, and remarkably recovered to rule India for another ninety years.⁵⁷⁹

Chinese history is packed with up and down movements. After the expansion and contraction of the Shang and of the Western Chou, the first unification of China took place under the Ch'in dynasty. The resulting empire lasted from 221 BC to AD 221. This was followed by the first partition lasting some forty years. After that came the second unification and second partition, the third unification and third partition, and finally the fourth unification, which lasted until the institution of the republic in 1912.⁵⁸⁰ This only outlines the major changes of fortune. Within each period, there were further minor variations in prosperity and stability. The initial triumph of the Ch'in, for example, was relatively short-lived.⁵⁸¹ Much of the later part of their reign was afflicted by troubles of one kind or another, and by 206 BC their empire had been inherited by the Han dynasty.

In central America, there was a complex pattern of changing relationships, with individual societies sometimes in the ascendant and sometimes in submission.⁵⁸² Civilisation here was continually shifting in focus and extent, unified at one moment, broken apart at the next. The Mixtec people, for example, had both successes and failures during their 850-year history from AD 668 to 1521. They were located in a geographical buffer zone between the coast and the highland and became subject to all the recurring waves of conquest, by Olmecs from the coast and then by Toltecs from the highlands. Subsequently, they themselves became conquerors and after 1350 extended south into Monte Alban. By 1450, however, they had again been overrun, this time by the Aztecs.⁵⁸³ Similarly, the Maya went into a decline after their classic period but then experienced a renaissance from AD 1000. There was new building, including an impressive new city at Uxmal. The Mayan roads were refurbished and extended, while walls were constructed around coastal cities. Trading posts spread along the coast and contact was made with Cuba and Jamaica. Mayan learning revived and painted books were produced in great numbers. These described virtually every aspect of Mayan culture, science

and way of life. One of the older and most lavish books, the Dresden Codex, was made into a new edition during this Mayan renaissance.⁵⁸⁴

In the Anasazi region of the Colorado plateau, there was a pattern of mostly very small short-lived communities, each lasting perhaps one or two generations.⁵⁸⁵ After the original townships of Chaco Canyon were abandoned around AD 1250, a new site was soon occupied at Mesa Verde.⁵⁸⁶ The Anasazi did not grow up, reach a peak and then decline. Instead, their society continually moved forward and backward in an irregular fashion until its final demise. A similar story took place in the south-eastern region, where Cahokia was the chief centre. This declined progressively over the period AD 1250 to 1450 when other centres at Spiro, Etowah and Moundville were flourishing.⁵⁸⁷ The latter never matched Cahokia in size and importance, but they show that decline did not hit the eastern woodlands in a straightforward manner. The archaeological record of the Delmarva peninsula, an offshoot of this society, similarly shows periods when culture was changing rapidly and periods when it was in equilibrium.⁵⁸⁸

The last five hundred years in Europe have seen ever-changing relationships between the various powers. One author identifies at least four great fluctuations in Europe's economic fortunes since the twelfth century. These are associated with corresponding fluctuations in such areas as crime, civil unrest and family disruption. Within each fluctuation there were periods of equilibrium and periods of instability.⁵⁸⁹ Wars were not evenly distributed but came in clusters.⁵⁹⁰

Over the longer term, it is possible to identify gross trends such as the ascent and descent of the Iberian states. On shorter time-scales, however, the strengths of individual nations have not moved in consistent directions. The relative fortunes of France and Britain, for example, have changed direction several times. After the accession of Louis XIV in 1660, France rose to become the most powerful European state.⁵⁹¹ By 1815, however, France was falling behind industrially and militarily. Its manufacturing output, equal to that of Britain in 1800, was at 40 percent of Britain's in 1860.⁵⁹² By 1875, however, France's economy was gaining on that of Britain⁵⁹³ and it is now once more in the lead.

In relatively recent times, the Ottoman empire, Spain, the Netherlands, Sweden, Poland, Austria-Hungary and Prussia have all been leading powers.⁵⁹⁴ However, these nations followed divergent paths into the twentieth century. The Ottoman empire was to disappear altogether. Spain continued to decline. Sweden and the Netherlands emerged as still prosperous. Similarly, by the early eighteenth century, Russia was recognised to be a great power.⁵⁹⁵ After Waterloo, however, the country was losing ground at an alarming rate,

especially in the industrial sphere.⁵⁹⁶ In absolute terms, it still seemed strong in the middle of the nineteenth century,⁵⁹⁷ but the Crimean campaign of 1854-5 finally demonstrated its real backwardness.⁵⁹⁸ By 1918, in the aftermath of the first world war and the October revolution, Russia was at an extraordinarily low ebb.

Overall, the history of Europe involves a chaotic and ever-changing scene, in which both short term and long term trends may reverse themselves repeatedly and seemingly unpredictably. To say that any one nation rose and then fell in importance is shorthand for a complex and vacillating sequence of relative movements. World history demonstrates the same point a fortiori. Social evolution is not continuous, cumulative and gradual. It goes in fits and starts.⁵⁹⁹ In every part of the ancient world, the course of civilisation was marked by interruptions.⁶⁰⁰ In more recent times, societies have moved up and fallen back in relation to each other, like runners in a long distance race. The idea that civilisations just grow old and die like people does not account for the facts. It certainly cannot be regarded as a theory of decline.

Fluctuations on all scales

Changing fortunes are not just experienced by great civilisations. The same inconstancy afflicts much simpler societies. The prehistoric advance of the Polynesians across the Pacific, for example, is recognised as a triumph of navigation and exploration, in the most elementary of craft, that puzzles scholars to this day. Yet this remarkable migration had its setbacks. Many uninhabited islands showed evidence of previous occupation when discovered.⁶⁰¹ A number of them may have been settled and abandoned more than once. Some kind of oscillation of expansion and contraction seems to have taken place in the Pacific as a whole.

Within each Pacific island, social change also fluctuated in pace and direction. The isolated island group of Hawaii experienced in microcosm the same saga of expansion and contraction as the wider world. Over a thousand miles from the next habitable land, the Hawaiian islands were not settled until some time between AD 300 and 500. During the next thousand years or so, Hawaii saw the emergence of various rival chiefdoms. These engaged in territorial wars and acquired territories that sometimes extended over more than one island. Paramount chiefs would rule over client chiefs from whom they received tribute. However, their little empires tended to overstretch themselves and were eventually beaten back by rivals. Thus, the later prehistory of Hawaii is marked by a ceaseless rhythm of conquest, expansion, collapse and retrenchment.⁶⁰²

Even simpler societies may also experience fluctuations in their circumstances. For example, there are regional differences in consumption

patterns, division of labour and other characteristics among the Australian aborigines, which seem to indicate an element of dynamism in aboriginal society.⁶⁰³ In general and contrary to initial assumptions, the practices and situations of simple societies as they were when discovered by Europeans probably did not reflect thousands of years of stagnation. More likely, they represented a snapshot of a highly fluid situation.

The saga of rise and fall is by no means something that has afflicted the Romans and Egyptians and a few other ancient peoples. It is a characteristic feature of social change everywhere and at all times. Fluctuations occur on all scales, are of all durations, and affect societies of all different sizes.

Seamless history

To speak of the collapse of societies such as those of the Maya or Hittites is commonly accepted. However, this must be regarded as a loose way of talking about what has happened in the past. It is as wrong to think in terms of an abrupt and definitive catastrophe as to think of a smooth rise and fall. Civilisations may cease to be recognisable entities, but complexes of constituent elements live on in language, art and other forms.⁶⁰⁴ As they disappear, civilisations impart a legacy to those that come after them. Sumerians were assimilated by the Semites, Tunguses by the Chinese, and Wends by the Germans.⁶⁰⁵ Peoples may lose their identity, but their culture fuses with that of the newcomers and they do not really die out entirely.⁶⁰⁶

There are no longer any Etruscans, but this nation achieved a measure of immortality by inspiring Roman civilisation. The Etruscan language influenced the development of Latin and the word Rome is of Etruscan derivation.⁶⁰⁷ The early Romans must have acquired many crucial institutions, perhaps including writing,⁶⁰⁸ from this vigorous civilisation that already existed in northern Italy. Etruscans were possibly the original founders of Rome.⁶⁰⁹ There is strong archaeological evidence for an Etruscan presence in very early times and one part of the city was always known as the Etruscan village.⁶¹⁰ When the Etruscans were granted Roman citizenship in 89 BC, it consummated a long history of contact and of merging between the two societies.⁶¹¹

The cultures of other Italic peoples also persisted well into Roman times and made distinctive contributions to Roman civilisation.⁶¹² Augustus divided Italy into regions based on these original ethno-historical units, which in his day were still a living reality.⁶¹³ To a similar but lesser extent, the Romans' great rivals, the Phoenicians, survived what is normally regarded as their emphatic demise and went on to influence Mediterranean civilisation through Rome. Carthage may have been destroyed, but not all the

Carthaginians were destroyed with it.⁶¹⁴ Phoenician spiritual ideas informed those of Rome and, in the late empire, long after they had been supposedly wiped out, Phoenician habits became fashionable.⁶¹⁵

The forced abdication of Romulus Augustulus in AD 476, which brought an end to the western Roman empire, produced changes in the European scene that were far less abrupt than is implied by the phrase 'the fall of the Roman empire'. This was certainly a shocking event, but more so in retrospect than it appeared at the time. For many decades, Gallo-Roman society had already been fragmenting into the petty dominions that were to characterise the Merovingian age.⁶¹⁶ In his new Italian kingdom, Odoacer peacefully took over what was left of the imperial state apparatus and he even placed the heads of the eastern emperor on his coins. The eastern emperors, meanwhile, kept Roman civilisation alive for another thousand years, in the form of the Byzantine empire. From their perspective, the Roman empire still existed but just with a different focus. Those who ruled in the west were considered co-emperors and recognised themselves as such. On occasion, the eastern emperors militarily reasserted their authority over the Italian peninsula, reconstituting the empire in a real sense.

In a similar way, Phoenician civilisation shifted its focus to the western Mediterranean, after a pounding by Babylonians, Persians and Alexander the Great in its Levantine homeland. Hittite civilisation also shifted its focus. After being eradicated in its homeland of Asia Minor, Hittite culture was maintained in the former south-eastern provinces, where local people had adopted their conquerors' way of life.⁶¹⁷ These neo-Hittite kingdoms in their turn influenced the Assyrians and the Israelites, to whom they paid tribute and supplied harem wives.⁶¹⁸ Eventually, they became absorbed into the Assyrian empire and lost their separate identity by the eighth century BC.⁶¹⁹

The Harappan civilisation is often described as having risen and fallen largely in isolation, unheard of until it began to be excavated in the early part of the twentieth century. However, certain features of this civilisation did survive the abandonment of the great cities.⁶²⁰ Their way of life faded into the Indian cultural landscape.⁶²¹ On Crete, a large number of at least the common people must have survived the great disaster that is believed to have ended the Minoan civilisation. These people reoccupied the sites after an interval.⁶²² While the Mycenaeans came to dominate this part of the Mediterranean, Minoan culture persisted in a weakened and decadent form, and there was still some trade with other regions.⁶²³ The Minoan demise was not so abrupt as it is often painted. Rather it tapered into other cultural traditions that came to assert themselves in the region. On the

middle Nile, early Christian society showed remarkable continuity with the pre-Christian culture that it replaced, and many of the same houses remained in use.⁶²⁴ In south-east Asia, the Angkorian mandala did not so much collapse as shift its ground, in the sense that rival mandalas grew at its expense, acquiring and elaborating on its wealth and culture.⁶²⁵ Some of the customs of Angkor have persisted into the twentieth century, in the court rituals of the Thai monarchy.⁶²⁶

The Maya, with their desolate, jungle-clad cities, present one of the classic examples of collapse. However, it is wrong to assume that the whole area was abandoned just because activities ceased in the great ceremonial centres. In fact, Cortés found a considerable population and numerous settlements here, when he passed through the region in the sixteenth century.⁶²⁷ Some of the cities were still inhabited, albeit that no new building had been done for some 300 years. One place was dubbed Great Cairo on account of its impressive population.⁶²⁸ At Campeche, the Spaniards found that blood sacrifices were still being made in the temples,⁶²⁹ while the city of Tulum, founded in AD 564, was still flourishing when they reached it in 1519.⁶³⁰ The people of this area may have lost considerable ground since the classic period, but they still impressed the Spaniards as quite civilised in comparison to the Indians of the Caribbean.⁶³¹ In any case, Mayan culture had influenced the development of societies on the high Mexican plateaux, and it persisted into historical times, blending with that of European colonisers but transmitting its distinctive memory down to the present day.⁶³²

When the city of Monte Alban was abandoned, its Zapotec inhabitants maintained a vigorous culture⁶³³ and exerted an influence on the Aztecs.⁶³⁴ The Toltecs similarly influenced Aztec civilisation, especially in architecture, even as their own society was experiencing drastic setbacks.⁶³⁵ The Aztecs themselves lived on, after the disruptions of the conquistadors. Tenochtitlan was overthrown but the city of Azcapotzalco continued to flourish across the lake⁶³⁶ and Aztec culture and traditions have left a ubiquitous legacy in the region. In North America, elements of Hopewell culture persisted on the coast after its collapse in AD 400. These influenced the Mississippian society that began to rise around AD 700.⁶³⁷

Societies seldom, if ever, disappear entirely. Others, coming after, inherit and build on their achievements. Each one, including those extant today, is only a link in an endless chain of peoples.⁶³⁸ History is not the tale of discrete civilisations coming and going, but of a seamless whole in perpetual ferment. The changes in any given place are linked to what has gone before, to what will come after and to everything that is going

on round about. On the broadest possible view, all human experience is knit into one restless mosaic.

Experiences much the same

Even a non-specialist can distinguish Egyptian art from that of the Aztecs or Chinese. Yet art in general is something that people everywhere produce and consume. In their outward show, societies can look very different, but beneath there lies a core of shared humanity. One comparative study of seven early civilisations concluded that they had many basic features in common, not only with each other but also with the modern world. Its author reported being surprised by the extent of the resemblances.⁶³⁹ Many societies based on simple technology have presented a characteristic pattern in which prominent settlements are on average about 25 miles apart. These include the Mycenaean, Mayan, Minoan, and Etruscan civilisations.⁶⁴⁰ The kingship of the Anglo-Saxons resembles kingship among the Sudanese and other African peoples,⁶⁴¹ and even has echoes in the authority structures of American youth gangs.⁶⁴²

Edward Tylor, a Victorian professor of anthropology, observed that any society's cultural practices almost always have parallels in other societies, even though they may be thousands of miles away and quite different in other characteristics.⁶⁴³ Scalping, for instance, was practised by American Indians, as everyone knows, but it was also reported by Herodotus as a practice of the Scythians.⁶⁴⁴ Some American Indians told oracles by heating bones and examining the cracks, a practice that existed in Albania no more than a few decades ago and was also current among the ancient Chinese.⁶⁴⁵ There are similarities between central American and ancient western Eurasian writing.⁶⁴⁶ Maori lake dwellings share many features with those of ancient Switzerland. There need be no mystery about such duplication. When faced with similar problems and opportunities, people tend to settle on similar solutions. Oracles satisfy some fundamental human need, and people look for them everywhere. There are only so many ways to build a lake dwelling. Throughout history and all across the world, the issues and the human responses have had much in common. Continual change leads only to the eternal return of certain types. Minoan fashions, for example, are being reinvented in Paris today.⁶⁴⁷

The late Roman system of compulsory labour amounted to the same thing as the Mexican system of debt peonage.⁶⁴⁸ The Inca system of appointing one individual as the leader of every ten households, to keep the peace and collect taxes, was identical to the European tithing-man system of the middle ages, as well as to a system practised in pre-revolutionary China.⁶⁴⁹ These similarities can be understood in terms of the logical possibilities for controlling a population when communications are limited. In the mid-twentieth

century, seemingly very different societies responded to the challenges of modernity in almost identical ways. European fascists had much in common with Japanese nationalists and with the Kuomintang regime in China.⁶⁵⁰

The Iroquois Indians of North America developed a sophisticated system of dream analysis. Two hundred years before Freud, they recognised the Freudian concept of subconscious influences and the idea that the conscious mind attempts to suppress unpleasant thoughts. They understood how these may emerge in dreams and how the frustration of unconscious desires can cause mental and physical (psychosomatic) illness.⁶⁵¹ Africans and Europeans both employed the concept of witchcraft in explaining the origins of evil.⁶⁵² Eskimos and African Yorubas, in spite of widely differing lifestyles, recognise a condition equivalent to schizophrenia, whose incidence is about the same as in developed countries.⁶⁵³ Human minds, it seems, function in similar ways and human creativity must work within a finite repertoire of possibilities.

When simple societies are compared with complex ones, the gaps in the way of life can seem to be very large. Yet the raw human material is not so different. Peoples with no urban tradition have adjusted very readily to city living during the twentieth century. Foragers and subsistence farmers have learned market behaviour with alacrity once circumstances permit.⁶⁵⁴ After European fur traders arrived in sub-Arctic Canada, small-scale capitalism sprung up among the natives almost overnight. A Frenchman writing in 1611 remarked on how sharp the Indians were as businesspeople.⁶⁵⁵ While anthropologists have made much of the ceremonial exchange systems of Melanesian islanders, the practice of ordinary barter is equally important to them.⁶⁵⁶

People in simple societies may appear backward because of their belief in sub-rational phenomena such as omens, witchdoctors, and rain dances. Yet people in supposedly rational, technological societies have lucky numbers and read their horoscopes. A British journalist, who prides himself on his urbanity and sophistication, describes looking for omens in the card games he plays with his computer.⁶⁵⁷ It is mistaken to imagine that people in simple societies accept their superstitions uncritically and are any more credulous than say churchgoers in the developed countries. The Dinka people of the Sudan do an annual ceremony to cure malaria, but they time it for the month when malaria tends to abate anyway. At the end of the ceremony, the celebrant reminds people to go to the clinic if they wish to be cured. One anthropologist witnessed a rain dance performed by a group of Kalahari foragers, following which a cloud appeared on the horizon, approached and let out some rain. The

anthropologist asked if the rain dance had caused the rain. He was laughed to scorn.⁶⁵⁸

Ignorance should never be confused with stupidity. Members of simple societies may even be more intelligent on average than industrialised peoples, since their environment is generally less forgiving to the slow-witted.⁶⁵⁹ Doubt, independent thinking and disrespect for traditional wisdom are not exclusive to modern, industrialised societies. Even tribal societies have their philosophers and reformers.⁶⁶⁰ People living simple lives with little or no formal education can still exercise freedom of choice and think critically about social and natural phenomena.⁶⁶¹ Their knowledge of the natural world is remarkably good. For example, they classify their local bird populations almost exactly as ornithologists do, suggesting they can be just as clear-minded as university researchers.⁶⁶² If their ideas seem fanciful, it is largely a matter of them being unschooled and ill-informed. The psychologist Jean Piaget demonstrated that a small amount of instruction can rapidly eliminate many misconceptions.⁶⁶³

All sorts of basic inventions that are now taken for granted, to do with making clothes say or preparing food, would not have been so obvious when first invented long ago.⁶⁶⁴ There are simple societies but not simple people. The Australian aborigines, who never developed agriculture, normally replant a few seeds to ensure regeneration. They have the basic knowledge to initiate agriculture and so their foraging lifestyle is in some part a matter of choice.⁶⁶⁵ The aborigines certainly do not want for intellectual capacity. Witness the remarkable engineering of the boomerang or the ability to survive in hostile country where the uninitiated would die within days.⁶⁶⁶

Overall, there is little reason to regard the people of historical or simpler societies as fundamentally different from the average person in a complex society. Strip away the detail and their attitudes, concerns and capacities are seen to be not so unfamiliar. There is no such thing as a primitive people with a primitive outlook on life, whether

one is thinking of contemporary societies or of ancient ones. Prehistoric cave art is not made up of crude daubing but gives evidence of a highly developed and diversified aesthetic vision. Regardless of their simple circumstances, those ancient artists experimented with representational and non-representational styles, and they knew perfectly well what they were doing.⁶⁶⁷

In simple societies and in complex ones, and in the times of the Greeks or Romans as well as today, people have followed a career with many similar features. This includes the fact, for example, that it is usually by the late thirties that it becomes clear whether individuals are going to be a resounding success, or one of their society's failures, or somewhere in between.⁶⁶⁸ At a great distance, the ordinary people may seem faceless and obscure, but their experiences were just as rich as anyone's today. Peasants have never been helpless fodder for history. They have been able to advance themselves, while privileged people have been able to fall behind, so that there was always a continual turnover in the social classes.⁶⁶⁹ In 1800, a crowd outside a London prison chanted 'Pull down the Bastille'. They were demonstrating in support of certain radical leaders who were being held inside.⁶⁷⁰ People like these knew what was going on in the world and they were full participants in it.

It is too easy to regard simple societies or ancient ones as stagnant and the lives of their members as narrow and monochrome. In fact, the broad dimensions of life – childhood, marriage, work, families, old age – have been the same in every milieu. It is just the details that change. Foreign holidays, for example, are nothing new, only they used to be called pilgrimages. In the middle ages, travel to places like Jerusalem, Rome and the tomb of Saint James in north-west Spain was big business for hoteliers and tour guides.⁶⁷¹ Technologies may improve, and styles may vary, but the fundamentals of human experience, everywhere and throughout history, have been much the same.

Chapter 7 - Rotten at the core

Mishaps

A classic image of social collapse, which is typified by the Atlantis myth, involves a sudden natural disaster. The demise of the Minoan civilisation has been linked in this way to a huge volcanic eruption that blew apart the island of Thera, 100 kilometres north of Crete, around 1500 BC.⁶⁷² It has similarly been argued that the near-simultaneous collapse of civilisations in Iraq, Egypt and the Indus valley around 2200 BC may have followed from the earth's collision with a comet. The presence of meteoritic material in archaeological excavations in the middle east, along with evidence for climatic change and huge forest fires elsewhere, suggests an event of world-wide significance.⁶⁷³ A cometary impact has also been mooted as a factor hastening the collapse of Roman civilisation in Europe.⁶⁷⁴

Many analyses of social failure concentrate on these kinds of discrete and specific causes rather than on the idea of a general process. They do not recognise history as involving fluctuations on all temporal and spatial scales. They do not portray decline and collapse as part of a continuum of change. In consequence, such explanations are of limited application. They may illuminate the past but they yield few definite conclusions about the prospects for civilisation today. At best they offer only something like a warning. Nevertheless, these explanations are popular and they come in many different flavours.

Some societies are believed to have been affected by a general deterioration in climate. The Maya were afflicted by droughts, hurricanes and plagues of locusts as their civilisation neared its end.⁶⁷⁵ Great Zimbabwe may have been abandoned after an unlucky run of years with insufficient rainfall and an extremely poor harvest.⁶⁷⁶ It is likely that similar problems lay behind the changing fortunes of cities along the east African coast.⁶⁷⁷ Ethiopia's development has also possibly been inhibited by the periodic crop failures that have hit the highlands since the ninth century AD.⁶⁷⁸

The collapse of the Egyptian old kingdom may have been hastened by changes in rainfall patterns that affected the source of the Nile and reduced its ability to replenish Egypt's soil. A carving from this period shows people apparently suffering from famine.⁶⁷⁹ The whole middle east experienced social upheaval at this time, possibly because of severe and prolonged drought on a regional scale.⁶⁸⁰ Climatologists have concluded that this could be explained by a northward shift of the storm track, which would have produced exactly the pattern indicated by the historical evidence.⁶⁸¹

The collapses of the Hopewell culture, the western Roman empire and the Meroitic kingdom of the middle Nile have all been linked to climate changes of the fifth century, when it was becoming

cooler world-wide.⁶⁸² The same is true at Chaco Canyon, where the large pueblos were abandoned in conjunction with a fifty year period of substantially cooler and drier weather.⁶⁸³ This was always a marginal environment for human occupation in the first place⁶⁸⁴ and there are signs of definite malnutrition in late burials.⁶⁸⁵ The Toltec downfall may have been precipitated by chronic drought during the first half of the twelfth century.⁶⁸⁶ The Mississippian culture has sometimes been characterised as an early victim of the little ice age, the period of global cooling that reached its climax during the seventeenth century.⁶⁸⁷

Silting of watercourses is another environmental change that has been implicated in social decline through its impact on agriculture, communication and trade. Termination of the resurgent prosperity of northern Etruria, around the early fourth century BC, has been attributed in part to the silting of the port of Spina.⁶⁸⁸ Silting of canals and reservoirs also took place at Angkor.⁶⁸⁹ In southern Iraq, the Tigris and Euphrates meander erratically at a shallow gradient and do not have enough force to move silt downstream. Their beds tend to rise above the level of the surrounding plain forcing the river to change its course. Such shifts must have destroyed the viability of the region's ancient cities, as the riverbanks where they once flourished turned into waterless wasteland.⁶⁹⁰ Their sites are now usually far out in the desert, many miles from the modern course of the river.⁶⁹¹ Similar problems seem to have affected the Harappan civilisation, where changes in the course and flow of the river left the traditional agricultural lands literally high and dry.⁶⁹²

In some cases, people may have undercut their own survival by exhausting the very thing on which their prosperity was based. The demise of Etruscan civilisation has been linked to declining productivity in its mines.⁶⁹³ In a similar manner, some people perhaps ruined their own environment. Southern Arabia, once green and prosperous, is now covered in sand dunes.⁶⁹⁴ Agricultural decline resulting from changing environmental conditions has been suggested as a contributory factor in the failure of classical Greek civilisation.⁶⁹⁵ The dry, rocky landscapes that prevail in Greece and southern Italy today are the consequence of ancient erosion, after the forests were cut down and their wildlife hunted to oblivion. The characteristic Mediterranean maquis has been described as nature's way of trying to break up the rocks and make some soil again.⁶⁹⁶

Many problems have arisen from the practice of irrigation. Passing river water through shallow irrigation channels leads to an accumulation of salts in the soil, making it less hospitable to plants. This was a problem in the Tigris-Euphrates basin,

where various ancient texts record the negative effects of salination.⁶⁹⁷ Cultivators were forced to replace wheat with more salt-tolerant barley. One author suggests that the progress of salination upstream was the reason why power passed from Sumer, via Akkad and Babylon, to Assyria in the north.⁶⁹⁸ The Harappan civilisation also seems to have been a victim of salination, the damage to the soil being obvious to this day.⁶⁹⁹ There was a change to the cultivation of millet, which is hardier but less nutritious than other crops. In Europe today, millet is considered to be bird feed. The Harappans probably only adopted it as a response to the worsening fertility.⁷⁰⁰

An alternative way in which people have damaged their environment is through deforestation. This has been suggested as another possible factor in the Harappan decline.⁷⁰¹ The occupants of Great Zimbabwe may also have exacerbated natural environmental decline by exhausting the soils and the firewood of the region.⁷⁰² The Maya practised swiddening or slash-and-burn agriculture, whereby farmers gradually move through the forest, leaving it to regenerate behind them. As the Mayan population grew larger, the forest may have been left with insufficient time to recover, and the resulting agricultural problems may have contributed to decline.⁷⁰³ Skeletons from late classical times (including some aristocrats) show signs of malnutrition.⁷⁰⁴ The decline of Teotihuacan could have been caused by a similar debacle.⁷⁰⁵ Lime cement was used widely throughout the city and required vast quantities of wood in its preparation. The masons of Teotihuacan may have denuded the countryside, destroying the basis of their activities.⁷⁰⁶

Environmental deterioration is frequently cited as a source of difficulty in the Pacific islands. Being small, these presented their inhabitants with few options. On Hawaii, though it was only settled in the first millennium AD, shifting cultivation had begun to initiate environmental degradation by the twelfth century.⁷⁰⁷ The Easter Islanders rendered their island almost completely treeless, though it had once had good forest cover. The lack of anything other than driftwood may have been a factor in the island's social regression. Without wooden poles, for instance, they could no longer erect their famous statues. Deforestation was common throughout the Pacific. The effects may not have been all bad, since erosion of the denuded highlands initially deposited enriching soil in the more easily cultivable lowland regions.⁷⁰⁸ Yet this was hardly sustainable. The most likely reason why some islands were occupied and then abandoned is some kind of ecological crunch, possibly of the inhabitants' own making.⁷⁰⁹ Human hunters in New Zealand drove a whole genus of flightless birds to extinction, within centuries of their arrival.⁷¹⁰

Another powerful image of collapse involves rude barbarians sweeping down on an effete civilisation and laying it waste. Wherever people have reached a high level of development they have become a target for the uncivilised forces pressing on their frontier.⁷¹¹ Odoacer's deposing of the last western emperor is a classic illustration of this. The Roman frontier was steadily pushed back by barbarian incursions. Around AD 600, a letter from Pope Gregory commiserated with the Christians of the Dalmatian coast, where civilisation was dying under the attacks of Avars and Slavs.⁷¹² The Akkadian empire fragmented under the onslaught of people moving in from the highlands.⁷¹³ The whole of Iraq was in turmoil from 2150 to 2050 BC, due to the activities of invaders from Iran.⁷¹⁴ An invasion by less civilised Canaanites is associated with the decline of the third dynasty of Ur,⁷¹⁵ and Babylon collapsed for the first time after invasions by Kassites, Elamites and the up-coming Hittites.⁷¹⁶

The most widely accepted theory for the failure of the Harappan civilisation is that it fell to Aryan invaders under the war-god Indra – a name which means fort-destroyer.⁷¹⁷ The Hittite empire is also believed to have succumbed to some kind of barbarian onslaught.⁷¹⁸ Around 1200 BC, it disintegrated under the pressure of a rather mysterious group called the sea peoples⁷¹⁹ and the Hittites fled with other local races into Syria.⁷²⁰ The same sea peoples attacked Egypt.⁷²¹ In south-east Asia, the mandalas of the Mekong delta tended to collapse following military incursions.⁷²² Raiding recurs frequently as a possible explanatory factor in the decline and disappearance of African cities.⁷²³ The people who succeeded the Meroitic kingdom appeared suddenly and may well have been intruders.⁷²⁴ The failure of societies in east Africa appears to be associated with the movement of Bantu populations up the Tanzanian and Kenyan coasts.⁷²⁵

China long served as a magnet for invaders. Its history is punctuated by barbarian conquests. Between 1000 and 700 BC, the Western Chou were repeatedly pressed by less developed peoples from the north.⁷²⁶ The raids increased in frequency until the empire collapsed.⁷²⁷ After China's second unification, there were again problems from the north and the emperors had to withdraw southwards.⁷²⁸ In AD 1279, the Sung dynasty, which had brought China to undreamed of heights of culture and science, was extinguished by the hordes of Genghis Khan. To contemporaries it seemed like the end of the world.⁷²⁹ Less than a hundred years later, the Ming dynasty re-established Chinese rule⁷³⁰ only to be invaded in its turn. The emperor committed suicide and the conquering Ch'ing established a new dynasty.⁷³¹

The history of pre-Columbian America echoes the old world experience of invasion and collapse.

Teotihuacan fell to the Chichimecs.⁷³² The expelled inhabitants founded a new city at Tula, but this fell to further invaders in AD 1116.⁷³³ The Maya seem to have come under foreign rule in the last century of the classic period.⁷³⁴ It is telling that Mayan civilisation disappeared first in the easily invaded regions and only later in the more remote north Peten of Guatemala.⁷³⁵

The invaders who bring down civilisations are not necessarily driven by mere ignorance and vandalism. They are often just more vigorous peoples on their own ascent to high civilisation. The rising Babylonian empire destroyed the Assyrian empire in 600 BC.⁷³⁶ Later, Babylon fell in turn to Cyrus the Persian and to Alexander the Great.⁷³⁷ Similarly, Phoenician civilisation was destroyed by the incipient Roman empire. The Romans were also the scourge of the Etruscans, dealing them a devastating blow with the capture of Veii in 369 BC. This was the beginning of the end for Etruscan civilisation, though it lasted another three centuries.⁷³⁸

In the past five hundred years, many peoples, from simple societies to whole urban civilisations, have met their demise at the hands of technologically superior and militarily aggressive Europeans. The African city of Sofala crumbled after an early and violent attack by the Portuguese.⁷³⁹ In America, the Europeans had their most devastating effect. They overthrew the Aztec and Inca empires, and in 1697 took possession of Tayasal, the last surviving Mayan city, where people had lived for 3700 years.⁷⁴⁰ The Spanish conquistadors may not have been classic barbarians, but their basic motivation – plunder – and the outcome – destruction of a complex society – were the same.

The new world was overwhelmed by another kind of invader that accompanied the conquistadors – infectious disease. American populations had no immunity to old world diseases like measles and smallpox. These swept through them, drastically reducing their numbers and causing social disruption, in many cases long before they even saw a European. Epidemics were also possibly responsible for the demise of some cities on the east African coast.⁷⁴¹ Their large populations and doubtful sanitation provided ideal conditions for disease to flourish. This may account for the continual turnover of these cities. A plague hit Athens before the Peloponnesian war and possibly contributed to its defeat by Sparta.⁷⁴² Bubonic plagues may also have weakened fifth century Britain and helped it succumb to Anglo-Saxon invaders.⁷⁴³ Later, in both the fourteenth and seventeenth centuries, plague in Europe exacerbated the effects of war, insurrection and unreliable harvests.⁷⁴⁴

Some societies may have exhausted themselves through prolonged warfare. The final

phase on Easter Island, for example, seems to have been one of bitter warfare between two different ethnic groups.⁷⁴⁵ During this time, obsidian spearheads seem to have been suddenly invented and then manufactured in great profusion.⁷⁴⁶ Chronic raiding and warfare forced people to live in caves and lava tubes with narrow entrances.⁷⁴⁷ Any form of ordered society on the island became impossible.⁷⁴⁸

Other societies are said to have been brought down by internal revolt. Uprisings by disaffected citizenry occurred late in classical Greece and were certainly a factor in the decline of the city states.⁷⁴⁹ Some scholars think that a revolution, or struggle between contending dynasties, could have helped end the Mayan civilisation.⁷⁵⁰ In China, revolts broke out after the death of Shih Huang Ti, bringing down the empire he had built.⁷⁵¹ Rebellions also became general after AD 875, causing China to fall apart in 906. In seventeenth century Europe, the gradual collapse of Spanish Habsburg power is attributed to the series of revolts and cessations that plagued the Spanish empire.⁷⁵²

This adds up to a large number of ideas about the causes of social decline. Some concern external challenges while others are self-inflicted. Yet they all account only for unique sequences of events in particular places. To draw any strong conclusions from this jumble of human experience, it is necessary to interpret history as more than a succession of mishaps. It is necessary to identify some fundamental themes that lie behind the surface detail and that unify these seemingly disparate episodes at a more basic level. Too many of the explanations are based on circumstantial evidence and on the elaborate interpretation of sparse facts. Too often they compete with and even contradict each other. Under close examination, therefore, they can easily seem dissatisfying and incomplete. That in particular suggests that some sort of deeper insight is called for.

Doubtful explanations

The various accounts of decline may sometimes be convincing on their own terms and in application to the specific instances where they are applied. However, it will be noticed that many instances of social failure benefit from more than one explanation. For example, possible reasons suggested for the collapse of Mayan civilisation include, from one authority, insufficient food, invasion, and rebellion,⁷⁵³ and, from another, savanna creation, disease, and loss of girls due to infanticide or lack of care.⁷⁵⁴ In the latter case, the writer notes that none are really satisfactory and goes on to propose his own theory based on a series of peasant revolts.⁷⁵⁵ Yet another expert speculates that, as new fields were needed to support the growing urban population, Mayan farmers would have had to move further and further from the city,

and this agricultural decentralisation might have contributed to the disintegration of the cities.⁷⁵⁶

Clearly, when it comes to explanations for the Mayan collapse, there is an embarrassment of riches. In truth, nobody really knows what caused this civilisation to decline. It might have been one of these factors, or some combination, or all of them, or perhaps none. It is impossible to be definitive. The same is true in most other cases of social retrenchment. The supposed explanations represent plausible speculation rather than certain knowledge. For instance, one author suggests that the widespread destruction of statues on Easter Island may have been to destroy the enemy's magic power, or to upset them by destroying their property, or it may have been a revolt of the underclass against excessive demands by the elite.⁷⁵⁷ It is obvious that a large element of interpretation is involved.

There are often lacunae in the evidence that give plenty of scope for such interpretation. For instance, the two episodes of general catastrophe that seem to have afflicted the ancient middle east have both been attributed to barbarian invasion. However, little is known about the identity of these barbarians.⁷⁵⁸ They simply provide a readily understandable explanation for what might otherwise seem like an obscure series of calamities. The archaeological evidence for their activity is meagre or non-existent.⁷⁵⁹

In some cases, it is not even clear that the social disasters to be explained were even real phenomena. Some have argued that the supposed episodes of decline and obscurity in the ancient middle east are merely artefacts of mistaken dating. Similarly, there are doubts about the reality of the general crisis that is supposed to have afflicted Europe in the seventeenth century AD, when cold weather depressed harvests and caused severe hardship among people living close to the margin. Contemporaries and subsequent historians detected an unusual intensity to the troubles of this period, when vagrancy emerged as a serious problem against a backdrop of rapid militarisation and religious division. In the following century, Voltaire observed that political upheavals had occurred all over the world, ranging from Cromwell's English rebellion of 1642-60, via the Moscow revolts, to the Manchu rebellion of 1638-44. Yet recent historians, examining the evidence in depth, have cast doubt on this common perception and asked whether its problems really distinguished the seventeenth century from any other period.⁷⁶⁰

In many other cases, seemingly credible explanations dissolve on detailed inspection. For instance, the obvious mechanism for the abandonment of Chaco Canyon is certainly some kind of environmental change that tipped this ecosystem over the edge and rendered human

subsistence non-viable. Theories linking the Chaco collapse to climatic problems of the twelfth century have therefore been readily acceptable to archaeologists. However, the embarrassing fact is that there is no clear evidence for a major climatic deterioration in the early twelfth century,⁷⁶¹ i.e. the crucial period when Chaco Canyon began to fail. It was actually later that the climate became harsher, but by then the abandonment was well under way.

Similarly, the disruption following the end of the Egyptian old kingdom has also been attributed to environmental setbacks. Yet, although texts from this time mention famine and low Niles, they do not seem to emphasise them.⁷⁶² One recent author presents it simply as a matter of faith that non-climatic causes could not be sufficient to cause disruptions of such magnitude.⁷⁶³ This is hardly convincing. Furthermore, the same author unwittingly hints at gaps in her own analysis by suggesting that climatic deterioration sets in motion other forces that bring a society to its doom.⁷⁶⁴ This implies that the mechanism is relatively complex and casts doubt on whether climate change is necessarily the prime mover.

In the case of the Hopewell culture, climatic cooling and social decline are closely associated in time. Yet what seems to be a ready explanation again has problems on close analysis. Agriculture, which would have been compromised most by such a climate change, played an insignificant role in Hopewell subsistence.⁷⁶⁵ The putative link between the later Mississippian collapse and the little ice age is also suspect, given that other farming groups, such as the Iroquois, were actually flourishing at this very time.⁷⁶⁶

The theory that attributes Mayan decline to profligate swiddening and environmental damage is rather contradicted by the fact that the highly fertile city of Quirigua was one of the first to stop functioning.⁷⁶⁷ During previous periods of drought, the Maya seem to have abandoned their cities and moved into the jungle where they survived on the bark of trees until it was possible to return to urban living.⁷⁶⁸ Clearly, environmental stresses were not necessarily as apocalyptic as is imagined. The Maya could ride them out, if they wanted to. With respect to other conjectured explanations, there is no really firm evidence of a major climate change around the time of the Mayan collapse, nor of extraordinary diseases, nor of large scale wars.⁷⁶⁹

Even the demise of the Roman empire, which is well documented and extensively studied, has been the occasion of much theorising but no firm consensus. Some of the reasons given for its passing include depopulation, overtaxation of the provinces, and the arrival of Christianity. One expert states clearly that none of these explanations are really satisfactory.⁷⁷⁰ Edward Gibbon, who devoted half a lifetime to the study, concluded that Rome died of immoderate greatness⁷⁷¹ – a

suggestion that seems by and large to beg the question it is intended to answer.

Although the arrival of the Saxons is strongly associated with the turmoil into which Britain was plunged after the Roman withdrawal, the only thing that can be said with certainty is that it occurred some time between AD 400 and 600. It is difficult to be more precise and to link the Saxon arrival explicitly to the departure of the legions. It is not even certain whether the Saxons arrived all at once or over an extended period. Bede says that they settled Britain between AD 449 and 538,⁷⁷² by which time the Romans were already long gone. This rather exonerates them from being the original stimulus for the catastrophe that overtook this former Roman province.

In the case of the Maya again, while there is evidence for invasion it seems to have been at best a minor and secondary factor in the collapse of the ceremonial centres.⁷⁷³ In most cases, the cities do not seem to have been abandoned because of conquest.⁷⁷⁴ Things often stand as they were left,⁷⁷⁵ suggesting that the abandonment was a rather gradual and peaceful process. The notion that the Maya were the victims of peasant revolt is also founded on a good deal of speculation. One piece of supposed evidence consists of late classic depictions of rulers subduing people with Mayan features. The latter are wearing simple loin cloths and have been assumed to be peasants. However, there is much uncertainty about this interpretation and generally there are doubts over the revolution theory.⁷⁷⁶

Students of decline and collapse often frankly admit that the fundamental causes are really quite uncertain or even simply unknown. Concerning Britain's loss of competitiveness during the late nineteenth century, one historian notes that this extensively studied issue of economic history has produced miscellaneous explanations but no certain conclusion.⁷⁷⁷ An authority on the Mayan civilisation admits that, even though theories abound, it is really a mystery why the great Mayan centres fell and their civilisation deteriorated.⁷⁷⁸ Another describes the sudden abandonment of hundreds of cities as seemingly inexplicable.⁷⁷⁹ He says that there are no convincing answers as to why three million people would desert the cities that had taken them centuries to build.⁷⁸⁰ The decline of the independent central American city of Monte Alban is similarly described as unaccountable.⁷⁸¹ An authority on North America concedes that the collapse of the Hopewell interaction sphere around AD 400 is not well understood⁷⁸² and that the decline of the Mississippian culture, 1000 years later, has also not been satisfactorily explained.⁷⁸³ The archaeologist who uncovered Dilmun says that the theory attributing its decline to shifting trade routes is really only a guess, and the truth is that no one knows why Dilmun ended.⁷⁸⁴ A writer on the

Harappan civilisation says there is no certain answer to the question of what caused its decline.⁷⁸⁵ In the case of Angkor, experts agree that despite numerous ideas about its decline no firm reasons have been identified.

Not mutually exclusive

The frequent existence of multiple explanations for a single instance of decline obviously gives an impression of confusion. However, the different explanations need not be mutually exclusive. For instance, Sir Arthur Evans, original excavator of the Minoan palaces, was convinced that the evidence pointed to destruction by earthquakes and marine floods, but other scholars have argued that this civilisation was terminated by Mycenaean invaders.⁷⁸⁶ Clearly, in an explanation of the Minoan collapse, there could be room for both of these. That is to say, the Mycenaeans might have taken advantage of the natural disaster and the resulting disruptions to impose their authority on Crete.

Similarly, at Angkor, silting of waterways became a serious problem towards the end of its history.⁷⁸⁷ Yet military invasion by Thais and Champas has also been cited as causing the mandala's collapse. Again, both might be part of the story. Subsistence stresses, for example, may have encouraged potential invaders and weakened Angkorian resistance. Alternatively, military engagement with the Thais and Champas may have diverted effort away from maintenance of the canals and reservoirs, allowing silt to build up.

Rather than focusing narrowly on one explanation to the exclusion of others, one needs to acknowledge the multi-dimensionality of social phenomena. This is true even of something like the collapse of the Inca civilisation at the hands of the conquistadors. Initially this episode seems very straightforward. The Spaniards arrived and destroyed the Inca world. Deeper inquiry, though, reveals that the question of cause and effect is not as cut and dried as at first seems. To give just one example, the Incas had been hit by a pestilence shortly before Pizarro arrived. It is possible that this was smallpox, spreading from the north, where it had been brought by the first European invaders.⁷⁸⁸ The epidemic might have demoralised the Inca people and thinned their army, thus helping Pizarro to succeed.

Eyewitness accounts of social decline have drawn attention to the way that several factors reinforce each other. Early in the sixteenth century a descendant of central American royalty wrote that Teotihuacan had fallen for a combination of three reasons: religious conflict, revolt and crop failure. In recent history, Easter Island's traditional culture was seen to be obliterated by a combination of internecine strife, slave raids and European missionary activity.⁷⁸⁹ The decline of the Spanish, Dutch and British empires can all be traced to a

range of factors involving both internal and external pressures.⁷⁹⁰ During the twentieth century, it has been argued, at least three levels of causality interacted to determine the changing fortunes of nations. These comprised changes in the productive base, factors influencing the responses of each individual state to broader shifts in the world, and, lastly, diplomatic and political changes affecting each nation's chances in the great wars.⁷⁹¹ Decline is recognised to have depended on a complex dynamic and not just on haphazard accidents of fate.

Overall, social collapse always has numerous reasons and it is difficult to comprehend which is the leading cause, or even whether that is a valid concept.⁷⁹² People no doubt prefer simple, readily understandable explanations, but the reality is that social change is often quite convoluted. For instance, Aryan invasion is an appealing explanation for the Harappan collapse since it involves a clear cause and effect. The considerable evidence for gradual decline in wealth and the authority of the state⁷⁹³ is less sensational and its relevance is less obvious. There is no clear image to stick in the mind. The invasion theory has therefore been more influential, but any genuine explanation must clearly deal with the question of gradual deterioration⁷⁹⁴ rather than exclusively with the dramatic surface events.

Similarly, the role of barbarians in destroying the western Roman empire is well implanted in the popular imagination. This is with some justification since the last days of the Roman empire were characterised by an increase in the frequency and severity of barbarian raids. Nevertheless, the more one looks into the question of the barbarian raids, the more complex the question becomes. For instance, the abandonment of the Roman province of Britain is associated with its being overrun by Saxon adventurers.⁷⁹⁵ Yet the obvious conclusion that Roman Britain crumbled under the pressure of a Saxon invasion turns out to be quite inadequate, given that no one knows exactly how or when the Saxons came to Britain. Pirates and raiders had certainly been a problem in Roman times, but it is far from clear that the Roman legions were actually driven out by them. On the contrary, it appears that, after the Roman withdrawal, the Saxons may have actually been invited in by the British to help protect against invaders from Scandinavia.⁷⁹⁶ Only later did the Saxons begin to fight the British and establish their own kingdoms. Thus, the Saxon role in the collapse of social order in sub-Roman Britain is highly obscure, but it certainly involved a complex range of issues and there was no simple cause and effect.

Not out of the blue

Contrary to many simple explanations, the dramatic events that are associated with social collapse do not usually come out of the blue.

Instead they have a prehistory, revealing further the complexity of the mechanisms involved. The barbarians who harried the Roman empire during its decline and fall did not appear suddenly on the horizon. On the contrary, long before the Roman ascendancy, northern barbarians were already being attracted into Italy by the wealthy urban centres of Etruria.⁷⁹⁷ The Etruscans experienced a series of Celtic irruptions during the late seventh and early sixth century BC.⁷⁹⁸ Then, around the fifth century BC, the Celts expanded dramatically in all directions.⁷⁹⁹ They came to play an active and developing role in the history of Italy as a whole.⁸⁰⁰ During the first decades of the fourth century, Etruria was in trouble again, with incursions of Gauls from the north and west.⁸⁰¹ This was about the time that the Romans were beginning to make their presence felt. Hence, the problem of barbarian attack was not a new problem unique to late imperial Rome. It had been an issue for at least a thousand years.

Furthermore, insofar as barbarian influence caused Rome to fall, this was not by some abrupt and violent invasion of undisciplined marauders. Rather it was the culmination of a long process of infiltration. It has been said that the real problem for the Roman empire was not the barbarian at the gate but the barbarian already in the city.⁸⁰² Germans had been recruited into the Roman army in such numbers that they had effectively taken it over. During the late empire, even the praetorian guard, the emperor's elite bodyguard, was dominated by Germans. Essentially on their say-so, puppet emperors were removed or installed. Even the legions' Roman eagles had been replaced by barbarian insignia.⁸⁰³ It is scarcely surprising that Rome lost its ability to resist further German onslaughts.

When the Spanish Habsburg empire revealed itself to be in serious decline in the 1640s, it was as a result of causes that had been in existence for many decades.⁸⁰⁴ Although decay may only have become obvious at a late stage, it was part of a deeper and longer standing syndrome. The same applies to the empire of the Western Chou. This dynasty showed signs of instability over a three hundred year period from 1000 BC onwards,⁸⁰⁵ with barbarian incursions throughout. By the time that it finally collapsed, the unity of the empire was little more than a fiction anyway.⁸⁰⁶

A similar point can be made even about the Spanish conquests in central and southern America. On the face of it, these appear to be sudden and unexpected. However, here too there was an existing background, which allowed these minority forces to reduce whole empires quickly and convincingly. As Cortés travelled up from the coast to challenge the Aztecs at Tenochtitlan, he found resentment and rebellion already stirring among Montezuma's subject tribes.⁸⁰⁷ This was to be

expected given that they had known decades of paying tribute and yielding huge numbers of prisoners for the Aztecs' human sacrifices. The army that eventually marched on the Aztec capital contained a significant Indian component. The Spanish presence may have been the precipitating factor, but the uprising of the subject tribes was not really a surprise in retrospect. The Aztecs were continually having to reassert their authority and would have faced such a concerted challenge sooner or later. In the end, the Aztecs were not beaten by the military brilliance of a few Spaniards. They were worn down by hunger and disease during the course of a siege, and the besieging force consisted predominantly of their Indian neighbours.⁸⁰⁸ Cortés did not so much conquer the Aztec empire as precipitate its disintegration along pre-existing fault lines.

The collapse of the Inca empire can equally be linked to an inherent instability that resulted from a combination of religious and economic factors.⁸⁰⁹ When Pizarro arrived on the scene, the empire was just concluding a five year civil war, which had itself been precipitated by an attempt to resolve these instabilities. Hence Pizarro did not have to deal with a smoothly functioning and coherent entity but rather with one that was already in a moment of crisis. As with Cortés, his intrusion acted as a catalyst for revolt among those who had cause to resent the Inca dominion.⁸¹⁰ Perhaps if there had been no Pizarro the empire might have passed through the crisis and resolved its intrinsic problems. However, his invasion was certainly not the sole factor in the Inca's demise, and there was a whole other context that amplified the effects of this minuscule challenge.

The inadequate response

In general, civilisations are only destroyed by such things as barbarian invaders and natural disasters when they are already predisposed to failure.⁸¹¹ It has been said, for instance, that when Alexander the Great subdued the mighty Persian empire, he only had to cut down something that was already rotten and internally sick.⁸¹² If the Harappan civilisation was destroyed by an invader, it was because the state had decayed to the point of neglecting its defences.⁸¹³ The Aztecs fell to the Spanish because their empire was deeply undermined by religious and political conflicts, which had themselves been provoked by their own rapacity.⁸¹⁴

Inca society fell because it was already in a bad way. The civil war that preceded Pizarro's arrival indicated the existence of significant divisions. Atahualpa, an illegitimate son of the previous Inca emperor, gained support for his challenge against the incumbent, Huascar, largely because the latter had earned the enmity of many nobles. Huascar's attempted reforms of the tax system were threatening to reduce their incomes.⁸¹⁵

This dispute compounded the problems of ethnic diversity and internal rebellion that had always posed a threat to the coherence of the empire.⁸¹⁶ Furthermore, the empire had grown so large that its lines of communication were seriously overextended⁸¹⁷ and its unity was very fragile. The civil war gave free play to these sources of division leaving the empire fragmented and by no means fully loyal to its new leader.⁸¹⁸ This was the sickly society that Pizarro cut down. He was able to wander about the country doing much as he pleased, and that in itself represented an extraordinary lapse of Inca security which would not have been allowed in a previous reign.⁸¹⁹

As for the Roman empire, its problems went far beyond the barbarian incursions, however vicious those might have been. There were snowballing financial and social problems as the end approached.⁸²⁰ As early as the late second century AD, the city of Rome had lost much of its prestige⁸²¹ and it was unable to provide leadership and a focus for the empire. Historians are in strong agreement that the reasons why Rome succumbed are not to be found in accidents and external factors but within Rome itself.⁸²²

Much earlier, when the Etruscans and Phoenicians fell to the expanding Roman empire, this did not happen overnight. Rather, these peoples were gradually worn down by conflict with the Romans over a prolonged period. For instance, the Etruscan nation became steadily more feeble from the fourth to the second century BC, although fortunes ebbed and flowed. It was only when Etrurian society was exhausted and no longer viable that the Romans completed their victory.⁸²³ The Phoenicians, similarly, succumbed because they were severely weakened by the first and second Punic wars. These destroyed the Phoenician empire in Spain,⁸²⁴ constraining their ability to do business in western Europe. With a valuable source of revenue cut off the Phoenicians were no longer a formidable power. They stood little chance when they provoked the Romans into the decisive third Punic war.

The importance of internal weakness in the aetiology of decline is further suggested by the fact that initially vigorous societies often shrug off challenges and disasters that are just as great as those to which they eventually succumb. The Greek city states, for example, managed to resist the sustained onslaught of Xerxes and his giant army backed by the might of the Persian empire. Yet less than a century and a half later, the seemingly much lighter challenge posed by Philip of Macedon was enough to overcome them.⁸²⁵ In a similar fashion, the kingdom of Angkor once recovered from exactly the same kind of military disaster as the Thais eventually inflicted on it. This was in 1177, when the Chams of the Mekong delta brought their navy all the way up the Mekong river

and across the Tonle Sap lake to the gates of Angkor, whereupon they sacked the city and drove the population into the surrounding countryside.⁸²⁶ In spite of this debacle, the royal lineage was restored by 1181 and, when the ambassador of Kublai Khan visited in 1296, Angkor was again a flourishing and famous centre of civilisation. Yet later, when the Thais repeated the devastation wrought by the Chams, Angkor never recovered.

The decline of the Spanish empire has been attributed to its exhaustion by excessive military commitments. Yet Spain was able to bear hugely expensive wars in Italy at the beginning of the sixteenth century, without losing vigour in the way that it did at the end of the century. A similar point can be made about the British empire, which is said to have been fatally weakened by the wars of the twentieth century yet had previously shrugged off the cost of the Napoleonic wars and even benefited from them.⁸²⁷ The catastrophe that helped to end the Minoan civilisation was not much worse than many the Minoans had previously taken in their stride. From its foundation around 2600 BC, this civilisation was hit by periodic earthquakes. However, it simply rebuilt itself after each one, and usually on an even grander scale.⁸²⁸ A particularly large earthquake struck Crete in the second quarter of the sixteenth century BC, yet within a few years it was flourishing as convincingly as before.⁸²⁹ The Aztecs present a similar story. They experienced repeated crop failure from 1451 to 1456, and this must have presented a severe challenge to the social order, yet their civilisation did not collapse.⁸³⁰ Seventy years later, though, they caved in to a seemingly much slighter threat.

For most of its history, Rome shrugged off the barbarian incursions that were a constant feature of Roman life. As early as 395 BC, Gauls swept down on Rome and ravaged the whole city except the Capitoline Hill.⁸³¹ Only eight years later, exactly the same thing happened again. Yet the Romans went from strength to strength. Furthermore, Rome's rise provoked a reaction from her Italian neighbours, but the Romans managed to overcome this concerted opposition. In the last decades of the fourth century, the Samnites and Etruscans were joining forces with the Gauls to fight Rome.⁸³² In 285 BC, the Etruscans and Gauls again co-operated to inflict a bloody defeat on the Roman army at Arezzo. Around the same time, yet another Gallic tribe made a bold raid aimed directly at Rome, where it was repelled.⁸³³ Between the first and second Punic wars, Rome defeated a hostile alliance of Celts at Telamon.⁸³⁴ In 91 BC, there was a general uprising of Italian tribes against their Roman overlords.⁸³⁵ Despite being outnumbered and suffering some initial losses, Rome outclassed its enemies, defeating them convincingly by 87 BC.⁸³⁶ A similar civil war of 83 to 82 BC was also put down harshly,⁸³⁷ as was the Spartacus slave

revolt of 72 to 71 BC.⁸³⁸ Evidently, at one stage in its history, Rome was able not just to survive these considerable pressures but actually to thrive on them, growing in power and prestige. Yet at another stage in its history, when it had all the resources of a giant empire at its disposal, Rome surrendered to the barbarian invader. What had changed was not the external situation but Rome itself.

Inherent logic

When a society collapses or declines, the invasion or natural disaster that seems to have caused it is only a superficial or incidental factor. What is remarkable is not the occurrence of such a challenge. It is the failure of the society to withstand it. Generally speaking, humans can surmount most obstacles when they are determined to do so, but in decline this determination disappears. There is a loss of resilience. For example, the floods and diversions that affected the River Indus were not inevitably devastating, as the Harappans demonstrated. They spent centuries controlling and managing the river. Yet for some reason the system eventually broke down.⁸³⁹ Similarly, the places where states emerged in precolonial Africa exhibited considerable environmental diversity. Each had its own advantages and disadvantages.⁸⁴⁰ To build up thriving societies, the Africans had to adapt to and resolve many challenges of climate. If the same climates later destroyed those societies, it points to a loss of such adaptability.

Many societies have overcome considerable disadvantages to achieve prosperity and security. In the Vitiav straits of Melanesia, for instance, the wealthiest islanders are those with the least provident homeland. They voyage around the region, offering pigs where people produce sago, sago where people make pots, and pots where people breed pigs, generating a tidy profit in the process. It is therefore insufficient to say, for example, that the focus of ancient Iraqi civilisation changed due to increasing salination, or that the Maya abandoned their cities due to water stress. The important question is why the Sumerians could not have resorted to trading with other regions, and why the Maya could not simply have occupied their cities at a lower density rather than abandon them altogether. It must be that something went wrong within these societies that left them vulnerable to such stresses.

The obvious problems that become implicated in cases of social decline are symptoms as much as causes. All people continually face all sorts of challenges. However, these only appear as real problems when the society has lost its ability to deal with such challenges. In effect, a nation collapses because it yields to pressures even when they are not inherently irresistible. There is a kind of failure of nerve and imagination. This is the

message of Kipling's parable, *The Mother Hive*, in which the boy says that one cannot blame the bees because their hive is infested with wax moth. The beekeeper replies that this is to confuse correlation with causation. "Wax moth only succeed when weak bees let them in".⁸⁴¹

The failure of classical Greek civilisation has been blamed on the enervating philosophies of people like the Sophists and the erosion of commitment and noble ideals that they encouraged. Yet it has also been argued that teachings of this nature could only succeed where people were ready to receive them.⁸⁴² It appears that Greek society somehow became primed for failure. An intriguing illustration of this effect involves the role of pre-Columbian myth in psychologically disadvantaging the Aztecs and Incas when challenged by the Spaniards. Cortés answered to the description of Quetzalcoatl, a bearded, white-faced god and culture hero, whom the Aztecs were expecting to return from the east. He was therefore not resisted militarily until his hostile intent had become uncompromisingly clear. The Incas also thought that Pizarro and his crew were returning gods, in accordance with their legend of Tiel Viracocha.⁸⁴³ These factors seem purely fortuitous, yet it should be remembered that the conquest of Mexico occurred nearly thirty years after the first voyage of

Columbus and that of the Inca ten years later still. By then, rumours of white men and their activities could well have filtered through to these American civilisations, perhaps giving new life to their ancient myths. The credulity with which they welcomed the Spaniards as gods is probably symptomatic of a general loss of nerve in the face of an unfamiliar enemy. It was the Aztecs' and Incas' lack of robustness in facing this challenge that is the principal cause of their downfall.

Overall, therefore, social change must be explained in terms of internal defects rather than in terms of direct, mechanical shocks. The crucial issue is not the challenge but the failure to resist it. Geological cataclysms, environmental deterioration, and barbarian invaders are the perennial backdrop of history. Societies decline not because of these factors but because they cease being able to cope and adapt. The explanation is to be found in some inherent logic and not in terms of abrupt, unexpected and insuperable shocks. Human experience is a seamless unity, and each specific trauma must be recognised as a manifestation of a general process. Implicitly, there is a logic of failure that has operated throughout history and all around the world. There is no reason to suppose that it has recently gone away.

Chapter 8 - The principle of mutual causality

Recurrent arrangements

When Hernan Cortés travelled from the coast to the Aztec capital at Tenochtitlan he passed through cities, towns, villages, markets and irrigated fields. He saw slavery, poverty, potentates, farmers, judges, churches, massive temples, roads, boats, pottery and textiles. In short he encountered a world whose almost every aspect he could understand in terms of his own experience as a sixteenth century urban Spaniard. Yet prior to Cortés's arrival, the old and new worlds had, to all intents and purposes, been out of touch for some twenty thousand years. Their convergence on the same forms seems remarkable.

To some writers, the resemblances can only be explained in terms of theories involving cultural contacts between America and ancient civilisations.⁸⁴⁴ This is despite the lack of evidence for any systematic interaction and the rather decisive fact that cultural developments on either side of the Atlantic were unsynchronised by a matter of many centuries. In reality, there need be no mystery about the familiarity of central American civilisation provided one accepts that humans, encountering similar problems, are likely to settle on similar solutions. The fact that a large number of different institutions were reproduced so completely merely suggests that they belonged together in some kind of logical structure. For exactly the same reason cities in ancient times already possessed most of the basic institutions that distinguish cities today. At Harappa, for instance, there were drains, bathrooms, latrines and shops.⁸⁴⁵ Urban living brings with it certain obvious challenges, and the answers to them are equally clear.

The resemblance between old and new world civilisations is just one example of a common phenomenon whereby not merely individual customs but whole arrangements of institutions recur in societies that may be widely separated in time and space. There are clear similarities, for instance, between the traditional ways of life in highland Switzerland and in the Himalayas. These involve shared details of material culture, subsistence techniques, land tenure, and political arrangements, including such specific features as late marriage, high proportion of celibacy and low birth-rate.⁸⁴⁶ Yet rather than implying some Swiss-Nepalese liaison, these can simply be interpreted in terms of the logical possibilities faced by humans in adapting to such similar environments.

The main elements of culture are also surprisingly similar among the foragers of the Amazon and of Africa; Pueblo Indians and Persian villagers; the Maya of the forested Yucatan peninsula and Angkor's Khmers; the civilisations of Peru/Mexico and that of the Ethiopian plateaux; and the feudal systems of Japan and western

Europe.⁸⁴⁷ Under the Chou emperors, Chinese feudalism evolved towards forms that were almost identical to those that would emerge some two thousand years later in medieval Europe.⁸⁴⁸ Later the Ch'in dynasty replaced feudalism with a bureaucratic type of government,⁸⁴⁹ and this move was also subsequently paralleled in seventeenth century Europe. In America, the Mississippian and Hopewell societies resembled earlier central American societies, albeit in a watered down form. There is no evidence for migration from the Valley of Mexico into the eastern woodlands, and the differences in timing of these societies also count against any direct influence.⁸⁵⁰ It seems that they were local inventions that just happened to be founded on similar ideas.⁸⁵¹

The scattered islands of the Pacific have been described as a cultural laboratory, with numerous societies developing largely independently. Each island was probably founded by just a few colonists, who in principle would have had the freedom to devise any kind of social organisation they pleased. Yet the same basic developments unfolded consistently on numerous islands. Not only did the Polynesians reproduce the same forms over and over again but the processes by which they arrived at these forms were also remarkably similar from island to island. The initial colonists tended to differentiate into several social groups who gradually divided up the island between them. Eventually, the groups came into territorial conflict. They were then amalgamated into several large regions under strong chiefs, one of whom would be recognised as paramount. At the same time, defeated groups were likely to migrate to colonise another island and so the process began all over again.⁸⁵²

The American Plains Indians provide another example of societies falling into a common pattern of social arrangements. They started out as a whole variety of tribes who independently acquired horses from the Spanish conquistadors and then moved on to the great plains. (There were no horses in pre-Columbian America; they had evolved there but died out.) Originally, the different tribes had had a whole range of subsistence strategies – from foragers to farmers – and they had had divergent institutions to match. Yet on the plains, on horseback, they ended up forging very similar institutions from this diverse heritage.⁸⁵³ There were differences of detail, reflecting their varied provenances, but overall the Plains Indians were united by broad parallels, resulting from the common requirements of their newly shared way of life.

The recurrence of institutional arrangements shows that human societies everywhere are constrained by similar principles. Institutions cannot be combined arbitrarily. They must fit

together in consistent ways. Furthermore, when the logic is in its favour, a given set of institutions arises quite naturally. One society does not need to copy from another. The Plains Indians did not emulate some prototype. They arrived at the same forms almost independently. In Africa, the many states that emerged across the continent shared a set of institutions based around 'divine kingship'. It used to be assumed that these ideas must have spread across the continent from the Nile. However, there is no evidence for this and it is now accepted that they can best be understood as largely indigenous developments.⁸⁵⁴

Institutional reinforcement

The tendency of institutions to form consistent arrangements can be related to the fact that particular institutions reinforce or promote each other. Thus, institutional complexity comprises the three different areas of: power relations, commercial activity, and moral and aesthetic sensibility. These areas are distinct and they have distinct characteristics. Yet they also interact.

For instance, a nation's moral purpose can be linked to its effectiveness as a military power. When Roman citizens shared a strong sense of loyalty to Roman values, the legions did not go short of committed soldiers. Similarly, the prosperity that comes from vigorous commercial activity makes it likely that a nation will also be strong and powerful. Wealthy nations are better able to support large and well-equipped armies with which to exert their authority. Historians connect the rise of Etruscan power, for example, to the prosperity that it derived from trading in its mineral resources. Conversely, the later crises in Etruscan power relations occurred in conjunction with commercial difficulties.⁸⁵⁵

It is significant that the world's first complex societies came into existence in areas of early agriculture, especially along the banks of the Nile, Tigris-Euphrates, Indus, Yangtse and Yellow rivers. Farming allowed these societies to feed themselves more efficiently and hence to become more prosperous. This in turn permitted the rise of coercive elites along with differentiation into status hierarchies. State formation in the new world followed the same path. The major city of Teotihuacan seems to have risen after the Toltecs began to make a number of improvements in agricultural technique from about 200 BC.⁸⁵⁶

The relationship between prosperity and power is well illustrated by Figure 8-1. This shows the relative shares of world manufacturing output of different nations and regions over a 150-year period.

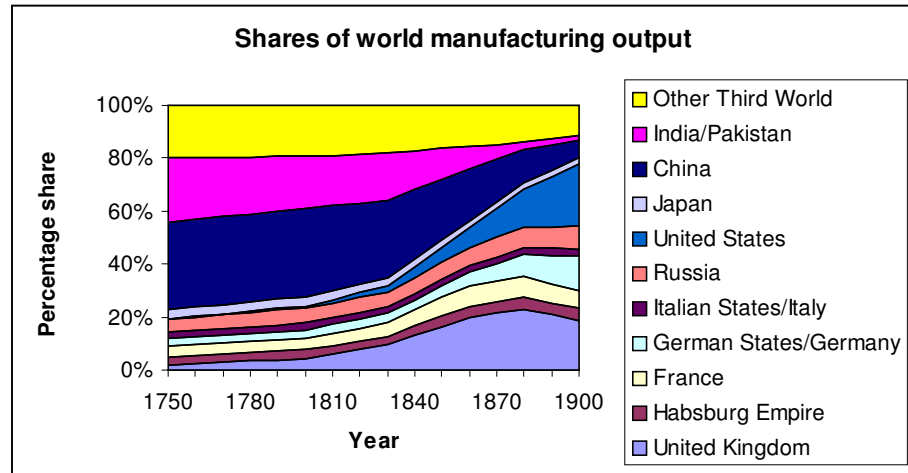


Figure 8-1: *Relative shares of world manufacturing output, 1750-1900.*⁸⁵⁷

Although it strictly tells a story about commerce, this figure could just as well be a story about power relations. For instance, the massive rise in the European share of world output, relative to the third world's share, parallels the massive extension of European colonial control over third world countries. Within Europe, the relative decline of France's output and the relative rise of Germany's are also paralleled by political events. The United Kingdom's rise to the position of top producer, peaking around 1860 to 1880, echoes the fact that the British empire also reached its zenith around this time. Britain's subsequent relinquishment to the United States of the number one slot is also reflected in the world of international politics.

Hence power, prosperity and moral purpose are linked to each other. Yet they should still be recognised as distinct aspects of institutional complexity. They are correlated but they do not vary exactly in synchrony. In Figure 8-1, the trade figures only correspond to power relations in a qualitative manner. The actual point at which, say, the United States ceased to defer to Britain in the international arena is not necessarily the same as the point at which its share of output surpassed Britain's. Commercial and coercive ascendancy are certainly related, but they are not the same thing. Similarly, though heights of aesthetic achievement are often associated with the wealthiest and most powerful societies, this is not an inevitable association. The Hittites, for example, established a great empire but their literature and religion remained relatively primitive.⁸⁵⁸

Mutual causality

Historians often present the linkages between different aspects of social complexity as though changes in one area effect changes in the other. That is to say, there is an implicit assumption that causality flows in one direction only. This assumption is often suspect because the direction of causality may arguably be in the reverse direction. For example, a high level of pride and loyalty may well have been important to the prowess of the Roman legions, but one can equally well assert that it was the legions' prowess that fostered pride and loyalty.

It appears obvious to some people that a society's wealth is the prime mover and that political fortunes follow financial ones. This is the essence of the historian Paul Kennedy's thesis in his study of the rise and fall of great powers. He argues that the material resources at the disposal of a great power ultimately determine its international standing. For example, Kennedy observes that the Habsburg empire was weakened by debt due to the French wars and by slow industrialisation,⁸⁵⁹ thereby implying that economic weakness led to military weakness. However, this account of the matter still leaves questions unanswered. The supposed explanation requires explanation in its turn. One wonders, for instance, why the Habsburg empire only industrialised slowly. It is also suggestive of some pre-existing political weakness that the empire should have become embroiled in exhausting French wars. After all, really powerful nations enjoy their authority unchallenged.

The reality is that causality does not flow obviously in just one direction or the other. There are equally good reasons for believing that it flows in either direction. With the Habsburgs, for example, one can say that an original failure of authority led to wars and therefore to financial problems. These financial problems then caused further failures of authority. It seems to be a chicken-and-egg situation.

Similarly, it may be true that mineral resources or agricultural surplus can lead to prosperity and that on the basis of such prosperity powerful governments can arise. However, that can never be the whole story. It overlooks the fact that different social groups must compete for prime resources in the first place. In the pre-Columbian Mississippi, for example, or on Pacific islands, warfare appears to have been stimulated by conflict over scarce agricultural land.⁸⁶⁰ Command over the best natural resources, which are a source of prosperity, may depend upon prior military prowess.

There may certainly have been a competition to secure the prime sites of irrigated and fertile land where civilisations first arose. Few major cities, even to this day, do not have a sizeable river flowing through the middle. In the Yucatan peninsula, where there are no reliable rivers, the

Mayan cities were tied instead to huge natural wells called cenotes. Ancient and modern societies have taken considerable interest in the sources of their water. The Incas extended political alliances beyond the coastal desert, far into the Andes, in order to protect the water supply.⁸⁶¹ Implicitly, coercive control over a well-watered stretch of territory is a prerequisite for ecological stability and economic growth. Again, therefore, one cannot simply argue that powerful governments arose where there was an agricultural surplus. Effective government may have been necessary to ensure agriculture's success in the first place.

The flow of causation from political prowess to wealth is also shown by the fact that strong governments facilitate production and commerce in many ways. The arrival of Roman rule in Britain resulted in spending on roads and forts, which in itself produced a transformation of the economy.⁸⁶² The existence of an efficient court system capable of enforcing contracts has been identified as a crucial factor underpinning the well developed Hittite economy.⁸⁶³ This also goes for Rome and indeed every other successful civilisation. At Angkor, the rulers took an explicit interest in encouraging agriculture and trade. The Hittites particularly prospered during the relative peace that prevailed after their rulers had concluded a treaty with Egypt.⁸⁶⁴ Farmers could give attention to their land rather than crippling themselves in the armies, on offensive and defensive operations. Merchants could trade freely over a large area. The government's resources were available for capital projects instead of being used up in fighting. Similarly, during the era of peace brought about by Rome, there appears to have been an increase in trade between parts of the empire, like Britain and Gaul, that might not otherwise have occurred.⁸⁶⁵ It has also been said that, when Britain was well governed under both Elizabeth I and Cromwell, the nation was able to remain solvent while other European states were bankrupting themselves in never-ending local conflicts.⁸⁶⁶

Governments can overcome their subjects' naturally low aspirations. Given the choice, many people would be content to produce just enough for their basic needs and so have more time for leisure. This is what occurs in institutionally simple societies, where authority is minimal or absent. For instance, the Iban are swiddening horticulturists who make a living through dry-rice farming in the forests of Sarawak. In an Iban community, the separate families are responsible for provisioning themselves, each family from its own fields. Their success is variable, due to differences in application, ability and luck. One ethnographic account of these people tells of an individual called Imba, a particularly conscientious farmer, who often made loans of rice to less diligent families during the hungry months before the harvest was

due in. When harvest-time came, Imba was able to induce his debtors to carry his rice for him into the long house.⁸⁶⁷ However, Imba was not able to force his neighbours to work harder in their own fields, because he was not a chief and had no formal authority. Consequently, the overall productivity of his community remained low.

By contrast, the rulers of states do have formal authority. They make demands of people in the form of taxation and back them up with the threat of force. In this way, they can make people work harder than they otherwise would. By demanding a surplus, political authorities ensure that a surplus is produced. The Roman empire promoted the economic development of its provinces by forcing the inhabitants to produce for the market so they could pay their taxes.⁸⁶⁸ European colonial powers had a similar effect in many African states. At Angkor, the peasants had to produce food in quantities well above what they needed for their subsistence.⁸⁶⁹ Villages of a hundred people were required to supply 13.5 tonnes of rice in taxation, which was nearly double their own requirements.⁸⁷⁰ Similarly, merchants had to pay a tax for a good location in the market.⁸⁷¹ These levies compelled merchants and peasants to work harder in order to survive, and so forced commercial activity on to a higher level. Equivalent observations can be made about the role of the medieval state in stimulating the development of European economies.⁸⁷²

Overall, therefore, while prosperity and moral conviction underpin political power, it is just as valid to say that political power underpins prosperity and moral conviction. The three aspects of ascendancy – power, prosperity and moral purpose – are inextricably coupled. It is futile to try and identify which comes before the other. Causality is in all directions simultaneously. That is to say, in generating institutional complexity these three factors are bound together by mutual causality.

Self-defeat

Strength in one set of institutions reinforces another set of institutions, which reinforces the first set. This might imply that societies should spiral ever upwards in status and institutional complexity. Yet that is obviously not the case, since societies often go into decline. Evidently, the logic can operate in reverse. Weakness in one area may promote weakness in another area. For instance, while Rome's early success stimulated a sense of civic responsibility, its later failures encouraged the rejection of Roman values and undermined allegiance to the imperial state. The virtuous circle became a vicious one.

Beyond this, it appears that the mutual influence between power, prosperity and moral purpose is not always positive. There seems to be a self-defeating or self-limiting element to their relationship. For example, very powerful

governments have often damaged their economies through the measures by which they attempt to control them. It has long been noted that the most autocratic states do not generally fare as well as somewhat less effective governments. The dirigiste regime of Louis XIV's France proved less successful than British party-based politics in advancing economic development.⁸⁷³ Similarly, the authoritarian Russian state made the prospects for industrial take-off more difficult there than anywhere in Europe.⁸⁷⁴

Europe's fragmentation initially made it appear less advanced than regions like China or the Ottoman empire. In the end, however, this seeming weakness proved to be its great advantage. Since Europe was not under the dominion of a single ruler, merchants were less prey to the arbitrary whims of political authority. If conditions proved unsympathetic in one country, they could take their enterprise and their wealth elsewhere. Growth was decentralised, not driven by the state, and for that it was the more impressive.⁸⁷⁵

This does not imply that there is a straightforward correlation between political weakness and commercial growth. As has already been pointed out, strong government promotes prosperity in many ways. Furthermore, dirigisme has not always been associated with negative results. Scholars have linked the dynamism of Japan's economy and society during the two decades that followed the Meiji restoration of the mid-nineteenth century to the regime's dirigiste philosophy.⁸⁷⁶ The same point has been made about the interventionism of Japan's Ministry of International Trade and Industry in promoting the country's post-second world war success. The broader conclusion, therefore, is that the various dimensions of institutional complexity influence each other in a relatively complex way, and their interaction is neither exclusively positive nor exclusively negative. Institutions generally reinforce each other, but there is also a self-limiting element. Some aspects of strong government (peace and stability) may be good for commerce but others (bureaucratic interference) are bad for it.

In the same way, strong bonds of loyalty and civic responsibility can be detrimental to economic development. The incentive of self-interest is necessary for a vital economy. In communist Russia, for example, the share of production devoted to private, self-interested consumption was driven down to approximately 50 percent under Stalin, compared with 80 percent in other industrialising countries.⁸⁷⁷ This was just an extreme version of the collectivism that had a long pedigree in Russia, where owner-producers were rare even in pre-communist times. The result was a lack of vitality and responsiveness, with both quality and productivity lagging behind Russia's competitors. Neither coercion nor moral pressure

proved effective at stimulating people to work harder. However, collective farm workers were permitted to retain a private plot for family cultivation. At one point, these private plots occupied only about 3 percent of all Russian cultivated land. Yet they produced almost half of all vegetables consumed, almost half of all milk and meat, three quarters of all eggs, and two thirds of all potatoes.⁸⁷⁸ It is obvious where the peasants' time and energy was being spent, and it was not on the collective farm. A certain amount of selfishness and disloyalty was evidently vital to the country's economic viability.

Similarly, in China, after the farms were collectivised into huge communes, and farmers were paid for the time they spent in the field no matter how little they accomplished, the result was an agricultural disaster. Between 1959 and 1962, some 30 million people died in perhaps the world's worst ever famine. The policy was subsequently changed to give farmers more autonomy and to tie their rewards more closely to their own efforts.⁸⁷⁹ Nevertheless, China is still marked by a widespread policy of redistributing land on a regular basis. This is not simply perverse, dogmatic communism. It reflects a strong community spirit. The authorities adjust farm boundaries as families change size or when someone dies or moves away. This means, in principle, that each family always has a fair allotment according to its needs, something that might be thought morally commendable. All the same, the resulting insecurity, as farmers soon point out, means that they have little incentive to make improvements with pay-back periods longer than a year.⁸⁸⁰ That is clearly detrimental to long term growth.

This should not be taken as an absolute commendation of unbridled selfishness in economic activity. The point is more that moral responsibility, which often makes for a strong society, also has its self-defeating aspects. In fact, some highly successful societies have practised collectivism. The Incas, for example, had a form of land management like that of modern China. Each family belonged to an *ayllu*, or collective, which was responsible for allocating land between its members in accordance with their perceived needs.⁸⁸¹ There was no security of land tenure and no incentive to make long term improvements. Government control of the economy, though, was taken very seriously. If a citizen stole through want, the responsible official could be punished for the failures of administration that led to the crime.⁸⁸² The Maya are also thought to have practised such an approach to allocation of land rights.⁸⁸³ Overall, therefore, the temptation to settle on simple causal logics, based on a few illustrative cases, should always be avoided. The mutual influence of different institutions is complex and involves both negative and positive strands.

International interaction

Since the beginning of recorded history, the middle east has played a central role in world affairs. It is the source of numerous key innovations. The world's first states arose here, as did several of the world's great religions. Many plants and animals were originally domesticated in the general area. All this precocious achievement, it has been pointed out, may be related to the region's geography. It is a place where three continents meet. Societies here were exposed to a flow of ideas and materials from many different directions. They were invigorated by this intensive interaction. Such a hypothesis is strengthened by the case of America. There too, it was largely in the centre, where two continents meet, that states arose and significant innovations were made.⁸⁸⁴

While there may be other reasons why particular developments took place in the middle east or in central America, it seems clear enough that interaction with neighbours can exert a positive influence on a society's development. The interaction takes the form of both co-operation and competition. On the co-operation side, trade brings access to numerous exotic products and concepts that can be recombined in exciting ways. Competition, meanwhile, implies an incentive to ever higher achievement. During the last millennium of European history, the rivalry between individual states stimulated many advances in military technology and contributory industries.⁸⁸⁵ Warfare also helped to crystallise the incipient self-consciousness of different nations and promoted their coalescence around strong institutions.⁸⁸⁶

On the other hand, the interaction between nations has self-defeating aspects, just like the interaction between different institutions within a society. For instance, while trade and cultural exchanges can invigorate a society, they can also become harmful when the society has lost its original confidence. The society may simply imitate others, abandoning the very institutions that formerly held it together. The benefits of competition are also self-limiting in various respects, particularly when such rivalry degenerates into all-out war. The Assyrian empire, for example, seems to have exhausted itself in the effort to subdue Babylon, which never allowed itself to be wholly bent.⁸⁸⁷ Defeat in the second Punic war was followed by a progressive decline of the Greek cities in southern Italy.⁸⁸⁸ The Toltec people were also weakened by long struggles against their enemies,⁸⁸⁹ as was the Ethiopian state.⁸⁹⁰

The Etruscans present a clear example of a people who were progressively debilitated through military conflict. Their development stalled as a consequence of two events. Firstly, the Phoenicians barred the way to Etruscan colonial expeditions beyond the Pillars of Hercules. Secondly, the

Greeks established a colony on the Aeolian Islands protecting Sicily and the Strait of Messina. From the sixth century BC onwards, the Etruscans launched repeated attacks on the Greek strongpoint but failed each time.⁸⁹¹ During the fifth century something of a balance was struck between the Greek and Etruscan cities and those of the Phoenicians, implying an impasse for all. However, the Etruscans found their freedom of strategic and naval action increasingly curbed by the Phoenicians.⁸⁹² Not only had their outward movement been halted but now the restraints were being tightened. Thus, Etruscan history was characterised by unsuccessful struggles against Carthage, Sicily and the Greeks.⁸⁹³ These military frustrations contributed to the crumbling of Etruscan society.

The wars of the superpowers have frequently assisted minor powers that remain on the periphery and do not get involved. In the eighteenth century, Britain gained relative economic benefits from the chronic in-fighting of the continental European powers. Later, the first world war seriously eroded the prosperity of the European powers, but just as surely boosted the economies of the United States and Japan.⁸⁹⁴ This war has been described as a self-inflicted death blow to European civilisation. Most states funded their militaries by borrowing, and were left with huge debts and soaring inflation.⁸⁹⁵ At the end of the war, world manufacturing production turned sharply down, ending many decades of growth.⁸⁹⁶ Britain, in particular, was harshly alerted to the reality of its limitations. It had entered the war as the world's pre-eminent power, coming to the aid of the French. It ended the war having become dependent on the new American power.⁸⁹⁷ As for Russia, it was left prostrated both by the war and by the effects of the 1917 revolution. In 1920, Russia's manufacturing output was just 13 percent of what it had been in 1913.⁸⁹⁸ The United States gained a further relative advantage by staying out of the second world war until a late stage.⁸⁹⁹

Another self-limiting aspect of the competition between nations is illustrated by the chronic trials of the Habsburgs, whose very success ensured that they were repeatedly challenged by rivals. The Habsburg emperor, Charles V, had foes among the French and Ottoman Turks, as well as difficulties in Germany.⁹⁰⁰ During some periods, the Spanish Habsburgs were fighting on three fronts simultaneously.⁹⁰¹ Afraid of the disadvantage they might suffer if the Netherlands fell into the hands of their enemies, they fought a long and eventually unwinnable war of attrition to retain it.⁹⁰² In the concurrent thirty years war of 1618 to 1648, the Habsburgs fought against all-comers arranged in successive coalitions. Even after 1648, the Spanish end of the empire went on to battle it out with the French for another eleven years, until the Treaty of

the Pyrenees.⁹⁰³ It also continued to exhaust itself in a futile attempt to recover Portugal.⁹⁰⁴ Meanwhile in south-eastern Europe, the Habsburgs struggled with the Ottomans for decade after decade. All these long drawn out wars became increasingly expensive and difficult to maintain.⁹⁰⁵ The resources of the Spanish-Austrian empire were vast but they were still never enough to meet the spiralling costs of war that was being conducted on too many fronts.⁹⁰⁶

Sometimes, more isolated nations can fare better than those which are at an international crossroads. For example, Easter Island was a typical Polynesian society in terms of its language, artefacts and main social institutions.⁹⁰⁷ Yet, with its writing and impressive statues, Easter Island seems to have exceeded the level of cultural development typical for Polynesian islands of its size.⁹⁰⁸ This may be connected to its extreme isolation, three thousand miles from the nearest inhabited land, freeing it from the endemic fighting that characterised most Polynesian island groups.⁹⁰⁹ Similarly, it has been argued that Britain's success during the eighteenth and nineteenth centuries stemmed from its island location. It was neither forced to defend itself by land nor tempted to seek extension of its boundaries. It therefore grew strong at the same time that continental countries were dissipating their energy and resources in ultimately futile conflicts.⁹¹⁰

Interaction on the international stage is therefore a crucial influence on the development of any society.⁹¹¹ However, there is again no simple mechanism of causation. In many ways, interaction is positive and acts as a stimulus, but there is no monotonic spiral of improvement because of the presence of more negative processes. Furthermore, one thing leads to another, which then leads back again, and it is impossible to tease out the starting point of any particular sequence of events.

Simultaneity in social change

A nation's prosperity is vital to its coercive power. Its coercive power is also vital to its prosperity. There is no unique direction of causality. Each stimulates the other. Each is a prerequisite for the other. Conversely, decline in one aspect may be expected to be associated with decline in the other aspect. It is very difficult to say that one declined before the other, or to say that one was the cause and the other effect. Combine this with the notion that failure only occurs when a society is already internally weakened, and it becomes clear that collapse or retrenchment is not to be explained primarily in terms of some unusual circumstance and prime mover. Instead, it must involve the same principles, with their partially self-defeating logic, that govern the relationships between institutions every day.

Problems will arise in explaining social decline if the principle of mutual causality is

overlooked, and if external stimuli are given more importance than the internal relationships that apply all the time. This is why different analysts arrive at different explanations. This is also why the process seems invariably to be multi-causal and it is difficult to distinguish between primary causes, secondary causes and mere consequences of the decline. In effect, the whole notion of cause and effect is inadequate and unhelpful in application to social phenomena.

In sub-Roman Britain, for instance, the collapse of the money economy, the insecurity of road transport, the decline in mass manufactures, and the increase in home-produced goods⁹¹² are all related in a complex web of causation. It is one that can never be disentangled. To trace the precise sequence of events that led to the collapse of Romano-British civilisation is a hopeless task. This is just one example. Wherever societies have declined, change has taken place on many fronts simultaneously. This is because the institutions that make up a logical structure must inevitably appear or disappear together. For example, cities, markets and writing are all features of institutionally complex societies. When such societies decline, these institutions are all threatened and they tend to vanish as a piece. It is not feasible for one institution to be in severe decline while others are vigorous. In eastern North America, over the period 800 BC to AD 900, status differentiation and exchange networks emerged in parallel and they subsequently vanished in parallel.⁹¹³

The interdependence of institutions is shown particularly well by the way that states usually arise quite suddenly in the archaeological record. This indicates that particular institutional configurations emerge all at once in newly ascendant societies. In ancient Iraq, while there was a long process of development from the establishment of the first permanent settlements around 5500 BC, when cities finally emerged they did so remarkably swiftly.⁹¹⁴ Similarly, the Egyptians had a long prehistory, but when the dynastic state appeared it did so in a burst of cultural innovation. The Shang dynasty of China appeared abruptly around 1600 BC.⁹¹⁵ Among the Maya, it has been impossible to trace any extended evolution from the period of scattered and independent farming up to the city-building phase. The new cultural institutions appeared suddenly and fully-formed.⁹¹⁶ In Etruria, the Villanovan culture, which is presumed to have been the forerunner of Etruscan civilisation, underwent rapid and intensive growth in the eighth century BC.⁹¹⁷

Sometimes, the rapidity with which civilisations develop has been presented as a mysterious phenomenon that demands exotic explanations up to and including intervention by extraterrestrial visitors.⁹¹⁸ In fact, it is fully accounted for by the principle of mutual causality. Institutions are not simply accreted in a haphazard

manner, but they must combine in a logically necessary structure. Consequently, one should not expect anything else other than that the various institutions characterising a particular way of life tend to materialise in one rapid development.

It might be argued that what seems like an abrupt change may be due simply to gaps in the archaeological record. This is certainly conceivable. However, even where the history is known in some detail, the rise of states and empires seems to be rather swift. Rome, for instance, rose to prominence with incredible speed during the last decades of the fourth century BC.⁹¹⁹ The Hittites went from being a local and insignificant domain to an inchoate empire within the reign of a single king.⁹²⁰ The later flowering of the full Hittite empire was also achieved largely in the reign of a single king, Suppiluliamas. He not only brought large amounts of territory under his control but also established the mechanisms to administer it.⁹²¹

The unravelling of Yir Yoront society, after missionaries began introducing steel axes to these Australian aborigines, demonstrates the principle of institutional interdependence from another direction. What might have seemed a simple and uncontentious change, from stone to steel, produced devastating results. This was because stone axes occupied a well-defined place in Yir Yoront culture. Their manufacture required knowledge and skills that young men had to learn from their elders and that were not considered appropriate for women.⁹²² As an institution, therefore, the stone axe tended to generalise and standardise sex, age and kinship roles, and built up expectancies about conduct.⁹²³ There was a definite morality of the axe, representing the precedence of male over female and old over young. The stone axe fitted in with the whole Yir Yoront world view.⁹²⁴ When the missionaries began handing out steel axes indiscriminately, women and young people were no longer dependent on older male expertise. This struck at the very logic of the Yir Yoront way of life, and proved to be a blow from which it was unable to recover.

Having said this, the story of the Yir Yoront should be regarded as something of a parable and not the literal truth. It makes the point clearly, but the ethnographic classic on which this account is based greatly compresses other important issues. For instance, the Yir Yoront were receiving many other trade goods and were being converted to an alien ideology. Thus, the stone axe stands in for a more complex set of factors. Nevertheless, the basic point remains valid. A society's institutions form a coherent whole. They cannot be either accumulated or discarded in piecemeal fashion. Colonial administrations in Africa at the start of the twentieth century often received little assistance from their parent governments and had to pull themselves up by their own bootstraps. This proved

to be no easy task as they found that they could not extract taxes until they had pacified the region enough to allow trade to develop, but without an adequate fiscal revenue stream they did not have the resources to achieve pacification in the first place. They could not progress bit by bit but had to get everything in place simultaneously in order to

create a viable state.⁹²⁵ In accounting for decline therefore, or any social change, it is much more fruitful to consider the dependencies between a society's institutions, both self-promoting and self-defeating, than to think in terms of sequential causes and effects.

Chapter 9 - The camel's back

Dynamism and stagnation

Throughout history, an expanding population has been a clear-cut sign of a vigorous and dynamic society. This may seem surprising to those who have been encouraged to believe that the world's recent population explosion is an international calamity. Nevertheless, a growing society is one that is becoming more proficient at meeting human needs and usually one that has an exciting future before it. In Britain, the arrival of Roman civilisation sparked off a massive increase in the numbers of the local tribespeople.⁹²⁶ In China, the population grew strongly in the time leading up to its first unification in 221 BC. The neolithic revolution, about ten thousand years ago, saw a world-wide spurt of population as farming provided humans with a more assured and more abundant food supply.

It is a popular misconception that a rapidly growing population is a characteristic feature of poor and backward societies, and that it needs to be solved by technical interventions. Control of population size is neither a recent human achievement nor one that is related to advanced contraceptive technology. It is an ancient habit, relying on such practices as coitus interruptus, long nursing periods (which limit female fertility), and infanticide. Egyptian texts speak of a variety of contraceptive methods in use from at least 1900 BC. Foraging peoples, whose societies are the simplest and poorest of all, have typically kept their numbers stable, and well within the limits imposed by their environments, for thousands of years. Among the Mbuti pygmies of the Congolese forest, for example, Colin Turnbull (who also studied the Ik), noted that he never saw an unmarried girl become pregnant, despite the fact that they all led active sex lives.⁹²⁷

The reason that foragers like the Mbuti live in tiny groups is because larger ones would quickly exhaust the hunting and gathering potential of the locality and would have to move on unreasonably often. On the other hand, their small size means that their institutions are inevitably simple and so they can only live in such a basic manner. The principle of mutual causality applies. New institutions that improve subsistence can be said to allow population growth. However, it can also be said that population growth allows – and simultaneously demands – those new institutions. Complex institutions and an expanded population go hand in hand. It is pointless to argue about which comes first.

A stable population is associated with a society that is stagnating. After the Augustan age, when the Roman empire began to lose its momentum in every area, the population of the Italian peninsula stopped growing, and from about AD 200 it actually began to decline.⁹²⁸ Similarly, Japan's population

stagnated during its period of almost complete isolation from about 1700 until the mid-nineteenth century. In the course of this period, the standard of living improved but the society was not vigorous and there were few innovations. On the other hand, after the Meiji restoration, when Japan began to develop dramatically, the population soared.⁹²⁹ The population of China, meanwhile, stopped growing during the last decades of the Han empire and, after its collapse in AD 221, remained stagnant until the arrival of the dynamic Sung dynasty around AD 1000. The Egyptian population also declined during the late period of pharaonic civilisation.⁹³⁰

Population stagnation occurs before decline rather than as an aspect of it. It is characteristic of societies that have attained their potential. They may appear to be doing well, and often have great power and wealth, but progress has stalled. Actual collapse can often involve a population crash. The loss of institutional complexity means that former population levels are no longer supportable. Following the sack of Rome early in the fifth century, the Italian population decline became precipitous and reached its nadir by the beginning of the seventh century.⁹³¹ The period 1350-1450, when Europe's population declined dramatically due to the ravages of the black death and the hundred years war, was also a time of declining vitality on every front.⁹³²

A stagnating population is an ageing one. People have fewer children and there is a higher ratio of older people in the population. A text called the Admonitions of Ipuwer, which dates from the collapse of the Egyptian old kingdom, laments the fact that 'men are few' while 'women are barren and there is no conception'.⁹³³ In late Rome, meanwhile, some contemporaries deplored the proliferation of childless monks and nuns. The practice of celibacy was spreading even to devout people in secular occupations and exacerbated an already drastic fall in the birth rate.⁹³⁴

While its own population may be static, a mature and successful society can grow by attracting immigrants from less ascendant lands. The Admonitions of Ipuwer refer to the fact that foreigners had arrived in such numbers that they seemed to be swamping the Egyptians in their own country.⁹³⁵ Similarly, Rome received huge influxes of people from all over the empire, especially German barbarians. Such migrants are usually younger people anyway, and they tend to have a higher birth rate than the host population. Migration can therefore mask the effects of an ageing population and can inject a degree of vigour into an otherwise stagnating society. However, this is only a temporary reprieve. The stagnant society eventually becomes disrupted by this forceful, foreign presence in its own midst and is overtaken by those societies whose populations are still

expanding and where ambition remains strong. The Germans who came to Rome, to serve and to learn, finally destroyed it and all its ways.

Resistance to change

The institutions of institutionally complex societies tend to become self-perpetuating and hence resistant to change. Circumstances move on, but the institutions do not. They lose flexibility and inhibit needed developments. Bureaucracies, for example, gain a momentum of their own. Their activity is increasingly devoted to justifying their own existence, rather than responding to society's actual needs.

Powerful governments can provide significant benefits to their societies, imposing law and order, and regulating trade. They foster the use of money, which facilitates economic activity and allows the development of more elaborate financial practices. They establish standards for weights and measures. The Ch'in dynasty that first unified China even concerned itself with the gauges of chariots.⁹³⁶ Such regulation is convenient for merchants and a protection for the general public. It encourages trust and so aids commerce. The problem is, however, that regulation and standardisation can become a habit and an end in its own right. The authorities become overly prescriptive. Diversity is treated as anathema. Original thinking is suppressed.

A consequence of this is that ascendant societies become suspicious of dramatic innovations. Their very elaboration and complexity renders them brittle. Adjustment is difficult and there is too much to lose. The Chinese Ming dynasty, which came to power in the fourteenth century, was hostile to all mechanical contrivances and opposed their spread. One emperor demolished an astronomical clock that had been built in 1090.⁹³⁷ The dynasty's early period saw ambitious voyaging by the Chinese merchant navy. Chinese ships visited Mecca and even brought back a giraffe from east Africa.⁹³⁸ Yet by 1430, the emperor forbade any further voyaging and prohibited overseas trade, declaring it to be frivolous. His decree was obeyed absolutely and the Chinese fleet was destroyed. In this way, the Ming denied themselves the lucrative opportunities that fell instead to Europeans, after the Portuguese rounded the Cape of Good Hope half a century later and irrupted into the Indian Ocean.

The Mogul empire of India also stifled all innovation. It was its excessive rigidity and traditionalism that prevented this society from emulating the great technological and cultural strides that were being made in contemporary Europe.⁹³⁹ Russia also lagged far behind the rest of Europe in the nineteenth century because of its inflexible social institutions. Tsarist absolutism, the practice of serfdom, and a corrupt, backward-thinking bureaucracy all proved effective at suppressing talent and maintaining tradition.⁹⁴⁰ In

the sixteenth century, Britain began to succeed in the cloth trade primarily because the powerful Italian and Spanish guilds, which had hitherto dominated it, banned the techniques for making the 'new draperies', i.e. lighter and finer cloth that was more in demand.⁹⁴¹

It is not that ascendant societies are particularly unusual in their dislike of change. Anti-development sentiment seems to be a hardy perennial of history. The point is rather that highly ascendant societies are more successful at curbing unwanted developments. Ironically, their very effectiveness allows them to undermine their own further progress. For example, the pope banned all trade with Muslims – very much like the Chinese and Japanese decisions to close their borders to trade – only he was ignored. Similarly, the invention of the printing press meant an explosion in the number of books in Europe. The biggest demand was for secular books. These played a major role in the spread of learning and of agricultural and technological improvements. Such free exchange of information seemed to be threatening to the social order and attempts at censorship were prevalent. However, European rulers were too feeble to achieve what they would have liked. By contrast, the more powerful Ottoman emperors succeeded in banning the printing press for long periods of time. This huge own goal ensured that the Ottoman population remained ignorant and backward, and so it fell convincingly behind Europe in technical accomplishment.

Europe actually benefited from having lagged behind in the achievement of stable superstates with effective governments. The English parliament banned gig-mills, which were used in the cloth-finishing trade, but people went on and built them anyway. In 1589, a parson named William Lee invented a stocking frame for hosiery and other knitwear that was ten times as fast as a skilled hand-knitter. Fearing unemployment, the authorities refused Lee a patent, and his first machines were destroyed by mobs of hand-knitters. However, Lee went to France and set up a factory there. The factory eventually failed but the stocking-frame continued to spread.⁹⁴²

Charles I in 1623 ordered the destruction of a needle-making machine, and banned the casting of brass buckles on the ground that six casters would endanger the livelihoods of six hundred guildsmen who were making buckles the old way.⁹⁴³ Charles was later executed. Another invention, the Dutch swivel-loom for weaving multiple ribbons simultaneously, was prohibited in England in 1638, but also spread anyway.⁹⁴⁴ (The inventor of a similar machine had been suffocated 50 years earlier in Gdansk.) An English pamphleteer, describing himself as a 'Lover of his Country and Well-Wisher to the Prosperity of the King and the

Kingdoms', attacked the stage coaches that were established on many routes after the Restoration. He condemned them as destructive to horsemanship, encouraging effeminacy, and undermining both the social and the economic order.⁹⁴⁵ Evidently, if the English authorities had only commanded the same absolute obedience as the Chinese or Ottoman emperors, the industrial revolution would have had to find another venue.

The erosion of advantage

Ironically, at the very time that their institutions are becoming less flexible, successful societies find themselves increasingly stretched. They cannot rest on their past achievements because their initial advantages inevitably become dissipated. Indeed, the rewards go to the late-starters. It can be better to follow the paths that other societies have pioneered, enjoying the fruits of their inventiveness and avoiding their mistakes. Britain and France benefited by exploiting opportunities in the new world that had been opened up by Spain and Portugal. They saved themselves the effort and expenditure of the initial discovery and simply stepped in to pick up the spoils.⁹⁴⁶ The pioneers tend to lose their edge over the people that they dominate, as the latter acquire their technical secrets and institutional principles.

The Romans, for example, allowed northern barbarians to obtain their military technology. In this way, they gave away their lead over their potential enemies. The Romans were going down the same path as Troy and the early cities of Greece and Crete, which traded bronze implements to the less civilised tribes that later overwhelmed them.⁹⁴⁷ In fact, the Romans had themselves benefited by learning the techniques of the more advanced civilisations that they eventually conquered. Their civilisation inherited its potency from the Etruscans and from other societies of the Mediterranean.⁹⁴⁸ In a similar way, European and American civilisation now dominates north Africa, south-west Asia and China. Yet it is founded on cultural and technological innovations that were made hundreds or thousands of years ago in those very places.

Commercial advantages have a tendency to leak away in line with military ones. The Etruscan mineral trade suffered as the peoples of other areas, through contact with Etruscan merchants, gradually acquired the motivation and skills to open their own mines.⁹⁴⁹ In a similar way, mid-Victorian Britain undercut its own position by carrying its trade to the rest of the world. In spending its wealth on foreign goods of all kinds, and investing its surplus capital in overseas industries, Britain only stimulated the growth of potential rivals.⁹⁵⁰ Some contemporary observers remained rather sanguine about this. They suggested that Britain had got so far ahead of anyone else that it would always remain the foremost beneficiary of a world-wide economic miracle. However, that calculation

proved to be quite mistaken. It was nowhere near as difficult for other nations to catch up and overtake Britain as had been so fondly supposed.

Their very superiority ensures that ascendant societies attract challengers and would-be emulators. For example, French successes and French ambitions made other nations determined to stop them after 1815.⁹⁵¹ Similarly, as European colonialism penetrated underdeveloped societies and drew them into the global network, it created its own difficulties. The leaders of these subjugated societies acquired an education in European political and technological methods. People whom the Europeans had once effortlessly dominated gained aspirations that they had never had before, along with the capacity to realise them. Not surprisingly, they slipped increasingly away from European control.⁹⁵² The difficulty of ascending to a dominant position may become as nothing compared to the difficulty of holding on to it year after year, decade after decade. One challenger may be beaten off only for another to appear in its place. The need to maintain continual vigilance, not to mention embroilment in chronic defensive operations, will absorb resources and steadily debilitate even the greatest nations.

Overextension

The Athenians found that to maintain their desired lifestyle, they had to become slave-owners and exploit their Aegean allies. As a result, they lost their dignified isolation and acquired military obligations.⁹⁵³ Ascendant nations are likely to be sucked into ever greater commitments to protect their interests. At the beginning of the nineteenth century, Britain had one of the largest economies in the world, but this was not reflected in fighting power. Military expenditure represented only 2 to 3 percent of GNP, less than any continental nation.⁹⁵⁴ In the Crimean war of 1853-6, the French expeditionary force was by far the largest and made the most breakthroughs.⁹⁵⁵ Britain's poor performance in the Crimea, which saw the suicidal Charge of the Light Brigade as well as large losses from disease, was a national scandal. The response was to allocate vast sums to the military to make up for past neglect.⁹⁵⁶ By 1900, the Royal Navy was equal in power to the next two navies combined,⁹⁵⁷ and defence had become a major government activity and expense. Similarly, in 1938, the national income of the United States was about three times that of Britain,⁹⁵⁸ but its military was far smaller. However, in that year, congress passed the Navy Second to None Act, which provided for a massive build-up of the fleet.⁹⁵⁹ Ever since then, United States investment in the military has been at a phenomenally high level and it has steadily accumulated military commitments around the globe.

Powerful nations can overreach themselves when they absorb so large and diverse a population

that it requires an impossible internal policing operation to control it. Their elongated frontiers come to border on too many neighbours and their defence requires an equally impossible commitment. The Inca empire had become dangerously extended well before the Spanish conquest, and was reaching the natural limit of its power of assimilation.⁹⁶⁰ By the sixteenth century, the Ottoman empire was similarly showing signs that its territories had grown too large for it to govern them convincingly.⁹⁶¹ At the start of the twentieth century, Britain was in this position. The Royal Navy that once seemed so invincible could no longer be strong everywhere. The British empire had simply acquired too many borders to defend.⁹⁶² It could not control European waters and simultaneously maintain a decisive presence in the Indian Ocean.⁹⁶³ At the outbreak of the second world war, Britain was attempting to control 25 percent of the globe with only 10 percent of the world's manufacturing strength and war potential.⁹⁶⁴

Soft living

Successful societies live well. They are wealthy and they develop a taste for luxury. Ordinary people aspire to the standard of living that their betters have customarily enjoyed. The Admonitions of Ipuwer observe that 'paupers now possess fine things',⁹⁶⁵ while 'she who had no box, now has a coffer' and 'he that slept on a board, now has a bed'.⁹⁶⁶ The rich citizens of classical Athens became increasingly given to conspicuous consumption, and built themselves far more splendid houses than those with which their ancestors had been content.⁹⁶⁷ In the first century AD, Seneca commented wryly on the rather dingy and basic bathroom of a house that once belonged to Scipio, the destroyer of Carthage some 200 years before. 'Who is there who could bear to have a bath in such surroundings nowadays?', he asked. 'We think ourselves poorly off if the walls are not ablaze with large and costly circular mirrors, if our Alexandrian marbles are not decorated with panels of Numidian marble' and if the water does not pour 'from silver taps', all of which excesses, Seneca said, are 'just for the sake of spending money'.⁹⁶⁸

Of course, there is nothing wrong with a more comfortable lifestyle in itself. The trouble is that a society may indulge itself beyond what it can afford. Xerxes is said to have ruined the Persian empire by indulging in a welter of extravagance that was more than his coffers could bear.⁹⁶⁹ In China at the beginning of the seventeenth century, aristocrats were creating great private domains that drove peasants away from the land.⁹⁷⁰ They were seemingly oblivious to the fact that all their wealth ultimately rested on the land's productive value, and that only industrious peasants could realise it.

People in rich nations develop a growing distaste for hard labour. They wish to enjoy their

wealth rather than continue the hard struggle that led to its accumulation. The Admonitions of Ipuwer complain about the fact that craftspeople no longer cared to toil.⁹⁷¹ The Romans once derided the Greeks for their softness, yet they themselves became increasingly pampered by a state that provided all sorts of amenities. Late Rome was equipped with eleven public baths through the generosity of successive emperors. These not only provided for luxurious bathing at various temperatures but also served as elaborate leisure centres, in which many people, belonging to a wide spectrum of social and economic classes, spent a substantial part of each day.⁹⁷² The desire for luxury was rising, but the inclination to work for it was lagging behind. A book published in 1900 similarly noted how lazy British workers had become in comparison to their German and American counterparts. They were eager to consume but reluctant to work and resistant to innovation.⁹⁷³

This kind of runaway growth in expenditure, undermined by more sluggish growth in income, played a part in the decline of ancient Etruria. There was a shift in emphasis from production to consumption, i.e. to a society with more consumers and fewer producers. The Etruscan taste for fine things seems to have outrun the purchasing power of the people's earnings and accumulated wealth.⁹⁷⁴ That is to say, the Etruscan taste for consumption outran the Etruscan taste for the effort and self-discipline needed to supply it.

The later Roman armies even gave up wearing armour on the ground that it was too heavy. The Romans' upbringing no longer prepared them for strenuous effort. Their authority as well as their commerce was at risk. For a while, they could live in idleness on the taxes that they collected from their provinces. However, the provinces eventually realised that the all-conquering Romans had become soft and ineffectual, and they withdrew their support. The Romans had come to rely on the credit and reputation that had been built up by their forebears. That credit and reputation eventually ran out.

Burdens of complexity

Taxation implies both costs and benefits. As time goes on, though, the costs become increasingly likely to outweigh the benefits. The thirst for revenues is more consistent than the provision of good governance. During the eighteenth century, the French authorities imposed a huge tax burden on the wealthy port of La Rochelle, but neglected to defend it with the military forces that these taxes funded. In consequence, La Rochelle's merchant shipping suffered at the hands of the British navy, and its wealth-producing potential was eventually destroyed.⁹⁷⁵ Spain espoused numerous counterproductive policies that created a

straitjacket for Spanish entrepreneurs. Internal customs barriers discouraged trade, inhibited capital accumulation and generally kept industry in a backward state. In this way, the government short-sightedly attacked the basis of its own prosperity.⁹⁷⁶

The rulers of the Mogul empire touched some of the heights of excess in this field. They extracted vast wealth from their subjects and used it almost entirely for their own conspicuous consumption. They provided no direct benefits to their population and entirely neglected the welfare of the system on which they relied so heavily.⁹⁷⁷ In the end, through impoverishing and disincentivising their subjects, they destroyed their viability. People stopped even maintaining their homes properly because the state would confiscate any genuinely desirable residence. In China, extremely heavy taxation at the beginning of the seventeenth century was similarly associated with a great deterioration in the position of the government.⁹⁷⁸ The collapses of both the Mayan and Mycenaean civilisations have been explained in terms of exorbitant tax demands.⁹⁷⁹ It has been suggested that the same model may also apply to Angkor.⁹⁸⁰ Here, Jayavarman VII raised the tax burden to fund an ambitious building programme exceeding that of any earlier period. After his reign, the Angkorian mandala was essentially in decline. It seems that he may have gone beyond what the villages could withstand.⁹⁸¹

Excessive taxation was certainly an important factor in the decline of Rome. In the later stages of the empire, the middle classes were being destroyed by tax demands that they could not sustain.⁹⁸² The curiales, or municipal officers, suffered enormously from their hereditary position as tax collectors. They were obliged to produce a certain fixed amount of revenue from the areas that were assigned to them, although generally they found great difficulty in meeting the demands. In most cases, they could only escape by taking flight.⁹⁸³ The growth of taxation had become self-sustaining, as the bureaucracy consumed vast amounts just on maintaining itself. The vast size and deteriorating quality of the civil service in the late Roman empire was notorious. It had become a self-perpetuating body in which posts were hereditary. There were many concerted attempts to rein in this unmanageable officialdom but the very repetitiousness of such measures shows that they must have been almost wholly ineffective.⁹⁸⁴ Frauds and extortion weighed so heavily on taxpayers that broad areas which had once been productive were taken out of cultivation.⁹⁸⁵ It simply became no longer worthwhile to raise crops because too much was taken away by the state, whether legitimately or corruptly. By the fifth century, the peasants were paying one third of their gross product in taxes (comparable to

contemporary rates). In north Africa, the burden was felt so severely that many cultivators simply gave up and fled.

Parasites

Successful but stagnating societies are susceptible to parasites. There is an ever-growing class of people who extract benefit from their society without making any contribution to it. In classical Greece, freeborn people came to subsist on the fees that they were entitled to receive for attending tribunals.⁹⁸⁶ Certainly, these fees did not provide much of a living. However, the people who lived this way did no productive work and made no contribution to their society. They were exclusively a drain on it. These ancient Greek free-loaders demonstrated that when a privilege has been granted people are apt to take advantage of it.

The Romans of 300 BC may have held in contempt the grasping and self-indulgent Greeks that they conquered, but their descendants would eventually far outdo the Greeks as spongers and scroungers. By AD 300, Rome had become an enormous parasite on its empire. Large numbers of minor citizens subsisted at the expense of the public purse, enjoying freely distributed bread and being entertained by the public circuses. The aristocrats lived on the income from their estates. Only the slaves and freedmen did a little work.⁹⁸⁷

The free distributions had a history that went back to the Roman republic. In those days, citizens were guaranteed adequate corn at a fair price, the costs being subsidised if necessary. In 58 BC, however, in the context of the civil wars, this became converted into a free distribution of corn for citizens resident in Rome. In response, people moved into the city and slave-owners freed their slaves in order to claim their share. By 46 BC, there were 320,000 people claiming the corn dole. Julius Caesar cut the list of those who were entitled down to 150,000 names, with new names being entered only on the death of an existing recipient. However, Augustus abandoned the attempt to limit the list. By 5 BC, the numbers had crept back up to 320,000 and were continuing to grow. Around AD 200, the scope of the dole was extended to include oil, and by the late third century pork was added. In AD 200, there were 1.75 million people entitled to the dole. As can be imagined, the list was subject to massive fraud, with the number of claimants exceeding Rome's actual population. The burden of the dole helped motivate the emperor Constantine to move his capital to the east in AD 330, leaving Rome to destroy itself by its own avarice.

In a similar way, the Incas created a class of privileged people who were entitled to live at the expense of the general community. This derived from the system of split inheritance, which was associated with ancestor worship and the practice of preserving the mummies of dead emperors.⁹⁸⁸ In

this system, the Inca's principal heir inherited his titles and duties but not his property. Notionally, that continued to belong to the dead emperor. In practice, all the dead Inca's other descendants in the male line, collectively known as the *panaqa*, were entrusted with the property and received an allowance from it.⁹⁸⁹ As each Inca acquired his own estates and then died, more and more land was being monopolised by the dead. This cult of the dead emperors may seem bizarre but it should be recognised as an obfuscating ideology. Its real point was to legitimise the claims of an ever-growing class of minor aristocrats for lifelong support. The five year civil war that took place immediately before the arrival of Pizarro was about efforts to reform these practices. Huascar, the new Inca, wanted to bury the dead emperors and put an end to free-loading.⁹⁹⁰ Not surprisingly, this initiative earned him many enemies and stimulated Atahualpa's challenge. Atahualpa won the fight on behalf of the *panaqa* but met his demise at the Spaniard's behest.

Those who are completely idle are only the most visible part of the burden of dependency that afflicts ascendant societies. Beside these overt dependants there are also covert dependants. That is to say, there is a proliferation of occupations whose contribution to the commonwealth is meagre or non-existent. People can seem to be very busy but their efforts yield little tangible fruit. In the Angkorian mandala, for example, there was a gradual expansion of opulent display, feasting and the bestowal of patronage. This involved much work but was largely a consumptive rather than productive activity. In connection with such court ritual, Angkor acquired numerous officials and a complex bureaucracy.⁹⁹¹ There were more and more people who depended on the generosity of the state for their livelihoods. This reached its apogee under Jayavarman VII,⁹⁹² after whom the mandala began to decline.

There is a kind of built-in bias, which ensures that consumption tends to exceed production. This stems from the fact that people are only really satisfied with their relationship to the wider society if they feel that they are getting more out than they are putting in. However, it is logically impossible for everyone to be a net recipient of funds in the long term. The state therefore has a choice between struggling to meet a demand that outstrips its capacity, or being plagued by dissent and dissatisfaction. Usually it experiences both together. The Habsburg empire illustrates this starkly. The Habsburgs found that each part of their empire tended to absorb more funds than it contributed. No country or province was content to be a net donor. Each perceived itself to be at a disadvantage and in need of special treatment. Each one demanded not only that its tax revenues should be spent for its own benefit but also that it should receive a subsidy from the rest of the empire. The Habsburgs did not submit to these demands, which could scarcely be satisfied anyway, but they found themselves in a double bind all the same. In order to quell dissatisfaction in a particular part of the empire, it was necessary to spend money on military operations in that region. The sums required typically exceeded the tax collected from the region. The shortfall could be made up by tax revenue from the rest of the empire. However, taxing one part to spend on wars elsewhere only caused the first part to revolt as well, thereby creating an intractable problem.⁹⁹³ At any rate, once parasitism has taken hold, it tends to spread. People are never keen to subsidise their peers on a long term basis, and they seek the same privileges. In doing so, they exhibit a trait that has ultimately afflicted and damaged every ascendant society – the terrific capacity of human beings to exploit every situation to the maximum, or indeed to a point beyond what it will actually bear.

Chapter 10 - The phoenix principle

Interruptions in history

History is a continual ferment. Fluctuations of institutional complexity occur continuously and on all scales. Towards the deeper and longer lasting end of the scale is the downward fluctuation that overcame western Europe following the collapse of Rome. This was a time of severe retrenchment on all fronts. Civilisation gave way to barbarism. It took many centuries for Europeans to climb back to the kind of ordered, mercantile society that had existed under the Romans. The collapse probably went furthest in the former Roman colony of Britain, where the urban areas were all but completely abandoned. On the continent, some cities continued to be inhabited but they shrank drastically and defensive walls were put up, reflecting the insecurity of the times. This is the time of the 'Dark Ages'. It stands as an interruption in European history, or as a discontinuity in the evolution of human institutions.

Europe's dark age was neither the first nor the last such period in history. This kind of conspicuous retrenchment has occurred many times over the last five thousand years, and has afflicted numerous other civilisations. Pharaonic Egypt, for instance, experienced at least two unmistakable dark ages, or intermediate periods. During the first intermediate period, which followed the collapse of the old kingdom around 2200 BC, Egypt sank into a pandemic of conflict. There were repeated famines, trade dwindled, and life expectancy was reduced.⁹⁹⁴ It was in every respect a retrograde step. The nation lost its coherence and integrity. However, the crisis was only temporary and Egypt eventually recovered. Several centuries later, pharaonic rule again crumbled. Egypt entered its second intermediate period around 1700 BC, and the country was again plagued by unrest and problems with food supply.⁹⁹⁵ Around 1100 BC, there was a lesser dip in Egypt's fortunes, which is sometimes referred to as the third intermediate period.

The Egyptian first intermediate period was the local manifestation of a broader dark age that enveloped the whole of the eastern Mediterranean and middle east. As the Egyptian old kingdom collapsed, the Tigris-Euphrates region was also plunged into disorder. It was fragmented, at war with itself and plundered by outsiders.⁹⁹⁶ Building, writing and art all seem to have ceased. The third intermediate period also coincided with problems throughout the ancient middle east. Although the general area eventually recovered from this second widespread dark age, many specific societies, including the Hittites and Mycenaeans, never reconstituted themselves. The Hittites, though, had recovered from an earlier, more localised dark age. After the death of their king Telipinus, around 1500 BC, there was a hiatus during which the Hittite empire temporarily lost its authority.⁹⁹⁷

The dark age that hit Greece after the Mycenaean collapse was particularly severe. This is sometimes known as the Hellenic middle ages. Palaces and fortresses were destroyed in many parts of Greece and the land dissolved into numerous local groups engaging in petty warfare. Writing and urbanism disappeared. These institutions were only resumed during the Greek archaic period of 800 to 500 BC, which was the time leading up to the emergence of the classical city states.⁹⁹⁸ Some people also speak of an Italic middle ages, which began during the late sixth century BC and reached a low point as the fifth century turned to the fourth century. This dark age separated two periods of high achievement in Etruscan civilisation,⁹⁹⁹ and was also felt by the Phoenicians and Greeks. During the second half of the fourth century, the dark age lifted and there was a marked resurgence in Etruscan manufactures.

China gives evidence of repeated dark ages. The combined Spring-Autumn and Warring States periods, when the Chou dynasty retracted and disappeared, represented an era of marked regression and disunity.¹⁰⁰⁰ By 221 BC, however, the dark age was over. The Ch'in dynasts succeeded in unifying China under one regime. Nevertheless, over the next thousand years or so, China's first, second and third partitions were followed by further dark ages. Typically, during these episodes, the functions of the state went into abeyance, people turned to other-worldly religions,¹⁰⁰¹ and China was characterised by continuous fighting.¹⁰⁰²

Dark ages occurred in pre-Columbian America, too. The time between the collapse of Huari and Tiahuanaco and the foundation of the Chimú empire was a time of cultural regression in the central and southern highlands of Andean South America.¹⁰⁰³ In the Valley of Mexico, the fall of Teotihuacan was followed by a period of relative poverty and disorder. In North America, the Hopewell and Mississippian societies can be regarded as successive periods of ascendancy, which were separated by a long dark age.¹⁰⁰⁴

Having said all this, the term 'dark age' has rather fallen out of favour with most historians. It is felt to be an unduly negative way of writing off whole periods of history and the people that lived in them.¹⁰⁰⁵ After all, these periods were not without their achievements. However, 'dark age' is actually a good term for eras of this kind. This is because they are characterised above all by their obscurity. They are dark not only because they are times of trouble and conflict. They are also dark in a more literal sense, which is that scholars have very little idea of what happened in them. During these centuries, the historical record goes almost completely silent. There are very few contemporary inscriptions or documents. Dark ages

leave few records. They are missing chapters in the human story. It seems that the people who lived in them had more pressing concerns than to construct monuments and produce written accounts of their times.

Consider, for example, Britain's sub-Roman dark age. Historical information about this period does not even approach in value what is available for the centuries before and after.¹⁰⁰⁶ The period is dark because even the biggest events that happened in it, such as the arrival of the Angles and Saxons, are shrouded in mystery.¹⁰⁰⁷ There is only one significant contemporary document, which is attributed to a monk called Gildas. Even so that is a very obscure source and dates only from near to the end of the period. Most of it is just a lament for the sorry state of affairs in Britain caused by the Saxon invasions. The few references to actual events are difficult to interpret.

Gildas's account is supplemented in only the barest manner by Bede and a few other authors. These records date from several centuries after the time to which they refer. For instance, Bede's history was written 200 years after Gildas's manuscript, in the eighth century. The main value of these later authors is that they draw upon earlier sources which have not survived to the present. To illustrate the depth of modern ignorance, the period of the sub-Roman dark age is supposed to be the time of King Arthur, a very significant figure in British literature. Yet it is not known for sure whether Arthur ever really existed. At least one expert on the period is adamant that he did not.¹⁰⁰⁸ Another is equally certain that he did.¹⁰⁰⁹

Apart from these meagre documentary sources, the only insights into the sub-Roman dark age come from archaeology and the study of place names. However, data is scarce even there. Whereas there is an abundant archaeological record for Roman Britain and for Britain since AD 600, there is a dearth of finds dating to the two centuries after the Roman withdrawal. For Roman Britain, historians have buildings, coins and documentary records, and their understanding of the period is very satisfactory. However, for the subsequent dark age there is none of that.¹⁰¹⁰ Place names provide some indication of the distribution of particular tribes and groups and give a few other hints of the era's history. Yet as a source of historical information they are generally scant and ambiguous. The original names of many of the Roman settlements were completely forgotten.

It is this darkness that defines a dark age. For Britain the term 'Dark Ages' is often used to refer to a period ranging from the collapse of Roman rule up to the ninth century or later. However, in this book, the term 'dark age' is used more narrowly. Britain's dark age proper is considered to have ended in AD 597 with the arrival of St Augustine, first archbishop of Canterbury, when

events again began to take on a reliable historical nature. Of course, in reality, the term is relative. Darkness does not lift abruptly and some dark ages have been darker than others. Britain's was one of the darkest. Nevertheless, the various dark ages mentioned above justly earn that title because of the obscurity of the events that took place within them.

For example, with respect to the dark age that afflicted most of the ancient middle east around 2200 to 2100 BC, archaeological evidence is meagre or non-existent.¹⁰¹¹ In ancient Iraq, every activity that might have left an imprint in the archaeological record seems to have ceased. Similarly, in Egypt, despite its wealth of material, there are few contemporary records from the first intermediate period. The events of the second intermediate period are also highly uncertain. There was supposedly an invasion by the people referred to as the Hyksos. However, the Hyksos are an enigma. This appears to be a name that the Egyptians gave them and is not necessarily the name they gave themselves. Historians do not really have any idea as to who the Hyksos were, where they came from or where they went. Similarly, the Hittite dark age that followed the death of King Telipinus stands out as a time when the historical records go silent.¹⁰¹²

In the Greek peninsula, the archaeological record is very poor for the period of the post-Mycenaean dark age.¹⁰¹³ The archaeological trail also grows faint during the general depression that struck Etruria in the fifth century BC. This stems from a combination of factors that possibly include trade disruption, a fall in the standard of living, reduction in building work, lack of innovation in the arts, and demographic contraction.¹⁰¹⁴ Events during the Mexican dark age, surrounding and immediately after the fall of Teotihuacan, have been described as rather nebulous.¹⁰¹⁵ Similarly, the third partition of China, in the tenth century, has been said to be a time of confusion and one that is obscured by shifting mists.¹⁰¹⁶

A dark age is not only obscure in itself. It also serves as a barrier to the transmission of information about the time before the dark age. It is a break in the handing down of knowledge from one generation to the next. People who live in such an era know less than their ancestors did both about the past and about the world around them, so this is another reason for calling it dark. For example, Gildas, who lived (even this is uncertain) around AD 500 to 550, demonstrates a remarkable lack of knowledge of the period AD 350 to 450. It appears that very little came down to educated people of his generation of even late Roman times.¹⁰¹⁷ Indeed, when classical civilisation collapsed in the west, much of its learning was forgotten within Europe. Scholars today only know as much as they do because a number of key texts were preserved

within Islamic civilisation. The ancient literature of European civilisation was not so much inherited as reconstructed during the renaissance.

Perceiving catastrophe

An important question is whether people whose societies are in decline are actually aware of their predicament. There are certainly some examples of prescience regarding the approaching ruin of past societies. In the fourth century BC, Demosthenes saw disaster looming for the world of classical Greece.¹⁰¹⁸ Scipio showed an understanding of the transience of temporal power after the sack of Carthage in 146 BC. Standing among the ruins of Phoenician civilisation, he quoted Homer to his friend Polybius and indicated his presentiment that Rome would one day suffer the same fate.¹⁰¹⁹ Several hundred years later, when Roman civilisation was indeed decaying, St Jerome observed that 'alas the world is crashing about our ears'. The Christians as a whole taught that society was teetering on the edge of an abyss.¹⁰²⁰ Their understanding of the catastrophe that was descending on Rome seems to have been a factor in their ability to make the most of the opportunities that emerged in its wake.

People in general are of course sensitive to the deteriorating situation of a declining society in that they perceive crime, disorder and financial difficulties as undesirable. During the first partition of China, there was an intense discussion of social problems.¹⁰²¹ Similarly, late Romans bemoaned the ills of their time. Nonetheless, people find it difficult to believe that this is anything other than a passing phase. They expect the problems to be resolved rather than that their society should plunge into a dark age. Most Romans probably did not realise that their civilisation was transforming and coming to an end.¹⁰²² To be sure, the empire's problems were not difficult to discern. In some provinces, there were quite disastrous famines and even respectable families were being forced to sell their children into slavery. Yet for all this, there was no sense of real peril¹⁰²³ and to a citizen of the fifth century AD the gradual growth of crisis was not evident.¹⁰²⁴ In a similar way, the British did not appreciate that there was any genuine danger as their empire neared its end in the early twentieth century. Those who supported the existence of the empire sought to reassure themselves that its apparent faltering was only temporary and that somehow they would muddle through.¹⁰²⁵

It seems that the threat, the small dark cloud on the horizon which indicates the advent of the deadly storm, is not obvious to contemporaries. They see only the much larger expanse of clear blue sky. In the fourth century BC, the people of Carthage would have found the idea of Rome as a menace somewhat strange. They could not have conceived of how rapidly Rome might rise nor how far that rise might take it. On the contrary, they

must have looked around themselves and been able to feel quite pleased with what they had achieved.¹⁰²⁶ They were prosperous and powerful and there was no real reason to think that anything significant could be wrong. The Carthaginians were not especially complacent. When people are riding high, they generally assume that this happy state of affairs will continue.

During the dark age itself, a society's impoverished and feeble state is easily differentiated from the wealth and power that are signified by the magnificent monuments people can see in ruins all around them. It is obvious that standards of living are depressed. People can certainly contrast their makeshift houses and home-made implements with the temples and road networks of former times. However, this still does not mean that people regard themselves as being in a dark age. After all, the failure of cultural transmission means that people only have a hazy idea of what things really used to be like. No doubt, they accept their situation for what it is. The identification of any period as a dark age is therefore mainly a judgement for later historians.

Timings

The problems of a declining society have usually been building for centuries. However, these threats to its continued existence lie mostly below the surface, only to be dissected in hindsight and with minute analysis. Things can seem to be quite satisfactory in many ways, and indeed can seem quite normal. The approaching social catastrophe is therefore unexpected. When problems finally come to the surface, they often do so as part of an abrupt breakdown. The society seems to go over some kind of precipice, albeit that the contradictions producing the breakdown were in existence long beforehand.

The pyramid complex of King Neferkare Pepi II, the last major monument of the Egyptian old kingdom, is hardly distinguishable from those of his predecessors. It gives no hint of the dark age soon to engulf Egyptian civilisation.¹⁰²⁷ Similarly, the Assyrian empire reached its greatest height under Assurbanipal, whose name means great king. Yet only 14 years after his reign the empire collapsed with immense suddenness.¹⁰²⁸ The disaster that terminated the Minoan civilisation was also very sudden in its effects.¹⁰²⁹ When the Hittite civilisation collapsed around 1200 BC, all reference to this people and their empire ceases abruptly.¹⁰³⁰ Etruria entered the Italic middle ages after doing splendidly only a short time before.¹⁰³¹ Centuries later, under the pressure of Roman expansion, the Etruscan people vanished almost overnight, suddenly ending some 700 years as a significant force in the Italian peninsula.¹⁰³²

The same story is apparent in the pre-Columbian civilisations of America. Teotihuacan, for example, collapsed abruptly,¹⁰³³ while in the

Mayan cities activity ceased suddenly, leaving behind buildings that were still only half-finished.¹⁰³⁴ Easter Island society seemed to deteriorate rapidly between visits by Europeans. Captain Cook's expedition, only four years after the Spanish, found the islanders in a much more distressed condition. The previously friendly natives were now armed with clubs. Many of the statues had been overturned in what appeared to be a recent spate of destruction.¹⁰³⁵ Furthermore, a number of statues were abandoned along the road from the quarry, which implies that the cessation of statue-raising activity was quite sudden.¹⁰³⁶ The Inca empire, meanwhile, collapsed with extreme abruptness after Pizarro's execution of Atahualpa.¹⁰³⁷

A dark age does not last forever. It is an interruption, followed by recovery. If one defines the dark age proper as a period whose history is obscure, then the duration of the dark age is often relatively brief. The Hittite dark age after the death of Telipinus lasted 50 years,¹⁰³⁸ as did the Sumerian dark age of the twenty second century BC.¹⁰³⁹ After its defeat in the second Punic war, Carthage became obscure for a period of about 50 years.¹⁰⁴⁰ The first and third partitions of China lasted 44 and 53 years respectively.¹⁰⁴¹

On the other hand, the Egyptian second intermediate period lasted 170 years. In the Valley of Mexico, the chaos that followed the age of cultural unity lasted two centuries.¹⁰⁴² This was also the duration of the sub-Roman dark age in Britain.¹⁰⁴³ The second partition of China lasted 281 years.¹⁰⁴⁴ The Greek post-Mycenaean dark age lasted a full 400 years.¹⁰⁴⁵ Finally, China's Spring-Autumn and Warring States periods lasted 370 and 180 years respectively, for a total duration of 550 years.¹⁰⁴⁶ (Though, to be fair, this long interruption in Chinese civilisation was not an especially dark one.)

At the other extreme, it is now widely believed that the dark age of the Egyptian first intermediate period lasted only 20 to 25 years.¹⁰⁴⁷ Even shorter was the somewhat confused period that obscured the chain of events when Dynasty XI failed and Dynasty XII was founded. This dark age lasted only about 5 to 7 years.¹⁰⁴⁸

Typically, therefore, dark ages appear to last somewhere between 25 and 200 years, with a duration of 50 years being perhaps the most common. It may be helpful to reckon this in human generations. That is to say, dark ages commonly last about two generations, although the length can vary between one and eight generations.

A squatter's world

The most ascendant societies are known for their hugely impressive monumental architecture, including the pyramids, the Great Wall, Easter Island's statues, and the Sumerian ziggurats, i.e. temples on massive brick-built step mounds.¹⁰⁴⁹

Ostentatious public architecture like this reveals the considerable authority of the rulers who are able to order its construction. It also illustrates the society's wealth, in that there is obviously excess labour to expend on such activities.¹⁰⁵⁰ It is therefore one of the clearest indicators of a society's success. The very greatest monuments are produced only at the peak of ascendancy.

By contrast, as a civilisation declines its construction work becomes meaner and less grandiose. In the later levels of the Harappan cities, buildings became shoddier and smaller. Living quarters were more cramped and the overall quality of the workmanship was poorer.¹⁰⁵¹ In urban centres, the standardisation of street frontages declined. Brickwork was less careful and bricks from older buildings were reused in new, expedient ones.¹⁰⁵²

The same sort of shoddiness is found in the buildings that date from when the lowland Maya were in decline.¹⁰⁵³ At Chichen Itza, buildings of inferior design and execution were put together with stones scavenged from older structures.¹⁰⁵⁴ The later architecture of Mayapan has been described as unbelievably crude. Even important civic buildings had wooden roofs and thatching. They might be thought developmental if it were not known that they actually represent decadence.¹⁰⁵⁵ In the Valley of Mexico, the building at Teotihuacan became less massive towards the end, suggesting a loss of ambition and expertise. There was a shift towards second-rate methods of construction, with less hewn stone and extensive use of rubble filling.¹⁰⁵⁶ In Africa, on the middle Nile, the gradual decline of the Nubian Christian civilisation was paralleled by a steady decline in the size and pretentiousness of the Nubian churches.¹⁰⁵⁷

On Easter Island, the quality of construction declined as society fell apart. The courtyards and platforms where statues were erected became crude and structurally unsound.¹⁰⁵⁸ Many of the later ones were rebuilt from the broken pieces of older statues.¹⁰⁵⁹ In Etruria, during the Italic middle ages, tombs became less numerous, less imposing and less richly decorated. By contrast, when Etruscan fortunes revived in the fourth century, funerary architecture partially recovered its former lavishness.¹⁰⁶⁰ As Roman civilisation declined, its infrastructure was allowed to decay. Streets and drains were maintained to a very poor standard. The latest metallings of roads were of markedly inferior quality.¹⁰⁶¹ All across the empire, the formally magnificent highways were in disrepair as public services fell apart.¹⁰⁶²

With the final stages of decline, no substantial buildings are put up at all. In pharaonic Egypt, monumental construction declined to virtually nothing during the first intermediate period. In the simultaneous Sumerian dark age, building work

ceased, along with writing and art. In Rome, during the crisis of the sixth century BC, there is almost no record of any sacred buildings being constructed.¹⁰⁶³ The late Minoan period saw building work dwindle rapidly to nothing,¹⁰⁶⁴ while in Greece monumental buildings disappeared for the 400 years of the post-Mycenaean dark age.¹⁰⁶⁵ At Angkor, during the final 150 years of decline after Jayavarman VII's death, there was no major rebuilding. The ruins today reflect the plan of the city as he left it.¹⁰⁶⁶ The practice of erecting Sanskrit stelae was also discontinued some time before the final abandonment of Angkor.¹⁰⁶⁷

In America, the same pattern is repeated. The Maya, for instance, constructed no new monuments after AD 1000, when their civilisation was in terminal decline.¹⁰⁶⁸ In North America, the impressive earthworks of the Hopewell culture were mostly built before AD 300. Construction ceased shortly afterwards when the Hopewell way of life collapsed.¹⁰⁶⁹ In the case of Chaco Canyon, people began scavenging the towns for building materials towards the end of its span. After AD 1130 construction ceased completely.¹⁰⁷⁰ The collapse of Casas Grandes meant that no more ceremonial architecture was built in the south Mogollon region. Finally, on Easter Island, the late period immediately prior to the European arrival saw the end of stone carving from the island's quarries¹⁰⁷¹ and a cessation of new platform construction.¹⁰⁷²

The heirs of decadent civilisations apparently lack the resources or the motivation to build for themselves, at least on any significant scale. Instead, they camp out or occupy in a slovenly manner the buildings put up by their forebears. For example, after the late crises that shook the Minoan civilisation, people reoccupied the cities but without making any new constructions and in a way that suggests the same culture at a lower standard.¹⁰⁷³ Sir Arthur Evans, the great excavator of the Minoan cities, described Crete after 1400 BC as a squatters' world.¹⁰⁷⁴ It has similarly been said of the Harappan civilisation that during the later stages it looks as though squatters had moved in, and as if once dignified town mansions had deteriorated to become slum dwellings.¹⁰⁷⁵ Older buildings were subdivided, while pottery kilns came for the first time to be built within the city walls. At some centres, the Harappan occupation was followed by people who lived among the ruins in flimsy huts, seemingly after the complete breakdown of civil authority.¹⁰⁷⁶

In exactly the same way, the small groups that latterly occupied the ceremonial precincts of the Mayan cities, even as these lay in ruins, have been described as squatters.¹⁰⁷⁷ They lived in the decaying buildings, boarding up rooms as their ceilings collapsed and camping in the remainder.¹⁰⁷⁸ At the Mayan city of Uaxactun,

people continued to use the city for religious purposes, as some late burials demonstrate, but they allowed the buildings to fall into disrepair.¹⁰⁷⁹ As the buildings began to collapse, half-hearted attempts were made to keep some rooms in service by blocking off doors in a rather clumsy way.¹⁰⁸⁰ The grand and spacious rooms of the old buildings were partitioned up to make several smaller rooms. It has been suggested that this may have been through a religiously motivated desire for secrecy.¹⁰⁸¹ However, even if this is accepted as a partial explanation, such casual treatment of graceful old buildings still speaks of a squatter's mentality. At Chichen Itza, as buildings fell into semi-ruin they were first shored up with emergency walls before being finally abandoned. In the corner of one colonnade a room was built that included stones torn from an altar.¹⁰⁸²

After the collapse of Teotihuacan in AD 700, the remnant population again sealed off doorways and partitioned larger rooms into smaller ones.¹⁰⁸³ As the Casas Grandes civilisation went into decline, people simply resorted to living in the upper rooms of buildings when the lower storeys had become unusable.¹⁰⁸⁴ In the case of Easter Island, the sacred places were turned into makeshift graveyards. The islanders burrowed under the fallen statues and made no attempt to put things back in order.¹⁰⁸⁵

In Roman Britain, the last quarter of the fourth century saw a cessation of building activity. In the countryside, no new villas were built, while the standard of upkeep of the existing villas deteriorated. Rooms were allowed to fall into disuse. Historians have again described this as 'squatter occupation'. Some people began to live in what had formerly been the stables of great villas, while others constructed makeshift hearths in the middle of rooms, damaging their mosaic floors. Some evidence suggests that this was done by the original owners and not simply by invaders or looters. It implies that they were no longer able to maintain and repair the villas' sophisticated under-floor heating systems. At Canterbury, some large buildings were divided up into smaller rooms by means of wooden partitions. At Verulamium, town houses were being abandoned as the legions prepared to leave.¹⁰⁸⁶

Building activity clearly emerges as a sensitive barometer of a society's condition. As a society heads towards the abyss, its constructions become cheap, functional and impermanent, and few new monuments are produced. The dark age itself is a period of severe material impoverishment. People cease adding to the infrastructure that was built up during the times of ascendancy. Instead, they live within it as squatters and scavengers.

Violent ends

A dark age is a time of turmoil and of the breakdown of law and order. In Egypt's first

intermediate period, peasants carried weapons while working in the fields. Texts from this era describe every kind of social disruption.¹⁰⁸⁷ The abrupt decline that marks entry into a dark age is frequently accompanied by an episode of slaughter and destruction. There is evidence of a severe massacre in the last occupied level of Harappa.¹⁰⁸⁸ Unburied skeletons were found sprawled in the street, suggesting the aftermath of an invasion.¹⁰⁸⁹ At the Hittite capital of Hattusa, which was abandoned around 1200 BC, archaeologists found traces of a final, violent conflagration wherever they dug.¹⁰⁹⁰ Similarly, the end of the Mycenaean civilisation was marked by a violent spate of destruction and the abandonment of the palaces.¹⁰⁹¹ At the end of the third Punic war, Phoenician civilisation was terminated after days of gruesome street fighting when the victorious Romans razed Carthage to the ground.¹⁰⁹² In AD 410, during the twilight of the Roman empire, the Visigoths looted Rome for three days.¹⁰⁹³ Meanwhile, in the provinces, the withdrawal of Roman rule was the precursor to barbarians running rampage among the settled and civilised subjects of the empire. After AD 400, many provincial villas were burned down by these invaders.¹⁰⁹⁴

The ruins of these various civilisations are now popular tourist attractions around the world. Many people perhaps suppose that all such ancient palaces and temples are in a ruined state because they have deteriorated slowly thanks to the ravages of time and the elements. In general, however, this is not the case. These buildings were mostly ruined by deliberate acts of destruction during the violent episodes that accompanied collapse and the entry into a dark age.

For example, the Minoan palaces were devastated by a widespread conflagration,¹⁰⁹⁵ possibly at the hands of Mycenaean invaders.¹⁰⁹⁶ The Mycenaean cities were later destroyed when this civilisation collapsed, with Mycenae being again destroyed after it had been resettled in classical times.¹⁰⁹⁷ This is why these places are now in ruins. The rampaging by the Visigoths meant that many of Rome's great buildings had already sustained extensive damage before the empire actually fell. In America, the most impressive site of the Olmecs, at La Venta, was demolished about 400 BC, after being subject to violent desecrations.¹⁰⁹⁸ On Easter Island, during the troubles that beset the island in the late period, there was deliberate destruction of ritual platforms and toppling of statues.¹⁰⁹⁹ Islanders placed blocks of stone on the ground so that when the statues fell they would be decapitated.¹¹⁰⁰ The first Europeans saw statues in their original condition¹¹⁰¹ but an 1812 Russian expedition saw only ones that had been overturned.¹¹⁰²

As for those American civilisations that were still extant when the conquistadors arrived, the

sorry state of their relics is often due to deliberate vandalism by Europeans. For a start, the Aztec capital Tenochtitlan was utterly obliterated in the process of being taken by Hernan Cortés.¹¹⁰³ Buildings belonging to the Aztecs, Incas and Maya were all torn down in order to build churches.¹¹⁰⁴ Many pre-Columbian writings were also destroyed as baleful influences. Indeed, the demolishing of libraries and burning of texts is particularly favoured by those who rampage through collapsing civilisations, a factor that contributes to the darkness of subsequent dark ages. Some early Christian thinkers regarded the classics as a spiritual danger and in AD 391 a Christian mob destroyed the library at Alexandria.¹¹⁰⁵ The Mongols also destroyed the libraries of people they defeated.¹¹⁰⁶ Ireland's old churches lie in ruins thanks primarily to the efforts of Oliver Cromwell's armies.

The cities of the Maya are something of an exception to the vandalistic rule. They were not purposefully torn down but were simply abandoned to the jungle and forgotten.¹¹⁰⁷ Consequently they seem to have survived relatively intact. All the same, some murals have been destroyed more recently by the locals, who fear evil spirits.¹¹⁰⁸ In general, the ruins that are left by collapsed societies continue to suffer more from human depredations and scavenging than from the forces of nature.

Creative destruction

The notion of a dark age has many negative connotations. Talk of decay, deterioration and decline reinforces this impression, which is no doubt justified by the association of dark ages with poverty and weakness. On the other hand, it is an ill wind that blows nobody any good. For all their troubles, dark ages lead to a transformation of society. Out of them, comes the embryonic form of a successor civilisation. Dark ages can therefore be regarded as episodes of creative destruction. Societies emerge from them phoenix-like, renewed and reinvigorated.

The negative experiences of dark ages force people to confront the inadequacies of former systems of belief. Their search for new rationalisations demands creativity. The demise of the Yir Yoront aborigines after contact with Europeans was marked by such a creative outburst. Anthropologists who were studying the Yir Yoront found that their supplies of toothpaste were disappearing at an alarming rate. Eventually they discovered that the toothpaste was being spirited off to be used in the arcane rites of a new toothpaste cult, the primary object of which was to direct black magic against the European invaders and drive them away.¹¹⁰⁹ In general, when old practices seem to have failed, new solutions must be sought and cultural life becomes quite fluid.

To begin with, therefore, dark ages seem to be times of particularly rapid change. By the end of

the sixth century AD, barely a hundred years after the legions had departed, the whole fabric of Roman imperialism in Britain had been utterly destroyed.¹¹¹⁰ Such rulers as exist during dark ages tend to be overturned repeatedly and at frequent intervals. During the Egyptian first intermediate period, there were numerous short-lived dynasties. According to one modern authority, there were more than 31 and possibly as many as 40 pharaohs in a period of about 60 years.¹¹¹¹ The late Egyptian priest Manetho, who compiled the first definitive list of dynasties and pharaohs, said that Dynasty VII comprised 70 kings who ruled 70 days.¹¹¹² During China's third partition, some ten dynasties followed each other in rapid succession.¹¹¹³

At the same time, while the old institutions are being more or less broken down and destroyed, important institutional innovations are simultaneously being made. During the post-Mycenaean dark age, iron-working technology emerged in Greece and classical Greek society was born.¹¹¹⁴ The period was illiterate and backward in many ways, but it also saw the development of fine pottery with geometric designs and it was during this era that the Homeric poems were composed.¹¹¹⁵ Similarly, the fourth century BC was an era of crisis in Italy but it was from this crisis that Rome emerged, along with the institutions that were to propel it towards its magnificent destiny.¹¹¹⁶

In China, the dark age between the fall of the western Chou and re-unification under the Ch'in was a period of considerable intellectual flowering. Despite endless strife, this age produced some of China's major philosophical, literary and scientific achievements.¹¹¹⁷ Confucius lived at this time and founded an ethical system that came to be at the heart of later Chinese civilisation.¹¹¹⁸ This was also the time of the other great philosopher of ancient China, Lao Tzu, whose teaching, the Tao, has remained influential into the modern era.¹¹¹⁹ The Warring States period, during which China was fragmented and shaken by widespread conflict, was also when the so-called hundred schools of philosophers were at their height. This age is now looked on as China's classical period.¹¹²⁰ Later, the first partition saw the emergence of fresh themes and techniques in the arts, while, during the dark age of the third partition, gunpowder and printing made great strides forward.¹¹²¹

In Britain, the two centuries after the Roman withdrawal saw perhaps the most profound and far-reaching changes the island has ever experienced. New peoples arrived to settle it, the fundamental structure of the language was altered, many of Britain's basic institutions were laid down, and the exploitation of natural resources began to move on to a higher plane.¹¹²² Overall, Europe's dark age resulted in great innovations in agriculture, including the three-field system and ploughing with

horses instead of oxen, while the waterwheels that the Romans had neglected spread on a dramatic scale.

In North America, corn agriculture spread most strongly between AD 500 and 800, i.e. during the dark age that separated the collapse of Hopewell from the rise of the Mississippian culture.¹¹²³ Similarly, in Japan, the fourteenth and fifteenth centuries were unstable and chaotic, yet the country at large gave evidence of remarkable cultural and commercial growth.¹¹²⁴ The troubled times of the fourteenth century in Europe saw businesses innovating strongly in response to changing opportunities. A historian of the period has referred to the rich harvest of an age of adversity.¹¹²⁵ Similarly, the crisis-ridden seventeenth century was also the time of Shakespeare, Galileo and Newton, figures whose influence on contemporary civilisation could scarcely be more far-reaching.

A dark age can be seen as the ignominious closing of an old era. However, it can also be seen as the hopeful beginning of a new one. The transition from old to new is not an easy one and involves tribulation and conflagration. France did not pass from absolute monarchy to the republic without the horrors of the revolution and the abolition by decree of almost every structure of the ancien régime. One might call this the phoenix principle. The flames of confusion are necessary for resolving the many problems that accumulate in once-successful, declining societies, and for allowing them to become powerful again. Societies that avoid falling into chaos are only apt to become burdened and disadvantaged. Constantinople did not collapse like Rome, but the result was that the west not the east emerged a thousand years later to surpass every other region and become the world's leading centre of human advancement. In a similar way, defeat in war helped to give Japan and Germany a fresh start in 1945. Some of the victors, by contrast, remained lumbered with centuries-old institutions and ideological baggage that made it harder to reform themselves and to grasp the new opportunities that were taking shape.¹¹²⁶

During a dark age, then, traditional institutions are overthrown and the resulting social vacuum invites new ways of thinking and behaving. It is as though the society's institutions are thrown back into the melting pot. A curtain comes down. When it is lifted a new order seems to be in place. This may be a depressing experience for those who were doing well out of the old society. Yet for the dispossessed and the disenfranchised, who in any age are the majority after all, it creates only opportunities. When the world is turned upside down, kings and queens are likely to lose but slaves have everything to gain.

Part Two

*a theory of history
and society*

Chapter 11 - Motivation and method

A considered theory

In the 1970s, a group of researchers at the Massachusetts Institute of Technology determined that world industrial civilisation was hurtling towards a huge crunch. In their book, *The limits to growth*, they described the predictions of an elaborate computer model designed to simulate 'world dynamics'. This suggested that the accelerating curves of population and industrial output would eventually turn over into a catastrophic plunge to medieval levels. The world would become unable to feed itself, run out of non-renewable resources and be swamped by runaway pollution. The eventual collapse of the world's life-support systems appeared to be inevitable and would come about one or two centuries from now.¹¹²⁷

Such forecasts of impending doom are nothing new. They are as old as civilisation itself. European historians have been detailing the symptoms of their civilisation's terminal decline for centuries. Pessimism, it seems, is always in fashion. As one writer puts it, the world has been coming to an end for a very long time indeed.¹¹²⁸

While it is too early to dismiss the world dynamicists' conclusions completely, the decades that have passed do not exactly confirm their gloomy projections. On the contrary, there has been considerable progress in such areas as reducing pollution and controlling human fertility. The truth is that most doomsday scenarios fail to materialise as expected. They are about as reliable as the alternative predictions of universal peace and goodwill among humankind.¹¹²⁹ Nevertheless, books continue to appear deploring current trends in morals, or in biotechnology, or in human impacts on the environment. The threat of the millennium bug gained wide currency and even led some people to retreat to the hills with tinned food, oil lamps and a supply of shotgun cartridges.

The perennial appeal of doomsaying is partly a form of nostalgia. The millennium bug enthusiasts tended to be people who were attracted anyway to a self-sufficient lifestyle away from the complications of technological, urban society. James Lovelock has called it grandfather's law – the notion that the past was always more satisfactory than the present.¹¹³⁰ In the sixth century BC, the Greek poet Hesiod provided the classic statement of this idea, with his account of how humans had slipped from the golden age, via silver and bronze ages, to the miserable iron age of his own time.¹¹³¹

Predictions of imminent catastrophe exert a powerful hold on the imagination through the combination they offer of terror and bliss.¹¹³² To the poor and weak, apocalyptic visions hold out promise and opportunity. They represent another roll of the dice when people will be reduced to the

same level and ancient humiliations may be relieved. These forecasts also appeal to reactionary interests and the more privileged members of society. Implying that all change is necessarily for the worse, they can be used to argue in support of the status quo. The MIT investigation into world dynamics, for instance, was commissioned by a group of industrialists who were concerned with the impact of human activities on the environment and with the feasibility of continually accelerating economic growth. The resulting report largely confirmed their prejudices. It was oriented towards the preservation of the existing social order – the very order in which these industrialists enjoyed all the advantages.¹¹³³

Where doomsday forecasts go wrong, it is because they entertain a static view of the world.¹¹³⁴ They assume that the problems looming large today will always be problems. They fail to imagine the possibility of creative solutions whereby those problems might disappear.¹¹³⁵ In 1866, the economist W S Jevons pointed out the inherent danger in Britain's growing demand for coal. He calculated that the coal would all be gone by 2000, presumably with disastrous effects for all forms of industry. However, such alarmism turned out to be misplaced. The exponential rise in coal consumption stopped shortly afterwards and coal use has been in decline since the first world war. In Britain, all but a handful of pits have been closed down simply because nobody wants the coal that they could produce.¹¹³⁶ Jevons did not foresee that efficiency gains, new fuels and the emergence of high-technology, light industries would undermine his analysis. Even as he was making his predictions, oil and gas were being discovered at Titusville, Pennsylvania, and a whole new energy industry was about to emerge.¹¹³⁷

All the same, no one should be complacent about warnings of trouble ahead. The fact is that catastrophes do occur. History has seen some huge disasters. They have not even been particularly infrequent. One archaeologist reminds his readers of the Old Testament prediction by Isaiah that "Babylon ... shall be as when God overthrew Sodom and Gomorrah". Isaiah was right, he says, for today the city of Babylon – once the brightest star in a galaxy of brilliant ancient cities – is a great rubbish heap.¹¹³⁸

If this book is to be more than another false doomsaying, it must avoid the errors of Jevons and the MIT modellers. It must do more than describe today's problems and project their logical consequences. Whatever seems to be a problem now might be solved in due course. A longer perspective is needed, so that one is not distracted by transient adjustments. The aim must be to understand the fundamental logic of past failures. Instead of speculating about how certain current

trends could lead to disaster, one needs to consider the facts of how disaster has come about in the past. This means identifying the themes that are reliably and repeatedly associated with decline and collapse. It means, in effect, that one needs a generalised theory of history and society.

The science of society

Contemporary students of society are mostly suspicious of the notion that they should extract generalised laws from their subject matter, in the way that natural scientists do. The historian H A L Fisher asserted that history is one great fact about which there can be no generalisation.¹¹³⁹ Anthony Giddens, a leading contemporary sociologist, has argued that 'the task of constructing stably established generalisations ... is not an ambition of much relevance to social science'.¹¹⁴⁰ Since the days of Aristotle, it has been considered that, while natural scientists may look for general patterns and laws, historians and sociologists are more appropriately concerned with the analysis of specific, unique cases.¹¹⁴¹ They study the Crimean War, say, rather than the General Theory of War.

However, it is not the subject matter that dictates whether a discipline should focus on generalities or specifics. It is a matter of choice. It is the same choice that faced Newton when he sat in his orchard one day. He could have asked himself why that particular apple chose that unrepeatably moment to fall on his unique head. Instead, he asked himself why apples fall and whether the same pull could be affecting the moon – and so produced the theory of gravitation.¹¹⁴² In both social and natural science, cases are only unique to the extent that one concentrates on what makes them unique.¹¹⁴³

Scholars in the humanities make much use of generalisations, even if they do not self-consciously construct them.¹¹⁴⁴ For example, when historians say that a ruler was deposed because the people had been oppressed too much and too long, they are assuming the principle that rulers who are too oppressive are likely to be deposed. Giddens's own work shows that not only is generalising relevant to social theory but in fact one cannot get by without it. For example, from accounts of life in concentration camps, he identifies the stages by which people adjust to such conditions and suggests why the stages occur in the particular order.¹¹⁴⁵ This is precisely a generalisation from data.

Since social scientists do actually generalise, it would seem desirable for them to do so in more than an ad hoc manner. Various reasons are proposed why this is not in fact possible, but these are not impressive on close examination. For instance, it is protested that one cannot normally do experiments in studying society, such as re-running the collapse of the Roman empire to test one's hypotheses about its causes. Yet similar problems

affect recognised scientific disciplines like geology, astronomy and evolutionary biology. Science does not have to be done in the laboratory and theories can simply be tested against whatever data the world happens to supply.¹¹⁴⁶

Similarly, much has been made of the difficulty of obtaining reliable data in the humanities.¹¹⁴⁷ The post-modernist school denies that it is possible to have objective knowledge of the social world,¹¹⁴⁸ while the philosopher Jacques Derrida has shown that sociological texts are riven with bias and ambiguity.¹¹⁴⁹ Yet similar philosophical problems arise concerning the empirical facts and laws dealt with by natural scientists. Measurements are only approximate. Experiments never give exactly the same results. In quantum mechanics, opinions differ over whether an observation is the only reality or merely reflects an underlying reality. However, such doubts make no practical difference to day-to-day activity in science, which justifies itself by its results. The real point is to develop theories that overcome deficiencies in the status of the data.

The social theorist Jürgen Habermas says that humans cannot be subject to ineluctable laws because they have free will and perform deliberate acts.¹¹⁵⁰ Yet actuaries rely on statistical patterns in road accidents to calculate insurance premiums. This does not remove the autonomy of individual road users. The view that ineluctable laws cannot describe human societies is a statement of faith, not an empirical finding. It is true that humans are thinking agents and not inanimate objects,¹¹⁵¹ but it is not clear that this is a decisive obstacle, even though it may make the problem especially hard. There is no intrinsic reason why one should not seek generalisations. Whether this is worthwhile must be determined by the success of the endeavour, not by a priori reasoning.

As it happens, attempts to construct generalising and self-proclaimed scientific theories of society have largely proved quite disappointing. Marxism, for instance, is the classic example of a notionally objective theory of history, in which conflict between privileged and unprivileged classes is supposed to propel society through a series of evolutionary stages. Yet, though Marxism has its die-hard adherents, most social theorists now recognise it as flawed and inadequate.¹¹⁵² Apart from anything else, its simplistic predictions have been resoundingly denied by events.¹¹⁵³

Some of the social theories that come from natural scientists have also justifiably been found irritating by sociologists. The discipline of sociobiology, for instance, has sought to explain human social institutions in evolutionary terms.¹¹⁵⁴ Yet to talk about the whole of human politics, say, as simply an effort to get one's genes into the next generation is to ignore all the interesting aspects.¹¹⁵⁵ As one anthropologist puts it, between

a sociobiological concept like ‘aggression’ and the Vietnam war lies an enormous explanatory void. It is within this void that is found the enterprise of social science.¹¹⁵⁶ Sociobiologists have made some exaggerated claims about their theories while rather missing what it is that needs to be explained.

Recently, there have been some attempts to extend the natural selection model to social learning – the crucial area that sociobiology leaves untouched. These models suppose that there are units of culture, such as tying one’s shoelaces in a particular fashion, which compete for human minds, and where the fittest survive. However, this idea results only in a set of just-so stories¹¹⁵⁷ and again misses the real point. Social theorists rightly feel that the intricately interdependent structures of a successfully functioning society can be understood more fully than as the arbitrary outcome of some chance process.

Economics is the most science-like of social studies. Economists use mathematics. They agree definitions and enunciate laws. Their theories are used in planning by government and industry.¹¹⁵⁸ Yet even here the results are hugely dissatisfying, and the aura of precision and objectivity is mostly an illusion. Competing schools of economists disagree even about such basic questions as how profits arise in the course of economic exchanges.¹¹⁵⁹ Economic forecasts rely on guesswork¹¹⁶⁰ as much as on formal theory, and in any case they have an appalling record for accuracy.¹¹⁶¹ One economist suggests that the discipline remains in the condition that natural science was in during the middle ages, possessed of a few insights but otherwise erroneous and befuddled.¹¹⁶²

The deficiencies of these attempts at generalisation are no doubt responsible for the suspicion attached to scientific styles of thought in the humanities. Yet they do not justify the abandonment of further attempts. The problem is not really that a scientific method has been shown to fail in the area of social studies, but rather that it has never been properly applied. The scientists have known too little about the questions of sociology, and, as will be discussed next, the sociologists have known too little about the strategies of science.

Scientific method

In the 1930s, Karl Popper made his name with the publication of *The Logic of Scientific Discovery*. In this, Popper argued that science proceeds through falsification, i.e. that experiments are attempts to disprove not prove a theory.¹¹⁶³ Popper’s ideas have been highly influential, although he was neither the first nor the last philosopher to concern himself with the nature of the scientific method. As long ago as the thirteenth century, Roger Bacon was commending the virtues of experimental science, as was Francis Bacon in

the sixteenth century.¹¹⁶⁴ More recently, philosophers have discussed the ways in which scientists fall short of the ideal. Paul Feyerabend has even argued that some great scientists only succeeded by breaking every rule of sound procedure.¹¹⁶⁵

The discussion about the scientific method has lent it a kind of mystique. However, the debate has had no practical implications for ordinary scientists, who find the whole endeavour relatively straightforward. Arguably, the habits that go under the name of the scientific method amount to nothing other than the rudimentary requirements of academic rigour.

For example, the testing of scientific theories to make sure they do not give false predictions, as emphasised by Popper, is simple intellectual honesty. There is nothing arcane about this. It is relevant to any analytical activity, not just what goes on in the university science department. The failure to consider information contradicting cherished beliefs has been adduced as a factor in everything from miscarriages of justice to transportation accidents.

Natural science writings also tend to be expressed in unambiguous language, which is intended to be comprehensible to anyone who has the right training. Scientists give their concepts clear and explicit definitions, and they use them in a consistent manner. Again, one might think this a virtue of quite general applicability.

On the other hand, scientists do not apply rigorous standards to the original conception and development of an idea. This is a creative act that follows no method at all. However, it is wrong for people like Feyerabend to suggest that science is therefore a free-for-all. Every scientific theory must begin life as a guess.¹¹⁶⁶ It is true that some scientists, including Newton, have been willing to reject data that do not agree with their hunches. Yet this is only sensible when the data seem to be untrustworthy – as is often the case when they have not been gathered specifically to test the given theory. It is also sensible that scientists do not necessarily abandon a theory, even when its limitations have become apparent, unless they have something better to put in its place. In the scientific long run, theories that are contradicted by observation do still get sifted out.

A good example of science in practice is provided by *The Double Helix*, James Watson’s account of his discovery with Francis Crick of the structure of DNA. This book is considered a classic in the sociology of science for its depiction of the human side of the process, incorporating luck, arrogance and intrigue. However, it also reveals Crick and Watson proposing and rejecting hypothesis after hypothesis, in classic Popperian fashion, until they finally hit on one that is consistent with all the experimental data.¹¹⁶⁷

The problem with social science, then, is not the difficulty of applying some complex methodology. It is the failure to adopt elementary rigour. Far from avoiding ambiguity, scholars in the humanities often seem to employ language in an unnecessarily loose and obscure way. Social theorists typically prefer rhetoric to precision,¹¹⁶⁸ and they use lengthy circumlocutions to express relatively simple concepts.¹¹⁶⁹ Instead of there being consistent definitions, some key terms, such as 'society' or 'Marxism', constitute what the biologist Garrett Hardin has called a *panchreston*¹¹⁷⁰ – a word that means all things to all people.

The fact that natural scientists have learned to make their generalisations explicit, to express them clearly, and to check them honestly is the simple secret of their success. It is why the natural sciences are characterised by a clear, consensual, extensive and coherent framework of theory. The contrasting tendency of social scientists to eschew such straightforward disciplines is why the humanities remain characterised only by disparate, incomplete and disputed ideas.¹¹⁷¹

Having said this, some social theorists have self-consciously emulated scientific rigour and still produced disappointing results. For the most part, this can be attributed to the failure to adopt some other elements of science's strategies. For instance, physical science began to make progress in early modern times when its practitioners abandoned the attempt to explain the entire universe in one go and became content to produce partial theories about limited ranges of phenomena.¹¹⁷² Galileo, say, concentrated his attention on narrow topics such as the dynamics of pendulums. Hence, science is said to progress by successive approximation, as partial and flawed theories are steadily refined by generations of scientists. By contrast, some sociologists continue the pursuit of grand theory, setting themselves the impossible task of producing instant comprehension.¹¹⁷³ Conceived as a whole, these schemes are usually quickly rejected as a whole. Similarly, economists studying real world economies have attempted to incorporate every possible aspect of economic life, ending up with hundreds of equations and a model so complex that it is as mysterious as the thing it is supposed to represent.¹¹⁷⁴ To make progress, social theorists will do far better to rein back their ambitions and develop simple theories that capture the essence rather than the totality of some situation.¹¹⁷⁵

People in the humanities have also tended to overlook the way that scientific theories concern themselves with covert rather than overt properties of the phenomenon under consideration. Newton's generalisations about force and motion differed from those of classical Greek thinkers in that they dealt with hidden properties of motion. Newton realised that a body free from any forces would

continue moving forever in a straight line, even though neither he nor anyone else had ever seen such a situation. By finding such hidden rules or patterns, scientists have produced powerful theories that unite superficially disparate phenomena.¹¹⁷⁶ Social theorists, on the other hand, have tended to deal with the obvious features of social phenomena and have inevitably failed to find any clear patterns. For example, observing that marriage takes different forms in different societies, sociologists reject generalisations about marriage, but they neglect to consider that there may be underlying principles that produce all the manifestly different forms.

It has not always been appreciated that a scientific theory does not explain a phenomenon, in the sense of finding its cause, but is more a description of what happens. Scientific theories say how rather than why something occurs.¹¹⁷⁷ The more diverse the phenomena it describes, the more powerful a theory is recognised to be.¹¹⁷⁸ Yet some sociologists have objected to theories that employ tautology, without realising that this is in the nature of scientific exegesis. To say that bodies fall towards the earth due to gravity is a tautology, not an explanation, as Newton himself recognised.¹¹⁷⁹ The theory of gravity is about the properties of this attraction, but nobody knows why it occurs. Similarly, a scientific orientation to social phenomena would concentrate on description rather than explanation.¹¹⁸⁰ This means not worrying about why wars occur, for example, but instead producing a compact account of the common features that wars involve.

Uniformitarianism

In the early nineteenth century, Sir Charles Lyell made the first scientific attempts to reconstruct the history of the earth. His key insight was the doctrine of uniformitarianism. This is the premiss that there is a constancy in the operation of natural laws and therefore that processes going on in the present must also have been going on throughout the past and will persist indefinitely. This avoided the need to postulate any special, ad hoc, cataclysmic mechanisms – such as a divine creation – for explaining contemporary geological formations. Lyell assumed, say, that layered rocks were formed by the same processes of sedimentation that can be seen in operation today.¹¹⁸¹

Although the concept may have first been named there, uniformitarianism is not applicable only in geology. It influenced Darwin, for example, in his realisation that everyday differentials in the struggle for existence could accumulate to spawn new species.¹¹⁸² Interpreting it not simply as gradualism but as the view that the same principles operate at all times and all places, it is a key part of science's strategy for understanding the world. It is uniformitarianism that allows people to draw

conclusions from experience and apply them to novel situations. Through uniformitarianism, engineers could design a rocket to land on and take off from the moon even though they had never been there.¹¹⁸³

Clearly, a uniformitarian stance is central to the present project, with its aim of discussing the failure of contemporary global civilisation in light of the failures of the past. One must assume that industrial societies are subject to the same effects that worked on earlier societies,¹¹⁸⁴ whatever the differences in scale and technology. Thus, applied to social theory, uniformitarianism means the notion that people have been much the same at all times and in places. Without this assumption there can be no general theory of historical processes and any assessment of current prospects must be accepted as pure guesswork.

Anthropologists, who deal in the comparative study of human societies, are more inclined to emphasise the diversity and arbitrariness of human behaviour than its essential sameness.¹¹⁸⁵ The supposedly fractured nature of social forms is something of a dogma and prejudice. Yet in reality, the diversity is not as great as has been claimed.¹¹⁸⁶ There are good reasons for supposing that human beings in widely divergent societies have quite similar capacities and aspirations.

Recent scholarship has revealed that some of the classic anthropological works establishing the culture-is-arbitrary viewpoint were based on flawed data and flawed interpretation.¹¹⁸⁷ For instance, Margaret Mead's *Coming of Age in Samoa* was originally hailed as a definitive demonstration of human plasticity and had enormous influence.¹¹⁸⁸ Yet it is now understood that much of her account is simply wrong. This is for a combination of reasons that included the cursory nature of Mead's fieldwork, her tendency to romanticise what she saw, and her credulity when being teased by Samoan informants.

With the diversity of human nature clearly established in their minds, anthropologists have generally been insensitive to some caveats of classic ethnography that drew attention to the uniformities in human motivations. The works of Bronislaw Malinowski, a founder of British anthropology, are actually permeated with the idea that human impulses are everywhere much the same and that culture is rooted in innate or natural tendencies of the human mind. Yet this aspect of his thought has hardly been followed up.¹¹⁸⁹

If the apparent differences between societies have been vastly exaggerated, it is largely because humans are highly attuned even to the slightest nuances. When one looks at these differences more dispassionately, they sink into insignificance compared to the normally invisible habits that all humans take for granted. Donald Brown is an anthropologist who has rejected the prevailing faith

in the arbitrariness of culture. He describes his gradual realisation that stories he told to illustrate cultural differences actually contained far more evidence of basic similarities.¹¹⁹⁰ He was, he says, pulling quantitative rather than qualitative differences from a plainly human background.¹¹⁹¹

Brown tells of a colleague who intended to show the arbitrariness of culture by investigating the New Guinea Hewa. This group had only recently made contact with the outside world and could not yet have been contaminated by external cultural influences. In the end, however, the anthropologist was forced to concede that the Hewa experienced the world in a similar way and that their basic concerns and motivations were similar to his own.¹¹⁹²

Cross-cultural psychological research has reinforced this observation by providing evidence that basic elements of the human psyche are shared everywhere. For example, the facial expressions displaying the emotions of fear, loathing, anger, surprise and happiness appear to be invariant. Americans and stone-age tribespeople can recognise these emotions in photographs of each other with high accuracy.¹¹⁹³ In the 1950s, the linguist Noam Chomsky drew attention to the fact that all languages seem to share certain features or fit within a constant general framework.¹¹⁹⁴ Pointing out that children acquire language with a facility that suggests they are pre-programmed for it, he argued that the properties of language must be encoded in the brain's physical structure.¹¹⁹⁵ Subsequent research in neurophysiology has strengthened this view and extended it to other human capacities.

It is possible that there are some mental differences between people from different societies.¹¹⁹⁶ However, it is clear that they cannot be fundamental. It has been demonstrated many times that human babies adopt the cultural patterns of the society where they are brought up, whatever their biological origins.¹¹⁹⁷ The elementary fact is that human beings comprise a single species, who have spread and split into different societies far too recently for any significant evolutionary changes to occur.¹¹⁹⁸

Having said this, anthropologists may accept that human beings are biologically uniform. They merely deny that this has any bearing on cultural institutions. They repeat a dictum of Emile Durkheim that, whenever a sociological fact is explained in terms of a psychological fact, one can be sure the explanation is wrong. This is quite correct when the link between sociology and psychology is presented as a direct one. For instance, some people have explained China's isolationist foreign policy as the result of Chinese diffidence.¹¹⁹⁹ This sort of thing is obviously too simplistic and unsatisfactory. Even if one can establish the reality of Chinese 'diffidence' and

'isolationism' there is still much more to be considered in terms of China's history and internal and international circumstances if one is to understand its geopolitical standpoint. After all, America has been known for its isolationism yet Americans themselves are supposed to be extraverts.

While there is surely no one-to-one correspondence between mental dispositions and surface features of society, at some underlying level social forms must be constrained by the social psychology that is shared by humans everywhere. Consider, for example, the anthropological literature which suggests that every society has its characteristic pattern of exchange.¹²⁰⁰ Foraging people, who live by hunting and gathering wild plants, are found to pool and share their food and equipment. When successful hunters bring game back to the camp, most of it ends up being given away. To use someone else's knife, a forager simply borrows it and is rather casual about returning it. No matter how often foragers are on the receiving end of other people's generosity, they are never considered to be in each other's debt. Anthropologists point out that all this strikes a considerable contrast with life in industrialised countries. Here, people do not share their food and belongings with their neighbours. Shopkeepers do not lend people the things that they desire; they expect to be paid for them. If the bank manager gives someone an advance, that person is in debt and must repay it.

Put like this, the differences certainly seem impressive and irreconcilable. However, what ought to be obvious is that these differences arise by not comparing like with like. Foragers spend most of their time in groups of no more than about ten people, who are all relations and close friends. Clearly, even within highly capitalistic societies, most families share and pool and borrow in much the same way as these foragers.¹²⁰¹ It is absurd to suggest that buying and selling is the only way goods move around in capitalist cultures.¹²⁰² One anthropologist has even calculated that a sizeable part of the British economy is devoted to gifts, varying from birthday presents to rounds of beer.¹²⁰³ When foraging peoples have to exchange with outsiders, they are just as cautious and self-interested as people in capitalist countries.¹²⁰⁴ Thus, in the area of exchange behaviour seemingly huge overt differences may be readily explained in terms of covert uniformities. Those uniformities can be related to a common psychology, involving the question of whether one is dealing with relatives or strangers.

Having said all this, it must be acknowledged that people manifestly differ from each other in their psychological traits.¹²⁰⁵ Some people are more timid, or more libidinous, or more prudent than others. This does not deny the uniformitarian

assumption, but requires a more sophisticated view of it. When one says that people are much the same at all times and in all places, one really means that there are no *systematic* differences between different contexts. In other words, the variability *within* each society is more significant than the variation *between* them.

It is worth recalling the following dictum:¹²⁰⁶

Every person is in some respects:

- a. like all other persons
- b. like some other persons
- c. like no other person

If there is argument, it is over the relative significance of these three levels of variability. The present project assumes that sensible progress can be made by focusing on a. Anthropologists may object that this has not been proved. This is certainly true but the objection is based on a misunderstanding. In science, one assumes that uniformitarianism applies until proven otherwise, not the other way around. It is an enormous conceit to imagine that the laws of physics observed in the minuscule portion of space-time known to humans also apply in every other galaxy and throughout the history of the universe. Yet so far this assumption has helped astronomers develop satisfying accounts of all the information that can be extracted from the starlight falling down their telescope tubes and has not generated any (many) inconsistencies. Equally, the test of uniformitarian assumptions in the present case lies in whether they help to impose some kind of order on the empirical data, not in anybody's feelings about their likely validity.

Many analyses of the contemporary scene emphasise how some particular feature – modern telecommunications, say, or the pace of change – is unique and unprecedented. Clearly that style of analysis is anathema to the uniformitarian interpretation. In this book, the unique and unprecedented features of contemporary life are precisely the features that one is not interested in. Instead, the analysis is concerned with what is familiar and eternal about the present situation. Modern telecommunications, for example, are to be recognised as conforming to a particular social logic that applied to the first postal systems thousands of years ago. The aim is to find the deep themes buried within the confusing changeability of human affairs. The assumption is that those deep themes are as unaffected by the special conditions of the present time and place as they were unaffected by the special conditions of every time and place throughout history.

History's logic

This book intends to say something about the future history of the world, and to use a considered theory in order to avoid the errors typical of many past forecasts. However, some arguments suggest that these past errors were not because of a poor methodology but because forecasting history is

logically impossible.¹²⁰⁷ For instance, in his essay, *Cleopatra's Nose*, the historian J B Bury presented a view of history as highly capricious.¹²⁰⁸ He suggested that the result of the battle of Actium – at which Octavian defeated Antony's navy and went on to become Augustus, first emperor of Rome – was not due to the normal causes identified by historians but to Antony's being distracted by his infatuation with Cleopatra. If her nose had been just a quarter of an inch longer, so the argument goes, he might not have been attracted to her and his generalship would have been more effective, changing the result of the battle of Actium and the subsequent history of the world.

The economist Kenneth Boulding has said that history involves the growth of knowledge and since it is impossible to know what knowledge one will have in future – otherwise one would already have it – it is impossible to predict how history will turn out.¹²⁰⁹ The sheer complex interactions of social systems may also present a major theoretical obstacle. There is, for instance, the phenomenon known as a self-fulfilling prophecy¹²¹⁰ whereby people's expectations about the system cause it to meet those expectations – such as when the belief that shares will rise causes shares to rise.¹²¹¹ This kind of positive feedback creates major instabilities and magnifies the effect of chance occurrences.

The fact that history undoubtedly involves a series of contingent, unpredictable events has been seen as a clear distinction between natural and sociological phenomena, one that invalidates the scientific method for social studies. It is said that one cannot hope to construct theories of social phenomena that are precisely predictive like the laws of physics.¹²¹² However, this is to misconstrue what prediction involves in science. Scientific prediction is about saying that, given certain specific facts, some other facts will follow. It is not about making prophecies for the real world, with all its complexities.¹²¹³ While physicists may be able to predict the outcome of specific laboratory experiments, they are a long way from being able to foretell the future. Certainly, they can construct tables showing the positions of the planets a long way ahead with considerable accuracy. However, for the most part, their laws are inadequate for predicting the temporal evolution of real-world phenomena, such as a thunderstorm or a fire¹²¹⁴ – and that is not their aim.¹²¹⁵

Scientists investigating nonlinearity and chaotic dynamics are increasingly recognising that the complexities of natural phenomena also confound accurate prediction.¹²¹⁶ Research in the properties of systems that possess strong feedback shows that quite simple laws can produce effects that are virtually indistinguishable from random. Scientists have come to appreciate that even Newtonian systems, whose laws are well

understood, can generate completely unpredictable long term behaviour.¹²¹⁷

Though scientists may be unable to forecast the precise configurations of real world dynamic systems, they can still identify some invariant properties of those systems, such as the total energy for instance. There is no prima facie reason to suppose that social theory cannot deal with similar invariant properties of social systems and hence identify constraints on future events. For instance, though technology has developed dramatically since Sumerian times, the basic institutions of the state have changed little if at all. Governments raise taxes and fight wars just as they did then. If one were to focus on such abstractions, one might in principle be able to have some knowledge of the future.

History is certainly made up of chance events, but these may be bounded by deeper themes. For instance, it has been argued that, if the geological history of the earth had been such that there were no oil, the artefacts of the last hundred years would have been very different.¹²¹⁸ However, during the early development of the car, designers experimented with steam and electric batteries in addition to the internal combustion engine. Cars based on steam and electricity were essentially identical in function, appearance and performance to those based on fossil fuels. In 1906, the Stanley Steamer, with its high-precision steam engine, actually held the land speed record.¹²¹⁹ Of course, these technologies were soon abandoned in favour of the internal combustion engine, but, if fossil fuels had not been available, more effort would surely have been put into their improvement. Without oil, artefacts would have been different, but it is not clear that they would have been different in a significant way.

The important thing is not the particular discovery, personality or battle by means of which an opportunity is seized and a destiny fulfilled. The important thing is the historical process that creates that opportunity in the first place. It has been noted that, if Carthage had won the Punic wars, there might then have been a Carthaginian empire rather than a Roman empire, and St Peter's might later have been built in Tunis instead of Rome, but the overall pattern of a Mediterranean empire facilitating the spread of Christianity would possibly have been much the same.¹²²⁰ A study of urban evolution in the United States certainly found that chance did not appear to play a significant role. Simple mathematical models, which ignored local politics and peculiarities, gave a good account of typical processes in the history of cities, including suburbanisation and variations in relative aggregate growth.¹²²¹

In the nineteenth century, Thomas Carlyle argued that history consists of the achievements of heroic individuals.¹²²² Many accounts of history

certainly imply that it has turned on the chance contributions of particular personalities. Sociologist Bertrand de Jouvenel asserts that 'surely it is plain that with someone other than Napoleon the fifteen-year recrudescence of the European war would not have occurred and with someone other than Hitler genocide would not have been conceivable'.¹²²³ The answer, however, is that it is not plain. Nothing is known about this other person. Arguably, the times selected the individual. It is no coincidence, for example, that the Nazi party was led by someone like Hitler rather than by a liberal humanist. Hitler was not solely responsible for the doctrine of the party, which he joined rather than founded. There were many others who shared his views and who could have taken his place. Furthermore, some of the ideas that Hitler expressed in *Mein Kampf*, concerning an unseen Jewish conspiracy, have parallels in the notion of a 'witch society' that informed the great witch panic of early modern times¹²²⁴, and in the communist hysteria of 1950s America. It is too convenient to blame everything on Hitler's unique evil and thereby ignore what it says about humanity in general.

Contrary to what they might like others to believe, apparently powerful people have far less freedom of action than is usually supposed. Their agendas are constrained by the apparatus at their disposal, and their decision-making is influenced by the information that is fed to them.¹²²⁵ Although intention and direction seem to come from the person at the top, this is something of an illusion. The destiny of an institution or society is formed within the social system as a whole and depends on that system to achieve realisation.¹²²⁶ The consequences when the system is not amenable are illustrated by the efforts of the pharaoh Akhenaten to reform the religion of ancient Egypt. He attempted to do away with the existing gods and replace them with a strict monotheism having the sun disc (Aten) as godhead. However, the interests of the various priesthoods were too strong and after Akhenaten's death the old religion was restored.¹²²⁷ Despite his overwhelming advantage as the omnipotent ruler of the most secure of contemporary states, Akhenaten did not produce any lasting impact.¹²²⁸

In Europe's recent history, despite not having the vote, ordinary people have played a major role in shaping events through food riots, labour disputes and political revolts. In eighteenth century Paris and London, those who participated in popular disturbances had quite sophisticated aims and methods, despite their depiction as an unruly mob. Monarchs and prime ministers were influenced by these protests and were not as autonomous as is generally supposed. As early as 1801, posters in Manchester were calling for universal suffrage. Of course this was not granted

the morning after it was demanded, but it came in the long run and the role of the general population in effecting that change can hardly be overstated.¹²²⁹

In the words of Hegel, the great individual is one who can put into words the spirit of the age.¹²³⁰ Studies of Luther and Gandhi, for example, have shown that their views and motivations were typical of those of sixteenth century Germans and twentieth century Indians respectively.¹²³¹ When there is a great message to be communicated, there needs to be a transmitter, but if anything is to get through the receivers need to be tuned to the right channel. Christianity became a great religion not solely because of Jesus but because of the zeal of St Paul and many others. The turning point in history only becomes a turning point because of the continuing efforts afterwards. Without that, Christianity would have met the same fate as Akhenaten's doctrine. One person can do nothing acting alone. Actions are conceived and taken by individuals. Yet they must be examined and approved by the community before decisions can be translated into responses. It is the community rather than the individual that is the arbiter of adaptive change.¹²³²

The phenomenon of independent, simultaneous invention shows that there is no shortage of heroic individuals.¹²³³ For example, three people separately invented the telescope in the same year, and three different surgeons separately pioneered heart transplant operations within six weeks of each other.¹²³⁴ There are countless examples of this phenomenon. It shows that ideas are in the air when they are discovered,¹²³⁵ and the progress of history does not depend fundamentally on the efforts of any one person.¹²³⁶ Indeed, in other cases, scientists seem to have discovered things ahead of time, as Mendel did with genes, and their work has then been neglected until it could be properly understood.

The truth is that people simply find it easier to think in terms of heroic individuals and discrete incidents than in terms of abstract historical processes.¹²³⁷ It is easier to remember that Columbus discovered America than to grasp the complex trends whereby Europeans were pressing out into the wider world. The fact that Columbus visited the mainland only briefly, and died still thinking that he had reached India, is ignored, as is the fact that British merchant sailors independently discovered North America within a few years of Columbus's first voyage or possibly even beforehand. To say that Columbus discovered America is a shorthand for a process with a much deeper keel. When this greater process is acknowledged, it may be recognised that the chance event was the insignificant fact that it happened to be Columbus. The significant event –

the European eruption towards America – had nothing to do with chance.

History is a turbulent phenomenon, thoroughly characterised by random events, but in which there nevertheless appear to be deeper constancies. In turbulent flow, such as smoke rising from a cigarette, chance events can grow to produce great waves and eddies in a quite unpredictable fashion. Yet all streams of smoke look essentially the same. This is like history. Chance events are very significant, but only so far as surface appearances are concerned. Beneath the surface, there are deep, invariant properties.¹²³⁸ Those invariants can be discovered operating in the last five thousand years of human experience. They can reliably be applied to the understanding of future events. It may not be possible to predict the financial rankings of different countries a thousand years from now, or even what countries will be in existence. Yet it is possible to predict that major changes of fortune will continue to occur. The great contemporary configurations of wealth and power will play themselves out, like whorls of smoke, to be replaced by others that are exactly the same though different in every detail.

A theory of relationships

In studying societies, it is reasonable to begin with the question of what a society is. On this, there seems to be considerable agreement among scholars ranging from sociobiologists to historians. A society is not a collection of people but a structure of relationships. The important feature of a society is the interaction between its members.¹²³⁹ It may be contrasted with a crowd, which is simply a collection of people. Unlike a society, the crowd can be assembled, dispersed, photographed or massacred. Society is the total network of relations between human beings. The components of society are not the people but the relations, which are invisible and intangible.¹²⁴⁰

Beyond this, however, it has long been recognised that major difficulties arise in fixing the boundaries and identifying specific societies, such as British society or Cherokee society.¹²⁴¹ Is a British person on holiday abroad still a member of British society? What about someone who has emigrated? Is anyone who has a relationship with a British person a member of British society? The problems are even more involved when one admits the time dimension and becomes concerned with the continuity of societies.¹²⁴² One confronts the fact that many contemporary societies can claim to be the heirs of any past one.

Instead of arguing about where societies begin and end, as some sociologists have done, it is better to conclude from such problems that the question is not productive. In other words, there is an irreducible vagueness involved in such terms as say British society, European society, or middle-class society. Societies are simply not the sort of thing

that has a definite boundary. Furthermore, they are hierarchical. There can be societies within societies, as say London society is part of British society, which is part of European society.

Nevertheless, societies are more than phantasms of the sociologist's imagination. The notions of society and of belonging to a society seem to be embedded in the human psyche. People do not interact with others simply out of convenience. They are driven to form and be part of distinct groups. Even children spontaneously give their groups names and develop their own particular customs.¹²⁴³ Therefore, a society can arguably be identified as any collection of people who perceive themselves as such.¹²⁴⁴

Many theories of social behaviour have been expressed in terms of people's individual drives or needs. It is supposed that social forms can be understood as being arrangements that best satisfy these needs. Some attempts to characterise the needs that constitute human nature have produced very lengthy lists in the attempt to be exhaustive.¹²⁴⁵ Others have sensibly narrowed things down. One scheme suggests just three great needs: identity, stimulation and security.¹²⁴⁶

When one tries to analyse real world societies in such terms, it becomes apparent that there is a problem. Given the human needs for identity, stimulation and security, how should one explain the characteristics of a Sumerian city state? One might say that the existence of royalty satisfies the needs for identity of the leaders and for security of the ordinary citizens. Yet this is rather loose and unconvincing. The fact is that theories based on human drives or needs do not really address themselves to the questions of interest concerning broad patterns in history and in social institutions.

Society cannot be viewed as a collection of individuals, independently seeking to satisfy their needs. Society subsists in the interaction between these individuals, co-operatively satisfying needs and perhaps ignoring some needs in the pursuit of broader objectives. The trouble with explanatory schemes based on individual needs is that, even when they recognise a 'need' for social interaction (e.g. the need to be valued by other people), they provide no view of the structure or logic of that interaction. They cannot explain society because the basic building blocks of society are not people but relationships.

The theory to be developed in what follows will be a theory of human relationships. It is not concerned with what people are like but with what their relationships are like. It also takes no moral position. It attempts to describe what people's relationships are like, right or wrong, and not what they should ideally be like. When the theory is applied to the interpretation of current affairs, it should not be construed as a lament or a complaint. The aim is to understand what is happening now as

a continuation, fulfilment and reiteration of what has been happening over the last five thousand

years. Laments and complaints have no place here. It would be helpful if that could be understood.

Chapter 12 - Terms and concepts

Introduction

This chapter summarises the model of human relationships that will be used in the rest of the book. It defines and explains a number of key concepts. Since the terms involved also have loose, everyday meanings, a special typeface is used to indicate when the formal meaning is intended: e.g. *political* (formal usage) rather than *political* (everyday usage).

This model is about the relations between actors. The term ‘actor’ is used because the same model is assumed to apply at all levels. In other words, the actors may be individual people or they may be whole groups of people, such as the population of London, the British army or the nation of France. It is assumed that the relations between countries, say, conform to the same basic principles as the relations between individual people. This assumption is itself a part of the model and is presented as a formal proposition, as follows:

TC1 This model applies to interaction between actors at all levels.

In Part II, every major proposition will be marked with an identifier. In this case, the identifier is **TC1 – TC** for the chapter (Terms and Concepts) and **1** because it is the first proposition in this chapter. This is intended to draw attention to the key points emerging from the discussion. It also means that, when a point is relied upon later, it can be referred to by its identifier. This will give some traceability to a complex argument.

The model described below recognises three distinct kinds of *relationship* between actors – *political*, *economic* and *social* – and three *styles of interaction* – *friend*, *acquaintance* and *stranger*. It also recognises the notion of an *ensemble*. This is a self-consistent arrangement of social institutions, where an institution is a set of ideas, practices and/or objects structuring people’s behaviour. Finally, it recognises a distinction between *reality* and *perception*, i.e. between the actual relationship or interaction style connecting two actors and what the relationship or interaction style is believed to be.

Proposition **TC1** means that one can talk about whether France and England are interacting as *friends* or *strangers* just as one can talk about whether Janet and John are interacting as *friends* or *strangers*. It would not make sense to talk about Janet interacting as a *friend* with France, though, because Janet and France are not the same type of actor. This multi-level nature of the model helps account for the rich structure of human society.

Polity, economy and society

A relationship is something that exists between two actors and implies that the behaviour of one

affects the behaviour of the other.¹²⁴⁷ A *group* of actors is connected by a network of such pair-wise relationships. The present model recognises exactly three possible kinds of relationship and their corresponding networks. These are as follows:

TC2

Types of relationship		
<i>Name</i>	<i>Nature</i>	<i>Network</i>
Political	<u>Coercive</u> . One actor directs the activities of the other actor.	Polity
Economic	<u>Contractual</u> . The two actors voluntarily provide each other with complementary services on the basis of a fair exchange.	Economy
Social	<u>Co-operative</u> . The two actors agree on goals, on the methods to obtain those goals, and on the need to work co-operatively towards them.	Society

This trichotomy of terms has long been recognised in sociological discourse. People say such things as “the war changed the social, political and economic face of Europe”. Numerous authors have based their theories on essentially this scheme, though they have not always used the same terms. Kenneth Boulding¹²⁴⁸ speaks of the threat, exchange and integrative systems; for Rudolf Steiner¹²⁴⁹ they are political, economic and spiritual-cultural; for Arnold Toynbee,¹²⁵⁰ political, economic and cultural; for Pitirim Sorokin,¹²⁵¹ compulsory, contractual and familistic; and, in a recent contribution, Peter Crutwell¹²⁵² has suggested power, subsistence and metaphysics. The terms political/economic/social are considered to be the most familiar, however, and so they have been commandeered here, while also being given a reasonably precise meaning.

In everyday speech, ‘social’ is used loosely to mean anything to do with human behaviour, including political and economic behaviour. Similarly, ‘society’ is used to refer to a group of humans and not just to the network of co-operative relationships binding them together. Such usage is also adopted in this book, primarily in order to avoid disorienting neologisms. Nevertheless, readers should be aware of the distinction between the vague ‘social’/‘society’ of everyday language and the model’s formally defined *social/society*. (The term ‘cultural’ might have been adopted as a way of avoiding this potential confusion. However, ‘cultural’ has its own

resonances in everyday language, which are not necessarily appropriate, and so the more usual 'social' has been retained.)

Political, economic and social relationships bind people together in groups. The British nation, for example, forms a coherent entity because the people that make it up are held together by these relationships, and are not connected in the same way or to the same extent with people of other nations.

Political relationships are about power, coercion and authority. A network of political relationships (i.e. a polity) constitutes a hierarchy. One or more actors at the top control subordinates, who control their subordinates and so on. Such relationships are compulsory as far as the subordinate actors are concerned. Political relationships are especially associated with formal government. Obeying laws and paying taxes, for example, are compulsory.

Economic relationships, by contrast, are voluntary. They involve the exchange of complementary services – complementary because otherwise there would be no point in the transaction. The exchangers receive from each other services that they cannot or do not wish to provide for themselves. Being voluntary, economic relationships persist only so long as both actors benefit. They can therefore seem rather fragile and transient. However, these relationships are quite effective at binding actors together because each is better off with the exchange than without it.¹²⁵³ The exchangers have a mutual interest in continuing the relationship and they therefore avoid fighting and show consideration for each other. An economy is a heterogeneous network of actors providing diverse services, but it forms a coherent whole because they are connected together by their mutual dependence.

Social relationships are neither compulsory like political relationships nor voluntary like economic ones. They are represented by the loyalty, self-sacrifice and mutual concern that are found, say, in patriotism or among the members of a loving family. Such relationships are not forced on the actors involved but neither are they entirely a matter of self-interest and free choice. Social relationships are the source of *legitimacy* for behaviour. They imply the assent of other actors that particular goals are valid and worthwhile. The naturalist V C Wynne-Edwards once defined a society as a group of individuals pursuing conventional prizes by conventional means – a definition which captures this equation between legitimacy and agreement on shared goals.

In general, manifest phenomena and social institutions involve all three kinds of relationship. For instance, membership of a golf club involves submitting to the committee and its rules (political), paying for the use of the club's

facilities (economic), and sharing one's passion with other enthusiasts (social). The relationships are abstract principles that can be used to interpret phenomena without necessarily being seen in a pure form.

The number and strength of the relationships may also vary between different groups of actors. It will be helpful to introduce three terms that refer to this:

TC3

- Integration means the number and strength of political relationships.
- Organisation means the number and strength of economic relationships.
- Cohesion means the number and strength of social relationships.

The designation of these terms is partly arbitrary but reflects the typical usage in social science literature. That is to say, some authorities speak of economic integration and others of economic organisation, but the latter is more common.

When a group is said to have a high level of integration, this means that its members are joined together by many, strong political relationships – one can think of a totalitarian state. Similarly, when a group is said to have a high level of cohesion, this means that its members are joined by many, strong social relationships – one can think of a college fraternity. Since this model applies at all levels, it is as appropriate to talk about the integration of an international alliance (does one nation dominate the others?) as about the integration of a rugby team (is the captain's authority respected?).

It is important to appreciate that integration, organisation and cohesion are properties of a group and not things that are done to it. In particular, to speak of organisation does not imply the presence of a master organiser. A free market economy typically exhibits more organisation than a centrally planned one. Organisation arises spontaneously when various actors establish economic relationships with each other. The entrepreneur rather than the bureaucrat is the creator of organisation.

Goods and services can pass between social actors via all three kinds of relationship and not just by an economic relationship. For example, in a political relationship, one party may compel the other to hand over some desirable item. A meal in a restaurant reflects an economic relationship, but one in a private house (where there is no explicit, contractual exchange) reflects a social relationship. The academic discipline of economics could therefore be regarded as incomplete because it normally considers only one third of what is going on. Similarly, the attempts to justify the high

salaries of some chief executives as being the inevitable outcome of 'economic logic' could be considered dishonest, because such arrangements are often based on power (political) as much as on fair exchange (economic).

The three kinds of relationship tend to influence each other. For example, a social relationship may bestow legitimacy on a political relationship. This is illustrated by mature state systems, where paying taxes is compulsory, but citizens also understand and largely endorse the government's goals, implying that taxation is legitimised and accepted. Nevertheless, the element of compulsion remains important. Few people would pay their taxes if the police and courts showed no interest in enforcing them.

The formation of these relationships is considered to be pan-human and innate. Even young children exhibit these principles in their behaviour. One study has shown that the struggle to form political relationships is characteristic of the primary school playground, with some children achieving dominance over the rest.¹²⁵⁴ Similarly, children bond with each other (social) and enthusiastically barter things like trading cards (economic).

The concepts of this model are relevant to the present inquiry because they help to interpret data from many kinds of society and from every historical period. It will be shown that social collapse, and the entry into a dark age, is a movement from a higher to a lower level of integration, organisation and cohesion.

There is a kind of order among these three types of relationship. On the one hand, social relationships seem to be the hardest to disrupt, followed by economic and then political ones. The French revolution, for example, disrupted political relationships throughout France but it did not disrupt the social relationships whereby French citizens identified with each other and with their characteristic way of life. Under conditions of adversity, authority structures can change or be broken down quite easily. Exchange relationships, however, are harder to break up because this threatens people's livelihoods, while the most enduring are people's fundamental loyalties, which can overcome almost any challenge.

On the other hand, political relationships are the most powerful in the sense of being able to bind together arbitrarily large groups of people. Political authorities suppress the conflicts that inevitably arise when people live together in large numbers. In the absence of political relationships, people may be held together by economic relationships. Conflicts are suppressed because people have an interest in continuing mutually advantageous exchanges. However, they

are not suppressed as effectively as by political relationships with their explicit laws. Social relationships are the weakest. Maintaining agreement on goals and on the need for co-operation is only really possible within a relatively small group.

This leads to the following proposition:

TC4

- In terms of the difficulty of disrupting them, the three kinds of relationship may be arranged in the following order: social (most difficult to disrupt), economic, political.
- In terms of the size of group that can be controlled, the three kinds of relationship may be arranged in the following order: political (controls the largest groups), economic, social.

Friends, acquaintances and strangers

The next element of the model is necessary to deal with the manifest diversity of human societies. It brings such societies as the Eskimo and Amazon Indians into a common framework with modern industrial nations. These highly divergent social forms can then be understood, in uniformitarian fashion, as demonstrations of the same underlying principles.

The sort of thing to be explained is exemplified by the contrast that anthropologists draw between the sharing and generosity of simple foraging peoples and the apparent selfishness of people who live in capitalist economies. In this particular case, it can be said that both foragers and capitalists are generous when dealing with their intimates and self-interested when dealing with strangers. There is clearly an element of logical necessity about these attitudes. Shopkeepers who shared their goods with anyone walking into the shop would not remain in business for very long. Meanwhile, people who insisted on immediate compensation for every favour would not have many friends or loved ones.

To begin with, the model defines two conditions that can exist between a pair of actors, A and B:

- Intimacy: A's goals include the achievement of B's goals (A is happy if B is happy) .
- Trust: A expects to meet B again.

Next, the model defines three interaction styles, on the basis of the presence or absence of these conditions:

TC5

- Friend: both trust and intimacy are present.
- Acquaintance: trust is present but not intimacy.
- Stranger: neither trust nor intimacy is present.

The model thus takes some familiar words and gives them relatively precise definitions. The definitions may be unconventional but they work in the sense that the formal concepts closely match the everyday concepts. For example, *intimacy* will be found where one intuitively expects to find intimacy. One's happiness is diminished by the unhappiness of one's friends/*friends*, with whom one is intimate/*intimate*, but not by the unhappiness of complete strangers/*strangers*. The statements make equal sense whether they are based on the formal concepts or the everyday ones. However, there is good reason for adopting the formal terms, as shown by the following points:

1. The dictionary definition of intimacy is just 'closeness'. So if one asks 'are these people intimate?', it can be interpreted as 'are these people close?'. Yet this says essentially the same thing and does not help answer the question. On the other hand, with the above definition, the question can be interpreted as 'do the goals of one include the goals of the other?'. This can be answered more objectively and gives greater insight into the situation.
2. When the formal terms are used they mean neither more nor less than is stated above. However, in everyday language, the meanings of the terms are more diffuse and can change between contexts. Do parents trust their adolescent offspring? In everyday language, it depends what one means by trust. With this model, it is simply a question of whether the parties expect to meet again.
3. These terms are not simply the same as the everyday terms. For example, one's mother is (usually) one's *friend* in formal terms, but not in everyday language where there is a distinction between relatives and friends. The model uses words that are *close* to the meanings to be conveyed, instead of inventing new ones, because it allows the model to be understood more intuitively.

The next task is to indicate the properties of the three interaction styles. These properties are posited in such a way as to reflect the behaviour that people actually exhibit in situations where a given interaction style is prevalent.

Friendship

Friendship is the typical kind of interaction style among foragers or within the family group. It is the only style in which there is *intimacy*. Intimacy is built up through intense, repeated interaction over a long period. The more people interact, the more they care about each other and the harder they find it to be indifferent to each other's problems and failures. Thus, their goals come to include each other's goals. The model is not concerned with why this should be the case. It is simply accepted as a fact. However, it is not difficult to appreciate that caring for others is

important in a social animal and that social living has had important adaptive value for human beings.

Since *intimacy* requires repeated intense interaction, and since people's time is limited, it is apparent that the capacity to form *intimate* relationships is strictly limited. Evidence both from foragers and from studies in urban environments suggests that humans can interact with at most a few dozen other people in the manner identified as *friendship*.¹²⁵⁵

The definition of *intimacy* (A's goals include the achievement of B's goals) resembles the definition of a *social* relationship (agreement on goals, the means to achieve them, and the need to co-operate). If B's goals are included in A's goals it follows that they agree on what the goals should be. Hence, *friendship* implies a *social* relationship. However, when people agree on goals and the need to work together that does not necessarily mean that one's failure prevents the other's success. Thus, a *social* relationship does not necessarily imply *intimacy* and hence *friendship*. In practice, though, co-operation on a common task provides the conditions for the development of *intimacy* so that over time a strong *social* relationship is likely to lead to *friendship*.

Friendship is inimical to the exchange of complementary services which is required by an *economic* relationship. Friends do not exchange one thing for another. They share. Also, among *friends*, there is little incentive for some people to work harder than the group as a whole since the fruits of their labours will only have to be shared out. Without the profit motive, however, the effort needed to construct elaborate *economic* networks is unlikely to materialise.

Simple societies are characterised by their strong egalitarianism. People are discouraged from putting on airs and graces or throwing their weight around. The anthropologist Richard Lee has described buying an ox as a Christmas gift for the San foragers of the Kalahari desert and being put out when they disparaged the gift at length, pointing out what a measly ox it was and so on. Lee eventually realised that this was simply meant to bring him down to size. Such behaviour is characteristic of *friend-style* interaction generally. Friends cannot lord it over each other, nor give each other orders. Great and famous people do not receive the same deference within their households as they expect from the public at large. Hence, *friendship* is incompatible with the formation of a *political* relationship.

To summarise, the circle of *friendship* is strictly limited, along with the following proposition:

TC6 Friendship implies:

- Strong social relationships/a high level of cohesion.
- No economic relationships/no organisation.
- No political relationships/no integration.

Acquaintanceship

Acquaintanceship is typical of the village-level community. Here people know each other well and can expect to meet again (there is trust). However, people are too numerous for general intimacy.

Acquaintances tend to agree on goals and are likely to co-operate with each other. Yet this is not as intense as among friends and the social relationships between them are relatively modest.

Acquaintances do not share indiscriminately with each other but instead expect explicit reciprocation of their favours. However, the existence of trust means that credit is common and it may take years before a debt is re-paid. Thus, acquaintances may engage in the exchange of complementary services, but the flow of goods and services is typically very slow and any economic relationships are weak.

Among acquaintances, it is possible for some individuals to gain prominence. For instance, in the traditional villages of Melanesia and New Guinea, certain charismatic individuals, referred to as big men, organise inter-village feasts and are generally influential within their community. They help other people and then exert leverage over those who are obliged to them. The equivalents of big men are found all over the world in similar contexts. Village-size communities within urban settings also tend to have their community leaders. The authority of the self-made big man or community leader is quite limited, since it is based on influence rather than coercion. Such people tend to decline in prominence as they grow older and become less energetic.¹²⁵⁶ Thus, political relationships of some kind can certainly exist among acquaintances but these relationships tend to be relatively weak.

The number of acquaintances is limited by the ability to recall debts and to guarantee meeting again. It would be effectively impossible to keep track of millions of acquaintances and be confident of meeting each one again. The village of a few thousand people probably represents a practical limit on the size of a community of acquaintances. However, technical innovations such as writing can enhance the ability to record debts, thus increasing the potential range of acquaintanceship.

To summarise, the circle of acquaintanceship is limited by practical

considerations, and there is also the following proposition:

TC7 Acquaintanceship implies:

- Weak social relationships/a low level of cohesion.
- Weak economic relationships/a low level of organisation.
- Weak political relationships/a low level of integration.

Strangership

Strangership is typical of urban contexts. Here one regularly encounters people whom one has little expectation of meeting again and whose concerns are entirely divorced from one's own. The number of strangers is unlimited.

Strangers have no contact or only transient contact with each other. In general, they cannot be expected to agree on goals or on the need to co-operate towards them. Thus, strangership is inconsistent with the existence of a social relationship.

Strangers can certainly provide each other with complementary services. Since there is no trust, credit is not possible and contractual transactions must be completed immediately. Hence, a group with a high proportion of mutual strangers can be characterised by quite intense exchange activity, i.e. by strong and numerous economic relationships.

Meanwhile, since strangers' happiness does not depend on each other's happiness, they are quite prepared to take advantage of each other and to use violence or threats in order to get their way. In other words, coercion can be a feature of stranger-style interaction. Thus, strangership is consistent with the creation of strong political relationships.

Having said this, a given pair of strangers need not necessarily be bound by strong political and economic relationships. However, there are no social relationships. Hence, there must be at least some political and/or economic relationships if a group of strangers is to have any coherence at all.

To summarise, the circle of strangership is unlimited, along with the following proposition:

TC8 Strangership implies:

- No social relationships/no cohesion.
- Strong economic relationships/a high level of organisation.
- Strong political relationships/a high level of integration.

Abstraction and reality

The above discussion described friends in the context of foragers, acquaintances in the context of New Guinea villages, and strangers in the context of urban society. It should be

appreciated that this is only a matter of degree in each case, i.e. only a matter of which interaction style is most common in each context. Foragers also encounter *strangers*, when they trade with other bands. They then behave as *strangers* are predicted to behave – e.g. not sharing but demanding immediate reciprocation. Similarly, people in urban societies have circles of people with whom they interact as *friends* and *acquaintances*, such as their families and work colleagues respectively.

It is also worth re-iterating the point that *friend/acquaintance/stranger* are abstractions to be used in interpreting different situations. Actual interactions between real people will not conform exactly to these abstractions. The same two people may sometimes behave like *friends* and sometimes like *acquaintances*. In real life, for example, *trust* is not all or nothing. There are degrees of *trust*, since one can be more or less certain of seeing a person again. One might have sufficient *trust* to buy someone a drink but not to give the person one's life savings in cash.

The model is not a perfect description of social reality but it is a reasonable one for present purposes. If situations appear to be gross contradictions of the model, it is probably because the model is being incorrectly applied. One example of an apparent contradiction is the credit given by banks to their customers. This can be an impersonal transaction and so may be thought of as a *stranger*-style interaction, in which credit is not expected. The explanation, however, is that people are actually *acquaintances* to their bank managers, who have their addresses and are confident that the interaction will continue (*trust*). A second example involves charitable donations to disaster appeals. Giving away money without expectation of return is a *friend*-style act, yet people in distant countries are evidently *strangers* (in everyday language). The contradiction is removed if one recognises that the knowledge of distant suffering obviously upsets the donor, implying a degree of *intimacy*. It is, of course, a very tenuous form of *intimacy* and this is reflected in the modest scale of the generosity (less than might be expected if the donor's own family were involved, for instance).

Ensembles

The anthropologist Bronislaw Malinowski once wrote about his thoughts on seeing a bicycle leaning against a hut in an African village. It occurred to him that this seemingly innocuous object was symbolic of far-reaching transformations taking place in African life. The bicycle was made by a firm in Japan specially for the African market. To remain useful it required maintenance, involving a supply of technical knowledge and spare parts. Furthermore, the

bicycle would have made no sense unless its African owner had roads to travel on and indeed reasons for travelling. Thus, the arrival of the bicycle in African experience depended on the simultaneous arrival of numerous other innovations.¹²⁵⁷

These observations introduce the concept of an *ensemble*. This is a self-consistent collection of social institutions. An *ensemble* is an allowable mode of social living, i.e. one based on an achievable set of social arrangements. For example, the presence of a bicycle combined with traditional isolation of the African village, surrounded by hostile tribes and self-sufficient in subsistence agriculture, would not have been an achievable or allowable set of circumstances. If Africans had the bicycle, they had to have all the other things – a supply chain, technical knowledge, roads, reasons to travel. If they did not have all the other things, they could not have the bicycle.

The *ensemble* concept explains why certain complexes of institutions recur, as shown, for example, in the many points of resemblance between old world and new world civilisations. These resemblances occur because the various institutions belong together in a logical structure, i.e. an *ensemble*. It did not take centuries of urban living to hit on the idea of writing or commerce. These things were there from the beginning. They are interdependent components of the relevant *ensemble*. Furthermore, the *ensembles* have not changed over five thousand years. Modern foragers live like ancient foragers, and modern states, in their essential features, are the same as ancient states. This shows that the *ensembles* depend on the logic of human relations, which is constant, and not on technological progress.

Consider, for example, bringing some ancient Roman citizens two thousand years through time to contemporary London. The Romans would recognise streets, public and private buildings, shops, markets, coinage, commercial vehicles, written advertisements and road signs. The Romans would understand exactly what would be involved, say, in going into a shop to buy a bottle of wine. On the other hand, if naïve members of a contemporary foraging society were brought to London, they would be far more disoriented than the Romans. They might have a better understanding of specific technologies, such as a radio, but they would have no experience of shops, currency or police officers. If one wanted to send them to buy a bottle of wine, one would have much explaining to do.

The great differences that divide, say, Amazonian tribes from industrial nations result from the fact that these societies are in different *ensembles*. To explain how the same underlying principles governing human relations can generate

such different ensembles, it is necessary to introduce the concept of scale.

Scale is a measure of the number of different social actors with whom a given actor is likely to interact within a given time interval. The importance of this factor was recognised by the early twentieth century sociologist Emil Durkheim, who called it dynamic density.¹²⁵⁸ Scale depends on both population size and population density. Foragers live at quite high densities within the camp, but scale is low because their band has only a few members. Equally, scale is low where a large population is thinly spread across the landscape. Scale also depends upon transport and communications technology. Farmers in the American mid-west live at a much lower population density than farmers in rural China.¹²⁵⁹ However, the mid-westerners live at a higher scale, because they have access to private vehicles which carry them far and wide, including to the big city, whereas the rural Chinese spend most of their time in the same place surrounded by the same people.

The scale of a group correlates with its ensemble. Firstly, there is a division into three fundamental ensembles, as follows:

- At very low scale, people come into contact only with friends. Social institutions are based on sharing and egalitarian attitudes.
- At intermediate scale, people come into contact primarily with acquaintances (because the circle of friends is limited in size); they continue to have a small circle of friends, but they do not regularly encounter strangers. In this case, social institutions are based on balanced co-operation and competition for prestige.
- At very high scale, people interact frequently with strangers (because the circle of acquaintances is also limited in size). There are well-developed commercial institutions and political hierarchies.

Beyond this fundamental division, other important distinctions can be made. For instance, the stranger-ensemble may be divided into states and chiefdoms. Chiefdoms have political hierarchies and rudimentary commerce but, being at a lower scale than states, lack writing for example. In practice, ensembles are infinitely diversified since scale varies continuously. Individual states differ somewhat in their institutions, and these differences are related to differences in scale (e.g. those between rural China and the American mid-west).

A crucial feature of the ensemble concept is the chicken-and-egg interdependence of institutions. It accords with what was earlier called the principle of mutual causality. No institution has priority. They all require the presence of each

other, as with the bricks in an arch. African roads and markets required the availability of the bicycle in order to be worthwhile, just as the bicycle required roads and markets. Similarly, in the 1960s, Ester Boserup challenged the traditional view that improved agricultural productivity causes population growth, by showing that changes in population can cause changes in agricultural productivity (e.g. when population declines for some reason, farmers often return to less intensive practices).¹²⁶⁰ Thus, while a particular scale is correlated with particular social institutions, one should not say that the scale produces the institutions. It is equally true that the institutions produce the given scale.

Complexification

Increasing scale implies increasing organisation and integration. This is because only among strangers, who are found in a high-scale society, can high levels of organisation and integration be achieved (TC6-8). At the same time, by the principle of mutual causality, living at high scale demands high levels of organisation and integration.

For instance, to support a large urban population one must be able to use land very productively. This implies a sophisticated agricultural technology – not just a few simple items that farmers can make for themselves. One needs a strong network of economic relationships to get the sophisticated technology from the specialist producers to the farmers and the food from the farmers back to the specialist producers. Yet the existence of non-farming specialists implies an urban population. Hence, high scale allows high economic organisation, which allows high scale.

Similarly, when people live at high densities, there is ample scope for conflicts to arise. Political integration, with a few people directing the activities of everyone else, is necessary to resolve these conflicts and to ensure that the group maintains a common purpose. Yet only where there is a large, dense population can would-be rulers establish stable authority. Hence, high scale allows high political integration, which allows high scale.

In terms of people's experience, the effect of increased scale may be characterised as one of complexification. Making one's living is more complicated in a high scale group, because it relies on successfully orchestrating a series of economic and political relationships with other people. There are more things to know, more skills to master. One is also subject to formal rules and must be able to deal with people representing a wide range of personalities and capacities.

Complexification is reflected in culture and technology. One study found a logarithmic

relationship between the *scale* of societies and their complexity in terms of the variety of institutions and technical items.¹²⁶¹ The material culture of low-*scale* foragers, for instance, consists of a few simple items, such as baskets and spears, which everyone has the capacity to make. Typically, foragers prefer to cup their hands together for drinking rather than make a beaker and carry it about.¹²⁶² By contrast, a major manufacturing concern in an industrial nation may carry an inventory of over 100,000 different parts. This is possible because of the numerous specialists among the large, dense population of the high-*scale* society.

Technological and cultural change will be more rapid in a society of high *scale*. Ideas flow faster and there are more people to have ideas in the first place. By the principle of mutual causality, high *scale* is also needed in order to make such innovation worthwhile. Even if an African villager had invented the bicycle, for example, it would have literally gone nowhere without numerous other developments. A real-life illustration of this point is Leonardo da Vinci's fruitless invention of the helicopter at a time when the world was unable to realise his vision. Thus, technological evolution should not be regarded as following an autonomous logic. The modern technological cornucopia is not merely the result of a steady accumulation of inventions. Rather it is intimately connected with the high *scale* of the contemporary world, simultaneously making possible and depending upon the enormous growth in human numbers and communications.

Former foraging peoples who have become more sedentary illustrate the relationship between *scale* and cultural/technological complexity. Now that the Kalahari San are being drawn into the wider world by improvements in communications and opportunities for work on farms, their camps and their individual huts are becoming larger. They are accumulating stocks of possessions and the old ethic of sharing is coming under pressure.¹²⁶³ When Eskimo people settled down in Canada in the 1950s, they found themselves having to deal with disputes that in the past would simply have been solved by those who fell out moving off to separate camps. As this was no longer possible, the Eskimo formed a council of elders, and thus introduced rudimentary political institutions.¹²⁶⁴

The above may be summarised in the following proposition:

TC9 The cultural/technological complexity of a society varies with its *scale*.

Perception and reality

The investor George Soros has discussed the distinction between perception and reality in the context of financial markets. For example, investors may believe that a particular security is a

valuable asset when in fact it is not. This belief can lead to bidding up of the particular security so that in effect it does appear as a valuable asset. However, the resulting divergence between the perception and the reality cannot be maintained forever. Eventually, a correction will ensue – a crash in the price of the security – and some investors will suffer.

Soros turns his observation of this distinction into something more powerful by introducing the important notion of *reflexivity*. This refers to the fact that the perception and the reality may affect each other in both directions.¹²⁶⁵ For example, if people's perceptions cause a firm's shares to be highly valued this may improve trading conditions for the firm and so increase the value in reality. Thus, the perceptions come to be justified.

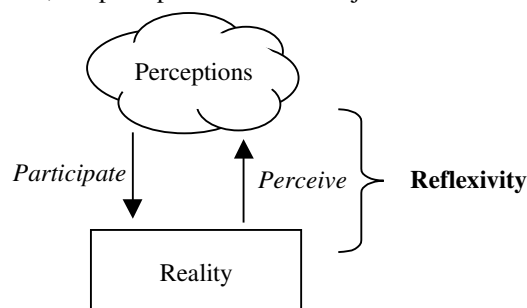


Figure 12-1: Reflexive connection between perceptions and reality (Soros 1994, 1998).

As Soros himself argues, these ideas are applicable to social phenomena in general. He presents them as part of a theory of history. The essential point is that the people who are *perceivers* of a social or historical situation can also be *participants* in it. Their perceptions influence their behaviour, which then shapes the very situation that they are perceiving.

Soros also recognises a concept that he refers to as a 'regime', which is equivalent to the above notion of an *ensemble*. A regime or *ensemble* thus has two aspects: perception and reality, the way people think and the way things actually are. With respect to the present model this means recognising a distinction between perception and reality concerning the interaction style and relationship connecting two actors. That is to say, the actual relationship or interaction style may not be what the actors believe it to be. At the same time, the perception and the reality mutually influence each other.

For instance, actors who believe that they are *friends* and so act generously towards each other may thereby create the conditions for *friendship*. On the other hand, large mismatches between perception and reality would be likely to produce sharp corrections in the long run. *Friendship* that existed in perception but not in reality might be abused, with one actor becoming a freeloader and taking advantage of the other's

generosity. Eventually, the one being taken advantage of might be expected to develop a more realistic perception and terminate the flow of generosity. Social welfare systems, for example, in which the community supports its less well off members, are based on friend-style logic. Fraud in such systems reflects a mismatch between perception and reality, as the recipients of welfare are treated like friends but behave like strangers. Soros's work indicates that the mismatch must eventually be corrected – most likely by a drastic reduction in the scope of the welfare system.

These ideas are summarised in the following two propositions:

TC10 Perceptions may maintain a group at a particular level of integration, organisation or cohesion, even after the reality has changed. This can apply in either direction; e.g. a group may persist in a state of integration even after the reality has moved in favour of disintegration, and it may persist in a state of disintegration even after the reality has moved in favour of integration. Eventually, however, there will be a correction (or series of corrections) tending to restore the perceptions to the reality.

TC11 Perceptions influence reality and vice versa (Soros's principle of reflexivity).

Contradictions

Societies notionally exist in an ensemble. However, the institutions of a group of social actors will not always be wholly self-consistent – in other words, they will not necessarily constitute an exact ensemble. In this case, there will be a kind of tension causing the institutions to adjust to each other to eliminate the inconsistency. Historical change can therefore be understood as a response to contradictions in the society's internal and external arrangements. If foraging peoples like the Australian aborigines held to a single way of life for thousands of years, it is because their societies represented a perfect ensemble. There were no contradictions and hence no reasons to change. Isolation can make it possible to arrive at such perfect consistency. By contrast, interaction with other societies that are themselves evolving makes it impossible to adjust completely and ensures that one's own society will continue to change.

Institutional inconsistencies or contradictions can arise because of changes in reality, for example due to technical innovations or population growth causing changes of scale. However, there may also be inconsistencies because of the discrepancy between perceptions and reality. Soros refers to this as 'fallibility'. He notes that fallibility can set up vicious or virtuous circles, due to positive feedback between perception and reality – for example when

the belief that a currency is desirable raises its value and thereby strengthens the original belief. (Whether a circle is considered vicious or virtuous depends on one's point of view, i.e. on whether the resulting change is desired or undesired.)

Thanks to fallibility, institutions can change autonomously as perceptions and reality continually adjust to each other, and without any need for external inputs such as technological inventions. In practice, both kinds of change will be going on simultaneously, creating a highly complex situation and making history a very interesting, unfathomable process.

The ensemble concept implies that historical change is apt to occur on many fronts simultaneously. All institutions are interdependent – when one changes they must all change. Since the situation between ensembles is unstable, change is also likely to be rapid. When a group moves from one major ensemble to another, as when a state arises where there was not one before, it will do so in a sudden, co-ordinated rush. In the financial markets, the return of perceptions to reality is usually abrupt – share prices collapse all of a sudden as the bubble bursts.

Perceptions can feed on themselves for a while. For example, subordinates may continue to take orders because of the perception that their leaders are powerful, even after those leaders have in reality lost the ability to enforce their will (**TC10**). The fact that the subordinates take these orders may also help the illusion of power to persist. However, when the logic for an adjustment finally becomes unassailable, perceptions are likely to change over to a more realistic view in one rapid movement. The Egyptian intermediate periods in each case followed several centuries of bad government. When external political developments finally revealed the bluff that lay behind the exercise of power, the breakdown of hierarchy, which restored the perception to the reality, took place in virtually no time at all.

There is another source of contradiction in institutional arrangements, which stems from the fact that the principles underlying relationships presumably reflect human traits that have been selected for in an evolutionary context. The trouble is that the context within which these human traits evolved was the foraging lifestyle of small groups. Agriculture and urban living are innovations of only the last five to ten thousand years – a minute period in evolutionary terms. Natural selection is not normally considered to achieve much effect on such short time scales. It follows that humans are adapted to circumstances quite different from those in which most of them now live. This is the source of much psychological and physiological illness.¹²⁶⁶

Asa Briggs has suggested that cities, being the product of human nature, are a natural milieu for

humanity.¹²⁶⁷ However, this does not really follow. Traits that were successful when people were divided into tiny groups with limited technology might easily be maladaptive in other situations – even if those situations are of people’s own making. Konrad Lorenz has drawn attention to the worrying picture presented by contemporary humans, who combine stone age thinking with nuclear age weaponry.¹²⁶⁸

The truth is that cities have never been an optimal environment for human beings. For most of history, the urban death rate has exceeded the urban birth rate. Cities have only been viable because of a continual influx from the countryside. They can function successfully in many ways, but problems of poverty, crime and chronic stress reveal a darker side. People have always been attracted to the stimulation of the city but they have never wholeheartedly accepted it. For the subordinates – who are in the majority – urban life is characterised by quiet frustration, by lack of recognition, and by awareness of many desirable things that they can never have.¹²⁶⁹

It is remarkable that humans spread to cover the whole earth (save Antarctica) long before the first city was ever founded. They followed the retreating ice sheets into northern Europe, found ways of living in the inhospitable polar regions, and pushed out to the remotest islands of the Pacific. They had reached the Shetland islands

1500 years before the building of Stonehenge.¹²⁷⁰ This clearly indicates an intense centrifugal pressure. One must conclude that people do not naturally choose to live packed together. They began to do so only when there was nowhere else to go. They still retain a preference for their small groups and for the leisurely lifestyle to which they are best suited.

All this means that groups at high scale are in a perennial state of tension. Their high scale is achieved against the inclinations of their constituent actors, though the form they take on is the consequence of fundamental principles of human relations. They are contained in this state by high integration, organisation, and possibly cohesion. However, when this containment fails, for whatever reason, the group will fly apart. Although ensembles of high scale are possible and take on certain predictable forms, there is a perpetual bias tending to disrupt them and tending to move them towards lower scale, less complex arrangements.

TC12 Groups of high scale are less satisfactory for human beings than groups of low scale. Scale tends to decrease unless counteracted by successful political, economic and/or social relationships capable of binding people together.

Chapter 13 - Political integration

Introduction

Integration is defined as the number and strength of political relationships within a group (TC3). This term can also be used to refer to the process of creating integration. In addition, some derived terms may be helpful (similar derived terms apply for organisation and cohesion). These include:

- Disintegration: a low level of integration, or the process of reducing integration.
- Integrative/disintegrative: tending to increase/decrease integration.
- Integrated/disintegrated: showing high/low integration.
- Integrator: an actor that increases integration (i.e. by creating political relationships).

Coercion

Political relationships involve coercion. One actor dominates; the other(s) submit. Integration is therefore achieved when some actors use force or the threat of force to impose their will on others. This applies at all levels (TC1), e.g. to the interaction between an imperial power and its vassal states as well as to interactions between individual people.

An actor's ability to force another actor to do things depends on the first actor being able to control the happiness of the second actor. This may involve violence, with the first actor being either physically stronger or mentally more committed than the second actor. However, other forms of leverage may also be used. Work supervisors who have direct responsibility over the pay and conditions of their subordinates are found to establish more effective political relationships than those who do not.¹²⁷¹

States are highly integrated social groups. They are characterised by the mechanisms of coercion: police, military, law courts, and prisons. Their populations are subject to numerous constraints that do not apply to people in simpler societies. Most of the time, most people in states submit easily to coercion, obeying the law and paying their taxes. They do not continually test whether force is effective. The perception of the state's threat power is enough. People prefer to mind their own business and live peacefully.

The urge to establish political relationships over others is widespread. Even monasteries and convents have their political life. However, people differ from an early age in their ability to dominate others or in their commitment to doing so. The submissiveness of state populations suggests that a successful ability to dominate is relatively rare.

The formation of political relationships is not generally about power for its own sake, although this may motivate some individuals and lead them to achieve high authority. Ordinary people tend to be drawn into political conflict in the course of particular disputes, as they become anxious to impose their own preferred solutions. The normal political process is a struggle over specific issues, rather than a battle for comprehensive power.¹²⁷² Politically dominant actors can compel other actors to accept a relatively undesirable settlement. The greater the integration, the more unpopular the measures that a political authority can introduce.

Nobody really knows how the first politically integrated communities arose. However, an illuminating myth suggests that when people first took up agriculture and began to settle down, they became prey to bullies and bandits. The latter used violence to extort a living from the more peaceable farmers. The bandits were not only a problem, though, they were also the solution. Once a community had submitted to them, the bandits had a vested interest in protecting it from other bandits coming along afterwards. (In Europe before the fourteenth century, the differences between soldiers, bandits, lords and pirates were all rather blurred. Even in the seventeenth century, the great mercenary general Wallenstein was allowed to extort his fees from the cities that he occupied on behalf of whichever monarch he was fighting for.)¹²⁷³ An alternative source of integration might have been if the community called on some of its own members to provide protection. Once these became accustomed to deploying force outwards it would have been easy for them to turn it inwards against the community they were protecting.

History suggests that both routes to integration are possible – external conquest and internal promotion.¹²⁷⁴ The route does not matter. The perennial human urge to dominate means that political authority would have emerged readily once conditions were able to support it. What is important is the end state. A defended community is inherently defenceless against its defenders. Protection and subjection are therefore connected together in an ensemble – one cannot exist without the other.¹²⁷⁵

A protection racket, such as that established by the Kray twins in 1960s London, illustrates this principle. The protection on offer is as much protection against the racketeers themselves as it is protection against outsiders. However, the supposed protection is not entirely a sham. The Krays, for instance, prevented other criminals from operating on their patch, and it is claimed that overall crime was less during their reign. Similarly,

the IRA and the mafia have opposed drug dealing and petty crime by independent elements within the areas where they are active.¹²⁷⁶ In modern Japan, street crime is kept down by yakuza gangsters as much as by the police.¹²⁷⁷

A uniformitarian view sees the Krays and the IRA in the same light as other instances of political integration, such as states. That is to say, they derive from the same principles of human behaviour and show the same twin aspects of protection and subjection. The Kray twins were just one or two thousand years too late. In earlier times, they might have founded a noble dynasty.

When a political authority loses its ability or willingness to apply force, protection and subjection disappear in conjunction with each other. During Egypt's first intermediate period, the peasants found themselves released from their serfdom. They were much freer than before to roam between cities.¹²⁷⁸ However, this greater freedom was at the price of lost protection. Contemporary accounts describe a period of insecurity and great troubles.

These observations lead to the following proposition:

P1 Integration \Leftrightarrow subjection *and* protection.

The \Leftrightarrow symbol ('double implies') means that both integration implies protection/subjection and protection/subjection implies integration. When integration increases or decreases, protection and subjection increase or decrease with it, and vice versa.

Peace and order

Integration establishes peace and order. The Kray twins established a sort of order in the East End by driving out troublemakers and bringing other criminals under their control. Of course, within the wider context, the Krays were reducing integration by challenging the authority of the British state, making them appear as criminals. Eventually, the state – founded on the same logic as the Kray regime – re-asserted its authority and disabled them just as they had disabled various petty crooks. If the state cannot assert its authority, i.e. if integration is low, criminals and troublemakers thrive, and there is disorder.

When people live together, disputes will inevitably arise. Ethnographers record endemic bickering even among the handful of people in a foraging camp.¹²⁷⁹ In agricultural communities, with higher numbers, there are more opportunities for relations to break down, while people are less emotionally attached to each other anyway. Hence, conflicts are especially likely to become chronic and bitter. This seems to be why villages in the Amazon are usually rather smaller than the surrounding land could theoretically support.¹²⁸⁰ When an Amazonian village grows to contain more

than a few hundred people, conflict becomes insurmountable. The village undergoes fission and one faction moves to a new site. One study of this phenomenon describes a particularly charismatic individual who took charge of his village as it was about to break up. He moved the whole village to another site and solved all the disputes.¹²⁸¹ This individual directed the activities of his fellow villagers, i.e. established embryonic political integration, and thereby imposed peace.

When there is no integration and people are free agents, the only recourse that they have in the case of a dispute is to take matters into their own hands. The result is fighting and feuding. Successful political authorities cannot tolerate this. Fighting on their territory undermines their own authority.¹²⁸² They therefore assume responsibility for settling disputes. Making and administering laws is an ancient practice among complex societies.¹²⁸³ Hammurabi, famous for his law code, also boasted 'I made an end to war',¹²⁸⁴ thereby illustrating the relation between integration and peace.

The link between integration and peace/order applies equally well when the actors are countries interacting in the international arena. A Jesuit missionary to China in the 1630s reported that his Chinese friends asked him how Europe could avoid war if there were so many princes.¹²⁸⁵ The answer, of course, was that it could not. Europe was racked by war. An international system of many countries will only be integrated and made at peace if one country is much stronger than the others and able to impose its will upon them. People thus speak of the pax Romana (Roman peace), pax Britannica, and today the pax Americana.

The greater the degree of integration, the greater will be the peace. When Ieyasu Tokugawa defeated his rivals at the beginning of the seventeenth century and made himself Japanese shogun after a hundred years of feudal war, he created a police state. The result was a period of great peace. Similarly, chronic fighting among the autonomous city states of classical Greece was abated when one of them dominated as hegemon and disappeared completely when Philip of Macedon conquered them all and fully integrated them within his empire. At the extreme, in which one actor completely directs the activities of everyone else (maximal integration), there would be no disputes at all.¹²⁸⁶

P2 Integration \Leftrightarrow peace and order.

In the 1990s, a radical utopian community in London starkly demonstrated this principle. It eschewed mechanisms of coercion for ideological reasons, but then found itself plagued by drunkenness and vandalism.¹²⁸⁷ The commune

collapsed in discord because of the behaviour of anti-social elements. It had lacked integration and so experienced conflict and disorder.

Since peace prevails throughout a politically integrated region, subsidiary communities within that region do not need to defend themselves. At the height of Rome's power, old city walls fell into disrepair and new cities were built without walls.¹²⁸⁸ However, these defences were quickly rebuilt when Rome collapsed and drastic disintegration took place. Europe's disintegration in the latter part of the first millennium AD was so extreme that walls were even constructed around monasteries and nunneries.¹²⁸⁹ The political unit is therefore characteristically a region that is defended at the boundary but undefended on the inside¹²⁹⁰ – a principle often used by archaeologists when assessing the extents of ancient states and chiefdoms.

When communities are relatively isolated, their borders are loosely defined and their internal integration is relatively low. Increasing interaction with other communities, due to improving communications for example, leads communities to define and defend their own borders more carefully. The increase in protection is associated with an increase in the integration of each community (P1). See Figure 13-1.

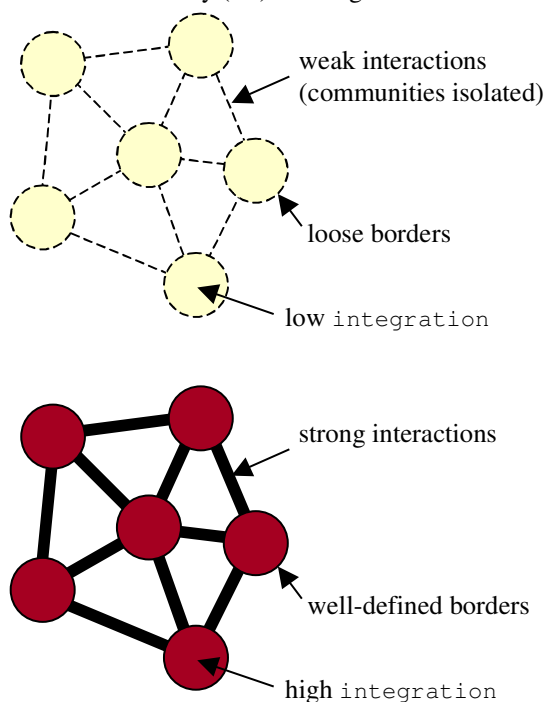


Figure 13-1: External interaction promotes internal integration.

P3 External interaction \Leftrightarrow internal integration.

Notice that this refers only to the internal integration of the individual communities. The

region as a whole may or may not be integrated. In fact, when communities are interacting strongly, there are more opportunities for disputes to arise. Unless one of the actors (i.e. one of the communities) is able to integrate the overall group of communities, there will be chronic conflict between them, just as in early modern Europe.

If one of the communities in Figure 13-1 undergoes internal disintegration for some reason, it will be at the mercy of its neighbours (P1). One of these neighbours is then likely to subordinate the disintegrated population and so restore integration. Hence, the association of external interaction with internal integration is an ensemble. There will only be disintegration in any part of this network if there is disintegration in all of it. Furthermore, if there is widespread internal disintegration then, by P3, there will also be a reduction in the level of interaction between the constituent elements.

Monopoly of force

Political integrators require a monopoly of force, i.e. an exclusive right to use force, at least in some situations. Integrators require such a monopoly in two senses. They *need* it, and they *demand* it. There can only be one master in a particular territory. If there is more than one master then the territory is not integrated.

To achieve the coercion of a political relationship requires a clear disparity between the dominant and subordinate parties with respect to their ability to apply force. The Mogul emperors rotated their governors between appointments, for fear that they might build up their own power bases if left too long in charge of a single region.¹²⁹¹ Similarly, Mussolini steadily removed from office those who had known him before his rise to power, bolstering his own authority.¹²⁹² A significant trend in European countries since the thirteenth century has been increasing control by the state over the means of violence. Rulers have steadily restricted or removed the right to bear weapons, thus increasing the integration of the state by disarming their subjects.¹²⁹³ Not surprisingly, this process has been associated with a drastic decline in homicide and violent crime since the middle ages (see P2).

The fact that political authorities insist on the right to settle disputes is an aspect of monopolising force. They forbid their subjects from taking the law into their own hands, for that would appear to undermine their own authority. The abolition of feuding and duelling can be seen in this light.

A monopoly of force also tends to be self-promoting. The greater the monopoly achieved, the easier it is for the political authority to enforce

and extend it.¹²⁹⁴ Hence, there is an inevitably close association between the level of integration and the extent to which the political authority has a monopoly of force.

P4 Integration \Leftrightarrow monopoly of force.

A political authority initially demands a monopoly of force only over the interaction between actors and not over what goes on within them. Hegemonic states forbid their vassal states from warring with each other but permit them to carry on disciplining their own citizens. The East India Company placed a resident adviser at the courts of Indian princes. The adviser exercised control over the prince's foreign policy but did not interfere in domestic affairs.¹²⁹⁵ Similarly, the early Roman state afforded the head of a family the right to use force within his own household, to the extent of killing his slaves or children. However, the British in India increasingly took an interest in internal affairs, and the rights of the Roman paterfamilias were steadily eroded and eventually abolished. In these ways, integration spread and become more comprehensive.

Historically, technological developments have tended to move the logic in favour of a monopoly of force. The growing sophistication and expense of weapons and other equipment (e.g. for surveillance) put them beyond the reach of ordinary citizens. Thus, technological developments have promoted political integration. This is no accident. States have committed significant funds to research and development of military materiel.

The notion of crime derives from the existence of a political authority. In the absence of political integration, there can be no crimes, only torts, i.e. wrongs or injuries. The response to a tort is compensation, and it is incumbent upon the victim to compel the perpetrator to make this compensation. Thus, in less integrated times and societies, a murderer is required to pay blood-money to the victim's family. The only incentive for the murderer to pay up is the threat of a feud and further deaths.

A crime, by contrast, is not so much an offence against the victim as a challenge to the political authority and its law.¹²⁹⁶ The response to a crime is punishment rather than compensation. The perpetrator is prosecuted by the political authority, while the victim is virtually irrelevant, except perhaps as a witness. Furthermore, while a crime against a fellow citizen is an indirect challenge to the political authority, some crimes – treachery, rebellion, tax evasion – are direct challenges to this authority. These have always been dealt with particularly harshly. Contempt of court is similarly a direct challenge to the coercive mechanisms of political authority and the logic of integration. Those who lie to

judges receive punishments that can seem disproportionately severe.

The state's labelling of torts as crimes and its assumption of responsibility for dealing with them can be regarded as a progressive step. It means that the weak have the satisfaction of seeing justice done, which might not be possible if they had to rely on their own efforts. However, there is a drawback, since the near irrelevance of the victim's interests and the replacement of compensation with punishment can make this satisfaction seem somewhat hollow.

The nature of life in a group without integration is classically illustrated by ethnographic studies of the Nuer, a pastoral people of the Sudan who have no chiefs. Among the Nuer, victims of wrongdoing must obtain their own forms of justice. The key points are as follows:¹²⁹⁷

1. *Deterrence.* Every Nuer man carries a sharp spear and has the skill and the will to use it. Every other Nuer knows that this is the case. This is a strong disincentive to anyone contemplating taking advantage of others.
2. *Balance of power.* Every Nuer is potentially hostile to every other Nuer. However, when a man is in conflict with his first cousin (i.e. an uncle's son), his brother will come to his aid. When a man is in conflict with his second cousin (i.e. a great-uncle's grandson), his brother and first cousin will come to his aid; and so on.
3. *Mediation.* In principle, disputes could lead to never-ending feuds. In practice, they are usually resolved before too long. This is because there will always be people who have relatives in both camps through marriage, and in whose interest it is to bring the fighting to a close.

When a Nuer man has been wronged he cannot appeal to any political authority. He must take the law into his own hands. If a wrongdoer is slow about paying compensation, the only thing the injured party can do is go and seize it for himself. This is quite simply anarchy (extreme disintegration). Nevertheless, fighting is constrained because of the above principles.

Traditionally, it has been said that the Nuer show how order may be maintained in the absence of integration. Yet the system is by no means perfect. Disputes and violent conflict are a normal feature of Nuer life. Far from showing order, in fact, the Nuer show a considerable amount of disorder in comparison with integrated societies. This is predicted by proposition **P2**.

Understanding the Nuer is important because the same principles apply to the international diplomatic system in the absence of a strong hegemon. States cannot appeal to a higher authority. If they are wronged, or feel that they have been wronged, they must take the law into

their own hands. However, fighting tends to be forestalled by deterrence, balance of power, and mediation.

It follows that the international system is plagued by the same problems as affect the Nuer. Thus, balance of power theory has a long pedigree in geopolitics, where it motivated diplomats to contract alliances that prevented any one bloc from obtaining a dominant position. It is still favoured today in some circles.¹²⁹⁸ However, it is increasingly appreciated by political scientists that balance of power theory is deeply flawed. There is little evidence that wars were ever much prevented by a balance of power.¹²⁹⁹ Rather, war seems to have been at its lowest ebb whenever the balance was strongly tipped in favour of just one nation, i.e. when there was hegemonic integration (**P2**).

Similarly, deterrence does not seem to lead to peace in the long run. It can fail both in theory and in practice,¹³⁰⁰ whether among the Nuer or in the international system. There may, for example, be a problem with credibility. An aggressor may underestimate a potential opponent's willingness to use the deterrent. It has been argued that Hitler miscalculated the British commitment in this way when he invaded Poland in 1939.¹³⁰¹ Alternatively, an aggressor may believe that a pre-emptive strike will eliminate its opponent's ability to respond. This is believed to have been the view of the German high command in 1914, and of the Japanese before Pearl Harbour. An aggressor may also not share the standards of rationality on which deterrence depends. Suicide bombing, for example, shows that to some people there may be issues more important than survival itself.

Deterrence represents a typically Sorosian situation, in which perceptions can deviate from reality. It is also reflexive. The belief that two nations are on the road to war can propel them down that road. The perceptions affect the reality and vice versa. A belief that a potential opponent has a particular military capability, even if untrue, may be enough to stimulate the development of a counter-threat. This ability of perceptions to feed on themselves and to run wildly ahead of or far behind the reality further increases the instability of deterrence.

Extraction

Political integration implies extraction. The political authority appropriates resources from the subject population, in order to maintain itself. In the case of a protection racket, this is called extortion. In a state, it is called taxation. In both cases, extraction is far from popular. One nineteenth century traveller described Egyptian peasants being flogged to force them to pay their taxes,¹³⁰² exactly the same fate experienced by their predecessors 4500 years before, as shown by tomb paintings.¹³⁰³ Basque separatists in the 1980s levied 'revolutionary taxes' on banks and others thought

able to pay, with those who refused being subject to bombs and kidnap.¹³⁰⁴ In the 1990s, Kosovo's unofficial Albanian government imposed a voluntary income tax on its supporters. This was widely backed but there was still a suggestion that it might not be good for families whose relatives abroad refused to pay.¹³⁰⁵

Political authorities have been described as kleptocrats, i.e. those who rule by stealing.¹³⁰⁶ However, the rulers of mature states go beyond mere racketeers in that their power is regularised. Governments issue laws, to which they can then be expected to adhere. By contrast, the power of gangsters is basically arbitrary. Nevertheless, given time and the opportunity to develop, gangsters are themselves apt to regularise their power. In one medieval Chinese rebellion, the marauders took local defence into their own hands, taxed the population, set up walls around the villages and took over the administration. Had imperial forces not subsequently defeated them, a new state would have been born. European feudal states developed directly from the gangsterism that rose out of the decay of the Roman empire.¹³⁰⁷

The practice of extraction may become legitimised if some of it returns to the original givers in the form of services provided by the authority to the subject population. Gangsters as well as states can adopt this strategy. In Asia, crime syndicates have long performed some social welfare functions. Japanese yakuza gangs initially proved more effective than the state in providing relief to victims of the 1995 Kobe earthquake.¹³⁰⁸

Since extraction is understandably unpopular, the ability of a political authority to make extractions depends on the level of integration. Weak monarchs have traditionally had a difficult time raising money.

P5 Integration \leftrightarrow extraction.

The burden of extraction has always fallen most heavily on the poor and the weak. Being least in a position to resist, they are subject to the most intense political relationships, and **P5** applies. With the social group's more powerful members, the political authority has to tread more carefully. They have sufficient power to influence the authority's behaviour. When the Japanese emperor cut the earnings of both nobles and samurai at the Meiji restoration, the relatively weak samurai came off far worse.¹³⁰⁹

In simpler states, the fact that the poor pay most is direct and obvious. Powerful people are usually explicitly exempt from taxation. In more mature states, the same principle applies but in more subtle ways. For instance, the wealthy may be able to set up complicated financial arrangements that reduce their exposure to taxation. Moreover, they may receive subsidies for their estates or government contracts for their companies, which

ensure that they are net recipients from public funds.

Extraction has some positive consequences, which may be summarised as follows:

1. *Stimulation of productive activity.* By demanding a surplus, an *integrator* compels actors to produce more than they otherwise might.¹³¹⁰ This increases the overall level of resources available to the group. Whether individual actors are better off as a result depends on how the *integrator* disposes of its income. However, even luxurious consumption may have hidden benefits. Elites provide a market for exotic imported goods and specialist manufactured items. They thereby create niches for merchants and specialist producers. Furthermore, the producers of specialist goods may become more expert over time so that costs fall and their products become more widely affordable. Nevertheless, throughout history the elites have lived very well and the masses have lived very poorly. Whatever the benefits, they have not generally been massive.
2. *Community defence.* Extracted resources help to maintain and extend the means of coercion, i.e. weapons and armies. Clearly, this is in the *political authority's* own interest, in order to preserve its dominant position. However, everyone benefits from the resulting order and defence from outsiders. It would be difficult to fund this by market mechanisms. An army cannot realistically defend only those members of a community that have paid for its services – especially when a large part of its role is pure deterrence.¹³¹¹
3. *Risk management.* *Integrators* typically use extracted resources for risk management, as when the biblical Joseph stored up the surplus of seven good years to ameliorate the seven bad years that followed. Through welfare programmes and health insurance schemes, governments divert extracted resources into a fund for relieving distress. This benefits the group as a whole.

Defensive services and risk management are examples of common goods. These are desirable practices or institutions that are unlikely to be achieved through the voluntary acts of individuals because of the danger of freeloaders or because one person cannot make a difference.

The biologist Garrett Hardin drew attention to the paradoxes of common goods in his essay, *The Tragedy of the Commons* (itself based on an eighteenth century tract). This uses the illustration of a traditional agricultural village in which there is a piece of common land where the villagers pasture their cattle. The arrangement works well so long as population is low. However, as population increases, overgrazing becomes a potential

problem. Individual villagers who consider adding another animal to the commons have a large positive incentive – since they will get all the benefits of the extra animal – and a small negative incentive – since the costs will be shared with everyone else. For the individual, therefore, it is always sensible to add another animal. Yet this is the conclusion reached by every other villager and therein lies the tragedy. The commons becomes overgrazed, to the detriment of all, yet no individual has an incentive to desist. As Hardin puts it, ‘ruin is the destination to which all people rush, pursuing their own best interests in a society that believes in the freedom of the commons’.¹³¹²

The situation changes radically if there is a lord of the manor. While individual villagers may see disaster looming, they are unable to prevent it and indeed they accelerate its arrival. Yet the lord of the manor is not so powerless. The lord can enforce a limit on access to the commons and thereby avert disaster. This actually happened in British history, in the form of the enclosures movement whereby landlords reserved for their private use land over which the peasants had traditional rights of commons. The result was a great improvement in the productivity and appearance of the British landscape.¹³¹³ This leads to the following proposition:

P6 Integration \Leftrightarrow avoidance of the tragedy of the commons.

Having said this, when actors are friends or acquaintances, they can overcome the tragedy of the commons by negotiation and recognition of their enlightened self-interest.¹³¹⁴ It is in high scale situations, where most actors are strangers, that the role of a *political authority* becomes crucial.

Political integrators can prevent the tragedy of the commons by the ways that they structure extraction as well as by simple regulation. Economists recognise that one function of taxation is to ensure that production costs reflect so-called externalities, i.e. costs that are incurred by individual actors but borne by society as a whole. For instance, a firm may discharge effluent into a river, producing pollution that is a cost to everyone. However, if the government pays for pollution control measures out of its tax revenues, then firms are effectively paying for the costs they incur.

Extracted resources are often diverted into grand projects, which range from pyramids to space programmes. Such projects lie far beyond the reach of private individuals. They are largely about prestige. They are a statement of the importance of the *political authority*. The more powerful the authority, the bigger the statement that can be made.

P7 Integration \Leftrightarrow grand projects.

Scale

A high level of integration can only be achieved in a group with a high proportion of strangers (TC6-8). Hence, in order to achieve high integration, a social group must have sufficient scale that most people with whom an individual comes into contact are strangers. At the same time, a group of high scale will break apart unless it is held together by bonds of integration (TC12 and TC4). Thus, integration and scale are intimately connected with each other.

P8 Integration \Leftrightarrow high scale.

Cities, which are settlements of high scale, are often explicitly founded by a political patron, as when Alexander the Great founded Alexandria. They do not just grow spontaneously. In the middle ages, cities were founded by kings. In England, burhs would be given royal charters that precipitated their development into cities. The Roman emperors founded many cities, but beyond their borders, cities were sparse.¹³¹⁵ In Russia, there were no cities until Kiev was founded by Vikings in the fifth century.

A city can only exist with some form of authority. Without integration, it would soon fly apart because of disputes and depredation. Cities always require more police than rural areas do. Not only are there more potential victims in the city, but also criminals can hide more easily by merging with the crowd. In Canada's vast and remote Yukon, wanted persons find it paradoxically difficult to escape from the law. A human being stands out very obviously in the wilderness.

The greater the integration, the larger and denser a social group can be. Montesquieu, the eighteenth century French essayist, argued that to hold together a large empire requires unlimited power in the ruler – an argument that delighted Catherine the Great of Russia.¹³¹⁶ Among early civilisations, the larger ones were based on more autocratic institutions. Individual Sumerian city states were actually quite democratic, with representative government and by no means absolute authority for the ruler.¹³¹⁷

Population growth and improvements in communications technology serve to increase scale. They therefore make possible higher levels of integration. The Incas created an empire that ran more than 2000 miles north and south along the coast, but they penetrated less than 50 miles into the Amazon jungle, where communications were difficult and people continued to live undisturbed in their hamlets.¹³¹⁸ At the beginning of the twentieth century, some writers suggested that revolutions in transport and communications would facilitate the rise of despots on a scale never before

seen.¹³¹⁹ It is fair to say that they were proved correct.

The archaeologist Colin Renfrew has presented a useful way of thinking about integration and scale. A centre of political authority (e.g. a city) can be imagined as a tent-pole at the centre of a conical tent. The height of the pole represents the power (force-projecting capability) of the authority. The centre's authority declines with distance, as shown by the sloping sides of the tent. Centres whose tent is entirely contained within the tent of another centre are subordinate to that centre and form part of its polity. Centres whose tent poles project out form independent polities.¹³²⁰

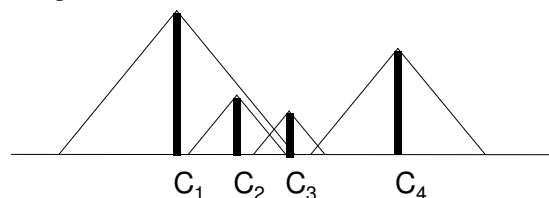


Figure 13-2: A model of the influence of political centres; each centre is represented as the central pole of a conical tent; the more powerful the centre, the higher the pole; centres whose tents are fully contained within the tent of another centre are subordinate to that centre.

The slope of the tent can be thought of as representing the ease of communications; a gentler slope means easier communications and more effective force projection. In the above example, if communications worsen, the slope is steeper and C₂ now becomes independent of C₁ (see following figure). There is a reduction in integration and the formerly high scale group controlled by C₁ splits up into two groups of lower scale. On the other hand, if communications improve, the slope is shallower and now C₃ is brought under the control of C₁. There is an increase in integration and the absorption of C₃ produces a group of higher scale.

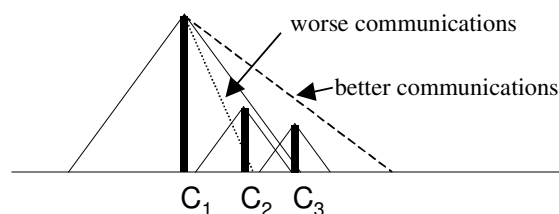


Figure 13-3: Changes in communications produce changes in the integration and scale of groups.

Changes in the power of a centre also produce changes in integration and scale. This is shown in the following figure. If C₁ increases its capacity to coerce, it can absorb C₃. The region is more highly integrated, with two groups

combining to form a group of higher scale. If C_1 loses its capacity to coerce, C_2 becomes independent. There is disintegration and the region is divided into a larger number of groups at lower scale.

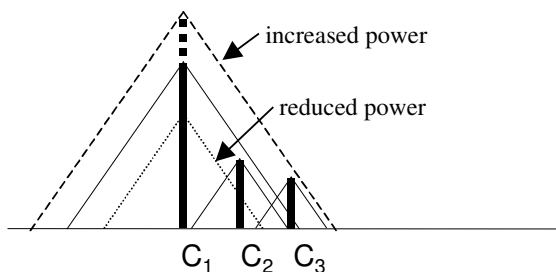


Figure 13-4: Changes in the ability to coerce produce changes in the integration and scale of groups.

Renfrew has successfully applied this model to European political history. He has shown that reducing the level of communications causes centres such as Naples and Seville to emerge as independent territories – just as they actually were during medieval times.¹³²¹

An important fact is that the ease of communications depends on the level of integration just as much as the level of integration depends on the ease of communications. For instance, when the Romans extended their empire across the Mediterranean area, they built roads and suppressed piracy at sea. In other words, Roman integration caused improvements in communications. Conversely, when Roman power declined, the pirates returned, highwaymen preyed on the roads, and travel became far more difficult than it had been in earlier times. Communications, group population size and integration are all connected in an ensemble. One does not cause the other. They are interdependent. Since communications and population size are components of scale, this point is already captured in proposition **P8**.

Another component of scale is population density. Hence, changes in integration also tend to be reflected in changes in population density. At low integration, people are spread thinly across the landscape. At high integration, they tend to be concentrated in confined regions. A centre in which a large number of people is concentrated will also be relatively powerful. Hence, just as a centre's power (the height of the pole) affects its population density, so the population density affects power. Population density and integration are interdependent, again as implied by **P8**.

By **P8**, the level of integration is reflected in the size of cities. After the fall of the western Roman empire, urban centres throughout Europe were drastically reduced.¹³²² Rome itself shrank to

little more than a village.¹³²³ At Nîmes, a new town was constructed within what had previously been just the amphitheatre.¹³²⁴ Some sprawling contemporary cities, such as Los Angeles, have population densities that are quite low in historical terms. Nevertheless, their scale is high because of advanced communications (e.g. widespread car ownership), which bring people in to the centre from all around and produce enormous concentrations during certain hours of the day. Hence these contemporary cities reflect a relatively high level of integration.¹³²⁵

Groups of high scale do not hold together naturally (see **TC12**). There is a strong centrifugal tendency. History shows that the divisions between social units can be maintained for hundreds or even thousands of years, despite their being integrated in a single political unit. When the integration is removed, the social units emerge intact. This has been the experience, for example, of the former Soviet Union and the former Yugoslavia. A political relationship does not necessarily lead to a social relationship.

When whole nations coalesce – such as in the 1707 Act of Union between England and Scotland – coercion is seldom the chief factor. Rather, for two nations to be successfully unified there need to be social motivations (belief that their interests lie together) and/or economic ones (belief that they can each realise a benefit through closer co-operation).¹³²⁶ Such coalitions therefore come under strain when these social or economic bonds disappear.

Integration implies high scale (**P8**), yet one person cannot directly control the activities of very many others. Political integrators must devolve some of their power away to an administrative hierarchy. Technological innovations influence the degree to which this is required. In the Roman empire, the imperial authorities could not simply telephone a provincial governor to receive reports and give instructions. By necessity, the governor had considerable autonomy in performing the relevant duties. With improved communications, however, the central authority can take a much closer interest in the day-to-day affairs of distant regions. (This is another way in which changes in scale relate to the level of integration.)

The ease with which high levels of scale and integration may be established also depends upon the group's *vagility*, i.e. the extent to which its members can move away from each other. Among foragers, when there are disputes or unpleasantness, people resolve the conflict by wandering off and joining relatives in another band. *Vagility* is high. In such circumstances, would-be political integrators face an

impossible task. They cannot get people to stay in one place to be bullied and dominated.¹³²⁷

Things that reduce vagility tend to increase scale and integration. Once the whole world had been settled, general population growth meant that local communities were increasingly hemmed in. In some areas, scale had to increase. The early development of civilisation on the Nile and in other river valleys, where people were kept in one place by the fertile riparian land, can be understood as showing the importance of low vagility for political integration.

Maintenance of integration

Since high scale groups do not hold together naturally, their integration must be actively maintained. Despite numerous studies, psychologists and social scientists have failed to establish what makes a good leader.¹³²⁸ This failure suggests that successful integration is dependent not just on the leader but on the whole hierarchy beneath the leader. Achieving a high level of integration is about having good subordinates as much as good leaders. They must bring out the best in each other. This means that it is important to consider the attitudes of subordinates, as well as the personal attributes of the leaders, when analysing the integration of a social group and how it might be changing.

The ease of maintaining integration does not just depend on the coercive capability of the political authority. It also depends on the balance between the costs and benefits of integration as far as subordinates are concerned. Integration certainly brings benefits for those at the bottom, including: protection (**P1**), peace (**P2**), and avoidance of the tragedy of the commons (**P6**). However, it also has costs. People in subordinate positions, with little control over their lives, experience more stress, for instance, and suffer more coronaries than people who have power.¹³²⁹ Beneath the surface of an integrated society there is a subterranean demand for equality.¹³³⁰ At the time of the Norman conquest, some English writers were already calling for representative government. If the perceived benefits of integration should evaporate, people's willingness to be subordinate may evaporate too. In medieval Europe, peasant revolts and communal movements made elites cautious about imposing taxes.¹³³¹ The traditional history of Hawaii contains various accounts of chiefs being killed for oppressing people.¹³³²

On the other hand, resistance and rebellion also have costs – i.e. the need to mount an effective force and the risks of defeat. The coercive capability of the political authority determines the size of these costs and hence the likelihood of resistance. The greater the coercive capability of the political authority, the greater the excess of

costs over benefits that is possible among the subject population. A very powerful authority can oppress its subjects with impunity.

Perceptions are just as important as reality in determining people's response to this cost-benefit equation. The political authority can adjust the reality by, for example, laying roads, investing in new military technologies, or improving bureaucratic efficiency. However, a grand project may produce a similar effect by creating the semblance of invincibility. It is said, for instance, that some of the bridges constructed by the Incas were such wondrous feats of engineering that they were sufficient in themselves to subdue surrounding tribes.¹³³³ Similarly, the defensive walls of ancient cities were far thicker in some cases than could possibly be justified by contemporary siege technology; they were intended to overawe potential enemies by their sheer size.¹³³⁴ Subjects may come to believe in their own weakness. There is also a reflexive connection between perceptions and reality. Acceptance of the reality of integration, for example, may make it easier for the authority to move its forces around, and the belief that extraction is inevitable may reduce the cost of collecting revenues.

Given the complex interactions between these various factors and the reflexivity between perceptions and reality, the integration of a group is never stable. Rather it is in a perpetual state of flux. Political life is marked by a dynamic struggle. Social disturbances are a recurrent phenomenon even in the most well-established nations. One study showed that European countries have experienced on average one significant disturbance every six years over the last few centuries.¹³³⁵

When disintegration occurs, it is likely to begin at the edges of the polity. Force projection is most expensive there, and the costs of extraction come closest to the returns. The Roman legions withdrew from Britain some fifty years before the western empire as a whole finally collapsed.

Perceptions can maintain the institutions of an integrated society even after the reality no longer supports integration (**TC10**). The Ottoman, Spanish, Napoleonic and British empires persisted intact even after they had become thoroughly overextended.¹³³⁶ When the reality changes, social arrangements do not automatically change to reflect the new logic. Dissatisfied elements, for whom the costs of integration outweigh the benefits, must first recognise that this is the case and then actively change the arrangements. In general, the perceptions of other actors will not necessarily change in sympathy (e.g. elites, who benefit from the status quo, will probably retain outmoded perceptions). Attempts to restructure political arrangements are therefore likely to involve a struggle. Arnold Toynbee has

observed that the foundation of a new state is often preceded by a period of heightened war.¹³³⁷ This is why the decline of a hegemon is such a dangerous time. In such a struggle, the actors whose perceptions are most wrong will come off worse. Through bitter experience, there will be a general forced restoration of perceptions to the reality.

Political integration has both positive and negative aspects. It produces peace but subjects people to another's will. The better it works, the more people take the positive aspect for granted and the more irksome they find the negative aspect. In effect, secure and prolonged peace allows people to forget how it was achieved and means that disaffection can develop. The protesters who camped outside Greenham Common missile base during the 1980s believed themselves to be promoting the cause of peace. Since they had always known peace, they assumed that it comes naturally. They failed to appreciate that it is the threat of military force, implied by bases like Greenham Common, that actually preserves the peace.

The peace that the Greenham Common protesters so earnestly wanted leaves people dissatisfied and full of ennui. The women of Greenham Common themselves had surely never felt more fulfilled than when they were cutting through wire fences and battling with the police; arguably, it was the lack of struggle and challenge in their everyday lives that drew them to this conflict in the first place. The students who rebelled in France in 1968 were the most pampered ever either before or since, and this was very their problem, for it is overcoming difficulties that gives life meaning. The revolutionaries of Romania and Tianenmen Square may all one day have video recorders and washing machines and live within a liberal, democratic state. Yet they will never feel as free or as alive as in the days when they had a cause and an opponent.¹³³⁸ When people experience the peace and protection of integration, they become steadily less enthusiastic about the disciplines, postures and privations on which it is founded.

Conversely, when people experience the disorder and insecurity of a disintegrated group, their enthusiasm for integration may grow. The Japanese Meiji restoration, which involved a major reassertion of the throne's

authority, was successful because the nobles desired peace and were willing to subordinate themselves to the emperor.¹³³⁹ Similarly, German fears and feelings of helplessness, following the unfavourable conditions imposed on them at the end of the first world war, helped give momentum to the Nazi movement and its platform of high coercion and strong integration. The post-1945 rise of President De Gaulle with his self-assertive policies has also been linked to the feelings of frustration and weakness that affected the recently liberated French people.¹³⁴⁰

The existence of both costs and benefits does not depend on the particular form of a government. Although it has often been argued that some types of government provide the most benefits for the fewest costs, and are thus to be preferred, these claims tend to contradict each other. For instance, the fact that some of the wealthiest countries in the contemporary world are democracies is considered in those countries and by some international institutions to provide evidence that democracy is the optimal form of government. Yet democracy has also been roundly condemned at other periods of history. Plato, for example, drew very unfavourable comparisons between the democratic city states of classical Greece and the powerful autocracies that surrounded them. A study of the history of Italy, which has experienced every form of government in its chequered history, provides little to suggest that its people were better governed and better served under one form than under the others.¹³⁴¹

The interplay between costs and benefits constitutes a fundamental contradiction in the logic of political integration.

P9 People value the peace/order of integration, but they resent the loss of freedom that it entails. Experience of the benefits of integration implies reduced enthusiasm for its costs; however, experience of disintegration implies increased enthusiasm for the benefits of integration.

Chapter 14 - Economic organisation

Specialisation

Organisation refers to the number and strength of economic relationships within a group. The parties to an economic relationship must have different services to offer. Therefore a group in which there are many economic relationships will be to some degree heterogeneous, with the skills and products of different actors complementing each other. In other words, organisation is formed only when there is specialisation, or a division of labour. Self-sufficiency, by contrast, means a lack of organisation.

E1 Organisation \Leftrightarrow specialisation.

Among a group of San people living as foragers in the Kalahari desert, every man makes his living in the same way, as does every woman. The only real division of labour consists of the fact that men hunt while women gather, though there may also be some age-related functions. Such rudimentary specialisation implies that economic relationships are of a very restricted kind. Within a foraging band, organisation is virtually non-existent.

However, the band as a whole can be involved in economic relationships with other bands. For example, some essentials, such as salt and flint, are only found in restricted localities and have traditionally been bartered in far-flung trade networks, even by the simplest, stone age societies.¹³⁴² This exchange is properly economic, since the exchangers expect explicit reciprocity.

The situation that arises when economic actors have access to different resources in this way might be called obligatory specialisation. It provides an a priori motivation for the formation of economic relationships. However, specialisation can also arise when the economic actors have access to the same skills and resources. This might be called optative specialisation. Consider, for example, three economic actors, such as three villages.

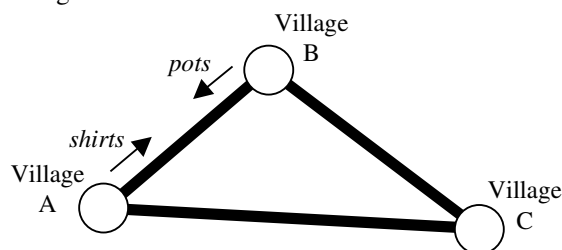


Figure 14-1: Three villages which may trade with each other.

Suppose that there are two goods that may be produced just as easily at any village. For concreteness, let these be pots and shirts. In principle, each village could manufacture its own pots and shirts. However, it would also be possible

for village A, say, to concentrate on shirts and village B on pots. Freed from the necessity of making pots, village A would have enough time to make shirts for B's needs as well. Similarly, village B could make enough pots to satisfy A's needs besides its own. The two villages could then exchange, half of A's shirts for half of B's pots, each ending up with enough of both types of good.

If this were all there was to it, the exchange might seem unnecessarily cumbersome. However, the potential advantage is that, by concentrating on shirts, village A may become more expert at their manufacture. It can produce shirts for both itself and village B in less than double the time it would take to manufacture them only for itself. The same applies to village B and its pots. By specialising, the villages end up with extra time on their hands, compared to the situation when they had to master both skills. They can use this extra time for some other worthwhile activity or simply enjoy it as leisure. In any case, they are better off through optative specialisation.

The potential advantage due to specialisation means that there is a bias in favour of its emergence. Chance fluctuations, such as an arbitrary preference at village A for making shirts, will mean that this bias is soon likely to be realised in practice. When actors are in contact, the emergence of specialisation, and with it economic organisation, is a natural process.

The same arguments can be applied to a third product and specialisation by village C, or if there were more villages to a fourth product, and so on. Hence, in principle, a complex division of labour might arise, leading to significant benefits all round.

The extent to which an actor can specialise in a particular good or service depends upon the level to which it is needed by the rest of the group. In a group of 100 people, it is possible to specialise exclusively in a service that is required on average 1 percent of the time by each individual but not in anything that is required less often. Thus, a large city can provide opportunities for all sorts of specialist services that simply could not survive in a village or small town. A small band of foragers, say, cannot support a full-time plumber, simply because the two or three families in the group would not generate enough demand. If foragers wanted plumbing, they would need to be their own plumbers. However, they would also need to perform all the other tasks associated with a successful plumbing system, such as metalwork to make the pipes and digging of the drains. It is simply not feasible for a handful of people to supply all the necessary skills and labour, while still procuring the food and other essentials that are needed for day-to-day survival.

Trading also has costs. It is necessary to travel to the place where a particular desired item is to be found. If the item is easy to make or procure at home, or if one can easily do without it, one will not be prepared to go a long way to obtain it by trade. Hence, when trading conditions are difficult – e.g. over long distances – exchanges will be restricted to highly desirable items that are easily transported and for which no local substitutes are available. This is why trade between Europe and the far east during the middle ages involved spices and silk, but not rice or cooking pots.

Economists distinguish between the *base* and the *reach* of a particular good or service (though they usually use different terms). The base is the radius of the region that encompasses a sufficient number of people to support an outlet providing that good/service. The reach is the furthest distance that people would be prepared to go to procure and/or supply it.¹³⁴³ See the following figure.

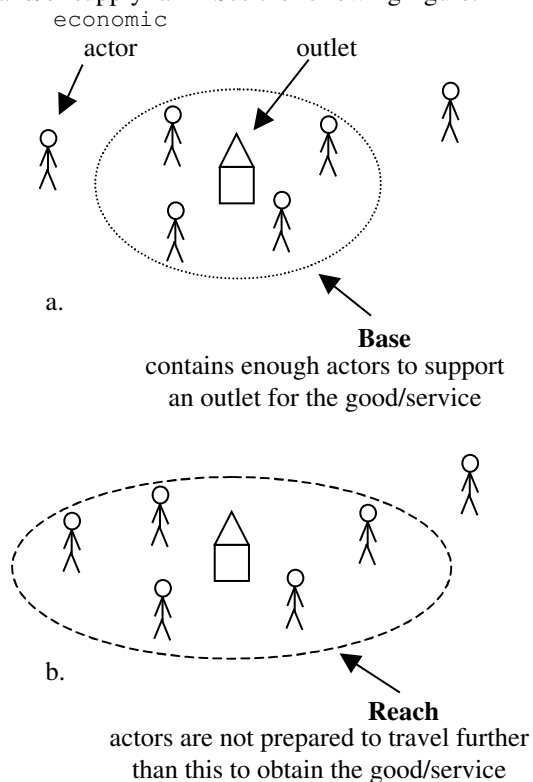


Figure 14-2: *The base and reach of a good or service.*

If outlets offering a particular good are to be viable, the reach must be greater than the base. Hence, anything that increases reaches or decreases bases tends to increase the number of goods that are potentially tradable.

The size of the base depends upon the density of economic actors. A higher density means more people being contained in a smaller space, and hence a smaller base. The reach, meanwhile, depends upon the level of communications. The easier it is to move around, the further people will go to obtain a particular good, since time rather

than physical distance tends to be the limiting factor. (E.g. commuting times have not changed much over the last few millennia but commuting distances have – an hour's walk to the fields has become an hour's train ride to the city.)¹³⁴⁴

Thus, to increase the number of goods that are tradable, it is necessary to increase population density and/or increase communications. Yet increases in population density and communications are both increases in scale. Therefore, scale is related to the level of specialisation and hence the level of organisation.

E2 Organisation \Leftrightarrow high scale.

In the United States, cities on the central plains are spread out and all provide the same sorts of services. They interact with their own hinterlands but there is little traffic between them. The plains cities are homogeneous and self-sufficient. In other words, on the plains there is low scale and low organisation. Conversely, on the north-eastern seaboard, cities are close together, merging into one huge megalopolis. They perform complementary functions and engage in high intensity trade. In the north-east, the cities display high scale and high organisation. Cities per se, with their high density of strangers and hence high scale, have long been places of great economic opportunity, as the story of Dick Whittington makes clear.¹³⁴⁵

This is the fundamental reason why foragers do not enjoy plumbing and other conveniences of modern living. It should not be attributed to some ancestral failure of imagination. It is simply not a part of their institutional ensemble. Surviving groups of foragers live in parts of the world (deserts or the Arctic) whose extreme unproductiveness has kept scale very low. The people who live there inevitably rely on a simple do-it-yourself lifestyle. The diverse, sophisticated products available in urban, industrial countries should not be attributed just to natural inventiveness. This diversity is closely tied up with the ensemble of urban life and depends upon the high scale of these countries.

The association of organisation with scale, is part of the broader issue of complexification (**TC9**). Changes in scale are reflected in the overall sophistication of life. Technological progress is not simply a ratchet of ever-accumulating inventions.¹³⁴⁶ If scale decreases, complexification can go into reverse. When the Roman legions withdrew from Britain, there was a reduction in scale (**P8**) as people fled the cities, where security could no longer be guaranteed. This resulted in a reduction in organisation (**E2**), and people who had formerly used a whole range of mass-produced

goods had to revert to the few crude items they could make at home.

The other side of proposition **E2** is that increases in economic organisation encourage increases in scale. Where organisation is already high, economic actors are likely to be drawn in, further increasing their concentration.¹³⁴⁷ Someone establishing a cobbling business is better off setting up near the leather tanner than doing so miles away. New retail outlets will be attracted to the big city before the small town. The inhabitants of surrounding villages are more likely to travel to the big city to do their shopping than to the small town.¹³⁴⁸ Economic organisation may also lead to improvements in communications, for example because people are likely to build better roads between important commercial centres. Increases in concentration and communications are, of course, increases in scale.

Not only does scale make possible greater specialisation and hence more diversified, more sophisticated products, but also it provides the stimulus for such diversification and sophistication. Trade exposes people to exotic ideas. It brings more possibilities together in one place than that place has to offer of its own accord. This convergence of ideas and possibilities provides a fertile environment in which new ideas and possibilities may be devised. In this way, scale facilitates innovation, so that scale and not the human imagination is the limiting factor on the way to advanced specialisation.

Specialisation implies the existence of specialised knowledge. Plumbers, dentists and barbers must know things that ordinary people do not. A group in which there is a high degree of specialisation has a high degree of specialist knowledge. For this reason, organisation is associated with formal systems of education. The preservation, extension and communication of specialist knowledge becomes an important activity in its own right. People who are going to be applying specialist knowledge as adults need preparation for it as children. According to World Bank research, lack of education emerges as a significantly greater obstacle to economic development than lack of physical assets.¹³⁴⁹

E3 Organisation \Leftrightarrow specialist knowledge.

If there should be disorganisation, and hence a reduction in specialisation, some of that education and specialist knowledge will be lost. Very severe disorganisation can even cause a group to lose the knowledge of its writing.

Wealth

In the example of Figure 14-1, the villages were left better off by specialising and exchanging. This is one of the oldest results of economics – the gains of trade – but still one that people find difficult to accept. Indeed, people often believe that

in some respects they are made worse off by trade. They argue for protectionism, for example, or complain about the threat of cheap labour abroad. The debate between advocates of free trade and its opponents has a long history and has swung backwards and forwards over the years.

If one considers the theory, the arguments are straightforward and unequivocal. A pair of actors can always do better if each specialises in the activity in which it has a comparative advantage, and then they exchange what they produce. To have a comparative advantage in an activity, an actor does not need to be more efficient than the other actor at the activity (that would be an absolute advantage). All that is required is that the differential efficiency between alternative activities is greater for one actor than it is for the other actor. For a full account of this, the reader is referred to a suitable economics textbook. However, the following two examples will convey the general idea.

Assume in these examples that both villages value pots just as much as shirts and therefore that they want to end up with the same number of each. (If some other scale of preferences were assumed, the same results would apply but the derivation would be more complicated.)

Example 1 (Absolute advantage)

Suppose that village A is better at making shirts and village B is better at making pots. In particular, suppose that in a full week's effort village A can produce either 20 pots or 30 shirts, while village B can produce either 30 pots or 20 shirts. If the villages do not trade, then the best each one can do is to allocate 40 percent of its time to the activity it is better at and 60 percent of its time to the activity it is worse at. In this way, they end up with 12 shirts and 12 pots apiece at the end of a week's work. See the following table.

Village	Pots per week	Shirts per week	Time on pots	Time on shirts	Total pots	Total shirts
A	20	30	60%	40%	12	12
B	30	20	40%	60%	12	12

If the villages agree to trade, however, they can do better than this. Firstly, each village needs to specialise in the activity it is better at. This means that A ends up with 30 shirts and no pots, while B ends up with 30 pots and no shirts (see the following table). A can then trade half of its shirts for half of B's pots, so that both villages end up with 15 shirts and 15 pots apiece. Each village is 3 shirts and 3 pots better off than it would have otherwise been. These are the gains of trade.

Village	Pots per week	Shirts per week	Time on pots	Time on shirts	Total pots	Total shirts
A	20	30	0%	100%	0	30
B	30	20	100%	0%	30	0

Note that, if village A had good negotiating skills, it might persuade village B to accept, say, 14 shirts in return for 16 pots. B would still be better off that way, showing that trade can bring advantages without necessarily being fair in any absolute sense.

Example 2 (Comparative advantage)

Suppose that village A can produce 20 pots or 30 shirts per week, as before, but village B can only produce 8 pots or 24 shirts. If the villages are self-sufficient, then A can again have 12 pots and 12 shirts for a week's effort but B can only have 6 pots and 6 shirts.

Village	Pots per week	Shirts per week	Time on pots	Time on shirts	Total pots	Total shirts
A	20	30	60%	40%	12	12
B	8	24	75%	25%	6	6

In this case, A has an absolute advantage in both products. That is to say, A's villagers are better at making both pots and shirts. However, B has a comparative advantage in shirts. This is because it can produce three times as many shirts as pots in a week, while A can only produce one and a half times as many shirts as pots. It turns out that the two villages can produce the maximum total product by specialising, as shown in the following table.

Village	Pots per week	Shirts per week	Time on pots	Time on shirts	Total pots	Total shirts
A	20	30	100%	0%	20	0
B	8	24	12.5%	87.5%	1	21

Between them, the two villages now produce 21 pots and 21 shirts, compared to 18 shirts and 18 pots when they were self-sufficient. When they come to trade, A requires at least 12 shirts from B if it is to be no worse off than before, while B must not give away any more than 15 shirts if it is to be no worse off. Meanwhile, B requires at least 5 pots from A, while A must not give away any more than 8 pots. These various requirements leave scope for a possible trade. For instance, suppose that A gives B 6 pots in return for 13 shirts. A ends up with 14 pots and 13 shirts. B ends up with 7 pots and 8 shirts. Of course, B is worse off than A, but this is not unreasonable given that it is less productive all round. The fact is that both villages are better off than they would otherwise be, and hence they both have a motive to trade in this way.

That, at any rate, is the theory. However, practical considerations cast doubt on this optimistic picture. In the highly simplified situation of these examples, it was possible to find a mathematical solution that made both villages better off. Yet, in the real world, there are many different products and many different actors, while people's preferences between products vary in a complicated, unfathomable way. Furthermore, all

these factors are continually changing. The issues are so intricate that an optimal solution may never be found. The mathematician John von Neumann demonstrated that there may not even be an equilibrium situation in which every actor has found an optimal arrangement.¹³⁵⁰

According to the theory, it is wrong for a rich country to fear being undercut by cheap labour in other countries. It should simply let those other countries do what they are good at, while itself specialising in some other field. If one country can obtain, say, its televisions from a country where they are produced more cheaply, then in principle that country ought to be able to have more televisions than if it relied on its own efforts. However, the reality is that the first country's domestic television industry will decline and the relevant workers will need to seek other ways of using their time. In theory, they should simply migrate to some other industry where their country has a comparative advantage. In practice, however, it is by no means obvious what this industry should be. Somebody must spot the business opportunity and invest the necessary time and effort to get it off the ground. In the simple example above, it was possible to calculate precisely how much effort each actor should devote to each industry. In real life, it is not possible to do this. Anyone setting up a new business is taking a gamble – not solving a mathematical equation. The existence of large numbers of unemployed people in developed economies shows that finding the opportunities is not at all easy.

People's fears about competition from other countries are therefore justified, at least in the short run. Such competition could certainly change conditions for the worse, and it may take some time before new opportunities are successfully identified. Nevertheless, countries that have embraced international commerce have generally done better than those that have been more inward-looking. In 1960, dirt-poor Mauritius seemed to have few prospects as it approached independence. However, it made itself wide open to trade, with no import tariffs or limits on profits repatriation, and it now has a per capita income approaching that of Saudi Arabia.¹³⁵¹ Conversely, the formerly wealthy Latin American countries became highly protectionist during the 1930s and have suffered ever since. Chile liberalised again during the 1980s and has realised significant long term benefits.¹³⁵²

Ironically, while people in more developed countries fear the cheap labour of less developed ones, people in the less developed countries fear the greater efficiency of more developed ones, given the latter's sophisticated know-how and capital equipment. In support of this view, some economists have argued that the gains from trade apply only when the trading partners are at approximately equal levels of development. The

elementary theory, however, denies this. In the second example above, the great disparity between A and B did not stop them from realising gains through trade. In practice too, if the less developed countries suddenly cut themselves off from all international trade, they would surely be immediately worse off. Their populations would, for example, be denied pharmaceuticals, which their own industries do not have the capability to produce.

There is also a problem with the notion that trade maintains the long term disadvantage of poorer nations. For instance, it is believed that, with cheap pharmaceuticals available from overseas, less developed countries will never be able to develop their own pharmaceutical industries. However, this belief is ill-founded. The history of the economy within one country is one of changing fortunes. Businesses rise and fall. There are always new products, new firms and new industries. There is no reason in principle why less developed countries should not develop successful new enterprises. This is not to say that it is ever easy or obvious. However, the potential is there.

Nevertheless, it remains true that poor countries have not experienced international trade as the unequivocal good that theory suggests. This is not because there is a problem with a free trade policy itself. The explanation is the failure to achieve a successful set of specialisations and trades, and this failure arises because the optimal approach is far from obvious. A policy of free trade does not bring benefits in itself; it is how actors take advantage of the policy that is the crucial issue.

The fact that people in real life find it difficult to hit upon successful trading arrangements does not in any way deny the fact that the more they trade the better off they will be. The simple truth is that changes in the intensity of trade have been thoroughly well correlated with changes in people's material well-being. The economic growth of cities, for example, has been shown to be related to the diversity of sectors they support – in other words to the amount of trade within them. In medieval Europe, internal customs barriers, which inhibited trade in countries such as Spain and Germany, quite obviously ensured those countries' backwardness and rural poverty. A number of German states initially resisted customs union when it was introduced in the nineteenth century, but they were forced to re-think as their economies fell far behind.¹³⁵³ In post-Roman Britain, when people reverted to self-sufficiency, they were undoubtedly worse off in material terms. When the Ethiopian kingdom of Axum lost its trading partners in the tenth century, it declined and disappeared.¹³⁵⁴ Economic recessions are, quite simply, recessions in the volume of trade. During

the depression of the 1930s, there was a 60 percent fall in world trade in three years.¹³⁵⁵

Trade also brings benefits beyond those represented in the simple model. For one thing, it makes possible new combinations of resources, whereby the combination is greater than the sum of the parts. For example, Gabon has considerable reserves of manganese – an important steel-making ingredient – yet it lacks coal and iron ore. Gabon manganese must be transported overseas to other countries that use it to make steel, some of which is shipped back to Gabon.¹³⁵⁶

Furthermore, opportunities for trade can stimulate demand by introducing new goods and making people work harder to obtain them. There are also the potential benefits of specialisation. These include economies of scale, a greater variety and flux of ideas, and more in-depth technical knowledge. Such factors improve productivity and further raise the total quantity of goods available to a group of economic partners.

The overall conclusion must be that trade is unequivocally and intimately associated with material well-being. Any practical problems that arise in the real world are not due to too much trade or even too much opportunity for trade. They are due to inappropriate or inadequate trade.

Since a trading partnership is what this model calls an economic relationship, the intensity of trade is equivalent to the organisation of the group. When people are engaged in many and frequent trades, it means that they are consuming large quantities of goods and services. Alternatively, a group enjoying a high intensity of trade is one with a great variety of specialist products circulating at a considerable rate. These are both precisely the hallmarks of wealthy people or of a wealthy social group. This leads to the following proposition:

E4 Organisation \Leftrightarrow materially better off; or, equivalently, organisation is synonymous with wealth.

As usual, the proposition describes an ensemble, implying an inevitable association. Among the former communist countries of eastern Europe, there is a direct correlation between their amount of international trade and the prosperity of their population.¹³⁵⁷ The world's wealthiest nations also generate the largest volumes of trade. There is considerable trade between the United States and the European Union, and this is because the European Union and the United States are both wealthy. They have much to offer each other, in return for their respective exports. Conversely, there is a low volume of trade between the United States and the less developed countries because the latter have little to offer. Meanwhile, the fact that there is a high volume of trade between the United States and the European Union is a cause of their

being wealthy (for all the reasons discussed above and summarised in **E4**). Similarly, the fact that there is a low volume of trade with the less developed countries is a cause of their being less well off.

A crucial point is that an economic relationship involves a symmetrical exchange, so that, assuming fairness in the terms of trade, it cannot be strong in only one direction. If one partner is made better off to a large extent, so is the other. If one partner is made better off only to a small extent, so is the other. The low volume of trade between the United States and the less developed countries does not only imply the poverty of the latter, it also means that the United States is less well off than it could be. Clearly, if the less developed countries were actually highly productive and could offer all sorts of desirable products to the United States, while demanding exports from the United States in return, both regions would enjoy a higher standard of living.

World trade is therefore not a zero sum game. The poor countries are not poor because the rich countries are rich. It is certainly not in the interests of the rich countries that the poor countries should be poor. By the poverty of some, all are diminished.

E5 Organisation \Leftrightarrow everyone is better off.

The same applies within individual countries. The World Bank has shown that large income disparities are inimical to economic growth.¹³⁵⁸ Britain's north-south divide, for example, is demonstrably harmful to the economy.¹³⁵⁹ In Taiwan and South Korea, increasing prosperity has been associated with increasing equality in people's earnings.¹³⁶⁰

Organisation is a global property of an economy. Making and breaking economic relationships in one part of the economy changes the overall level of organisation, and this ultimately affects all the actors in the economy. This is why business cycles have long tended to be synchronised across national borders. In the eighteenth century, farm prices in rural Massachusetts varied with market fluctuations in London and Paris.¹³⁶¹ Changes in the ability of one country to form economic relationships are felt everywhere.

E4 states that organisation is equivalent to wealth. This is an extremely important point. Money, though often regarded as such, is not in itself wealth. Millionaires who keep all their money in the bank must live very poorly. They must work for their food and enjoy few conveniences. Their lifestyle is no different from that of genuinely poor people. What such millionaires have is not *actual* wealth but *potential* wealth.

Hence, money represents stored up or potential organisation. Money is a token that was

received when a good or service was supplied in the past, without any good or service being received in return. Later, the holder of the token can use it to procure a good or service without supplying anything in return. Money therefore makes possible an exchange in which there is a delay in reciprocation and in which the two halves of the exchange are not necessarily with the same economic actor.

A high level of organisation implies a high level of consumption of goods and services. It requires economic actors to have demands beyond the necessities of life. They must desire all sorts of exotic goods and fancy products, in order to support large numbers of specialist providers. In effect, for a high level of organisation, the members of a group must be disposed to what could be called self-indulgence. They must have a taste for material pleasures. Conversely, if the members of a group are highly ascetic, organisation will be at a low level. If nobody wants to spend any money, there will not be any opportunity to earn money. Therefore, no one will have any money. A general attitude of asceticism implies poverty.

E6 Wealth is associated with self-indulgence; asceticism is associated with poverty.

It is worth emphasising that the abstract theoretical ideas presented above should not be confused with the free market policies that many governments began to adopt in the 1980s, despite their superficial resemblance. In the real world, political and social forces act alongside economic ones so that exchanges are not necessarily voluntary or fair. Governments cannot and do not legislate for pure economic activity and it is dishonest to suggest that they might. For example, taxation regimes have been designed to advantage high earners, supposedly because of the importance of encouraging wealth creation, but the vaunted 'trickle-down' effect is actually denied by proposition **E5**. Economic ideas are often introduced in political discourse for rhetorical purposes only, and to justify policies that do not really create the conditions for genuine economic relationships but instead advantage particular interest groups. What makes sense in pure economic theory need not make sense when dealing with actual societies, where the economy is only one third of their make-up.

Connectedness

Organisation has been discussed so far in the context of pair-wise exchanges. However, significant levels of organisation actually involve long chains of economic relationships.

Consider a group of strangers. For the moment, assume that there is no money. Suppose that one actor is a barber who requires a pair of shoes. The barber finds a cobbler. Unfortunately,

the cobbler does not want a haircut at the moment. Since these are *strangers*, there is no possibility of credit – the barber might abscond. However, the cobbler does require a shirt. The barber finds a tailor. The tailor wants neither shoes nor a haircut but a dozen eggs. So the barber finds a poultry farmer. As it happens, the farmer does want a haircut. Therefore, all four actors get together. The barber gives a haircut to the farmer. The farmer gives the eggs to the tailor. The tailor gives a shirt to the cobbler. And the cobbler gives the barber some shoes.

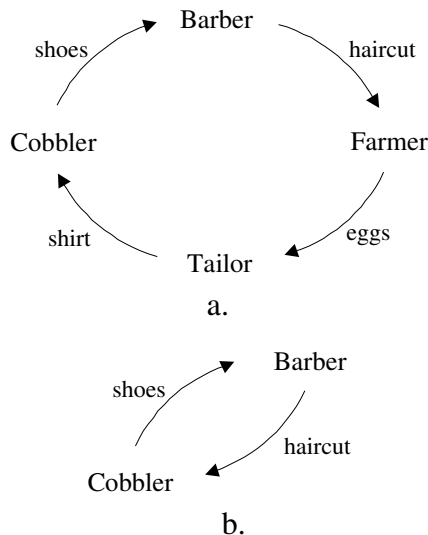


Figure 14-3: a. A closed loop of economic relationships; b. a minimal loop (exchange).

It should be clear from this example that the loop must always be closed. Every actor in the chain must receive as well as give. A simple barter, or pair-wise exchange, can be thought of as a minimal loop involving just two actors. See the following figure.

Introducing money into the picture creates the possibility of delays in the flow of goods and services. The barber goes to the cobbler for some shoes. The cobbler does not want a haircut, but accepts some money instead. The cobbler now commands some potential *organisation*. Later, the cobbler can return the money to the barber and receive a haircut. Crucially, the loop is still closed, although there is a delay in closure.

Suppose that the cobbler never requires haircuts. If there are only two members in the group, there can be no exchanges. The barber cannot give the cobbler any money for shoes because the barber never has the chance to earn money. Notice that the money is only potential *organisation* and does not in itself do the cobbler any good. If the cobbler were prepared to keep accepting tokens from the barber in return for shoes, the cobbler would simply be working hard to keep the barber supplied with shoes while not receiving any benefit.

Now suppose that, as in Figure 14-3a, the group includes a tailor and a farmer. Furthermore, suppose that the cobbler, who does not require haircuts, nevertheless purchases shirts, the tailor purchases eggs, and the farmer purchases haircuts. Then it is possible for the various exchanges to take place, without having to get everyone together at the same time. The cobbler can now gain some benefit from money given by the barber. The cobbler's purchase of a shirt does not have to be simultaneous with the barber's purchase of shoes. Nevertheless, for the situation to be viable, it should be clear that the loop must still be closed.

E7 Organisation implies the connectedness of actors in lengthy chains of dependency. To be viable, these chains must form closed loops, with a continuous (i.e. uncut) circulation of goods and services around the loop.

Of course, in real economies with high levels of organisation, one does not find simple loops like the above. The chains of economic relationships branch. In general, each actor is receiving goods and services from many other actors, and supplying goods and services to many other actors. The following figure shows firstly the basic concept of branching, and then some further level of complexity.

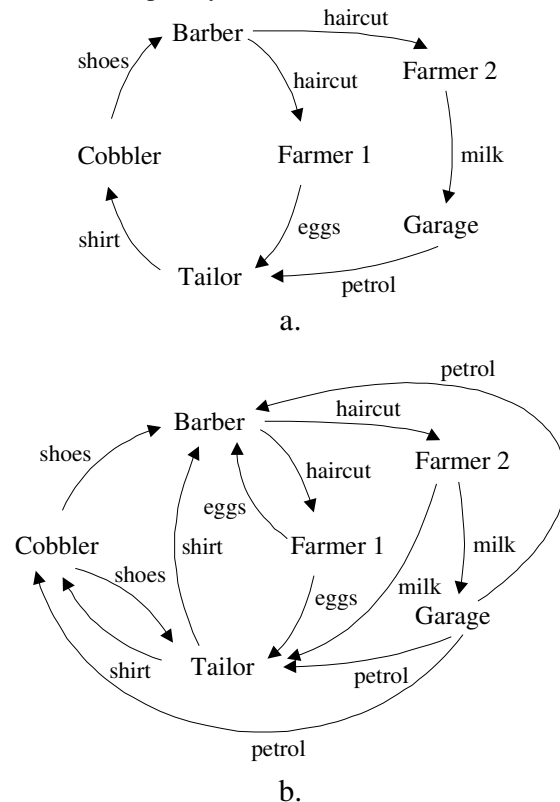


Figure 14-4: a. Branching; b. Further complexity of organisation.

Figure 14-4b is still highly simplified, of course, compared to the convoluted network of

relationships in a real economy. Nevertheless, the same basic point still applies. Loops of organisation must be closed. The incoming flow of goods and services to any actor must be balanced, on average and in the long run, by a corresponding outgoing flow. Strictly speaking, it is the values of these goods and services that must be balanced, where the values represent how many haircuts a pair of shoes is worth and so on. In Figure 14-4b, the money coming in to the barber for the two haircuts that the barber provides must be exactly the right amount to pay for the shoes, shirt, eggs and petrol. As a further complication, the relative values may not be fixed. However, while all these issues are important in their own right, they do not alter the fundamental points being made here. Also, notice that the discussion is currently about what is required for a given level of organisation to be successfully maintained. The possibility of loops not being closed and of flows not exactly balancing will be considered below.

A given actor in the economy may be thought of as a point where loops of economic organisation start and finish. The loops thread through the actor. An actor, such as a business firm or a country, succeeds economically to the extent that these loops are closed. If the loops fail to close, the actor takes a step in the direction of self-sufficiency and is worse off. Around the loops, there is a circulation of goods and services. This circulation may be thought of as an eddy associated with the economic actor.¹³⁶² Although it is convenient to have this picture of a number of simple loops, the network of relationships is actually very complicated (as Figure 14-4b is intended to show).

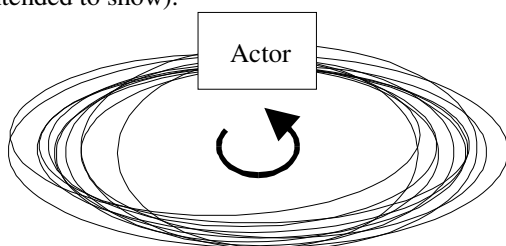


Figure 14-5: An eddy consisting of loops of organisation threading through an economic actor.

An economic actor with many loops of organisation threading through it is wealthy (E4). There is a large demand for its goods or services and it is able to consume large amounts of other actors' goods and services. Since this model applies to actors at all levels (TC1), not only is there an eddy associated with, say, an individual firm, but also there are eddies associated with the industry or town in which that firm is located. The

individual firm's eddy is contained within the larger eddies of the relevant industry or town. Thus, eddies are arranged hierarchically – eddies within eddies.

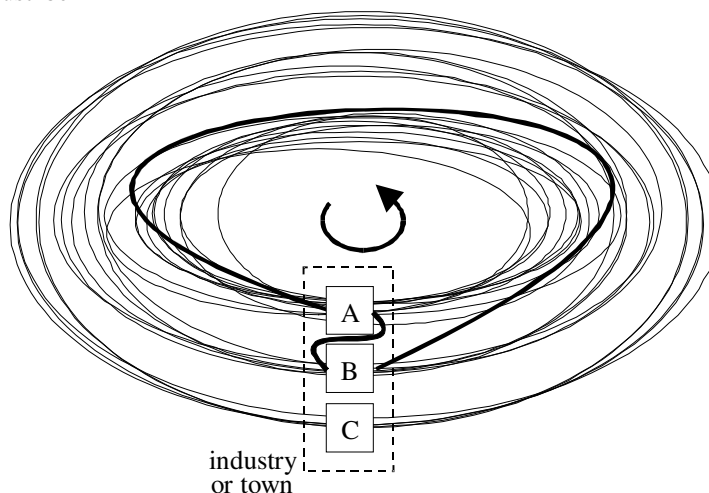


Figure 14-6: Eddies form hierarchies. Here a thread of organisation leaving a given firm within an industry/town returns to another firm in that industry/town but is closed by an economic relationship between the firms concerned. Viewed at the level of the industry/town, loops are closed just as for the individual firm.

It is commonly taken for granted that exporting is somehow good and importing is bad.¹³⁶³ The above discussion, however, indicates that this view does not make sense. On average and in the long run, an economic actor can only export to the extent that it imports. A net exporter is like the cobbler who does not want any haircuts and so prevents the barber from buying shoes. Net importing and net exporting, which are two sides of the same coin, are as bad as each other, both threatening the viability of economic relationships.

Having said this, a logical reason for having export drives is to make it possible to import. An economic actor that idly failed to promote its products would be unable to participate in the economy, would veer towards self-sufficiency, and would therefore miss out on the benefits of organisation (E4). However, to export without importing is only to put other actors in the position that one is oneself trying to avoid. In the long run, such an unbalanced relationship is likely to break down and that will be to the detriment of both importer and exporter (E5). If anything, the net importer will come out ahead, having at least acquired material benefits from the relationship, while the exporter acquired money claims that will never be cashed in.

Nevertheless, whatever the logic of organisation, the preference for exporting is a prevalent fact, and it is based on very understandable reasoning. This is that economic

actors have a liking for holding potential claims rather than being subject to the potential claims of others. Typically, economic actors, whether individuals or whole countries, prefer to be in credit rather than in debt, i.e. to earn (export) more than they spend (import). This reflects the fact that the more one is obliged to other actors, the more disadvantaged one is in one's dealings with them. For example, a net importer is likely to find its currency slipping on the foreign exchanges; it must bid more and more to get the same services from its trading partners.

This preference for holding credits is in fact part of a much wider aversion to economic dependency. That is to say, reliance on trade makes actors vulnerable to the decisions of others beyond their control. In the example of Figure 14-1, by trading with village B rather than manufacturing its own pots, village A becomes in some ways beholden to the other. Economic actors, individuals as well as countries, have often hankered after self-sufficiency or autarky.

Overall, therefore, economic actors have a perennial suspicion of organisation. In reality, there may be a bias in favour of the formation of organisation, but in perceptions there is a bias against it. This represents a permanent threat to the organisation that has already been achieved. It can be expressed as a fundamental contradiction in the logic of organisation.

E8 People value the material benefits of organisation, but they dislike the situation of dependency that it involves. They have a bias in favour of exporting or holding potential claims, which threatens the viability of economic relationships.

Creating organisation

A firm is associated with an eddy of economic organisation. An entrepreneur who sets up a firm is attempting to establish such an eddy. If the firm flourishes one may conclude that the eddy was successfully established. In the industrial revolution, British entrepreneurs constructed a highly profitable cotton industry even though the country grows no cotton. They became prosperous because they conjured into existence economic relationships around the world and not because they possessed any original endowment of raw materials.¹³⁶⁴ Thus, an entrepreneur is somebody who creates economic organisation. Since organisation is wealth (E4), an entrepreneur is a creator of wealth. The people that work in the firm's factory may produce cars or washing machines, but they do not produce wealth. It is the entrepreneur, making economic relationships where there were none before, who produces the wealth.

Suppose that somebody writes a book. That has taken a considerable effort and no doubt the

person deserves some reward. Yet so long as the book is no more than a manuscript on the writer's desk, the writer stands no chance of seeing any such reward. It takes the entrepreneurial publisher – who is prepared to spend money in having the book printed, distributing it to booksellers, and bringing it to the attention of the public – to translate the writer's efforts into income.

In Marxist theory, the entrepreneur is merely an exploiter who grows wealthy from the labour of others.¹³⁶⁵ However, what an entrepreneur does actually requires initiative, risk-taking and effort. Without the publisher's intervention, for example, writers would have to support themselves in some other way – and the writer's audience would be deprived of the pleasure of reading the book. Entrepreneurs take a portion of the wealth that they create through their own efforts – a reward without which there would be no incentive for entrepreneurship at all. Furthermore, the organisation created by the entrepreneur means that everybody is better off in consequence (E5). Of course, the entrepreneur tends to benefit the most because the entrepreneur has economic relationships with many other actors (every worker in the firm, every customer that buys the firm's product) whereas these other actors only have the one relationship with the entrepreneur.

Exploitation is not an economic phenomenon. It is a political phenomenon, as when racketeers demand money with menaces. The point is that the nineteenth century mill owners who concerned Marx had political as well as economic relationships with their factory hands. Marx was correct about exploitation, but his analysis of the problem was wrong. The pure entrepreneur is someone who seeks to establish co-operative relationships for mutual benefit and is not a ruthless exploiter. This must be so because economic relationships are voluntary and, for example, workers do not have to join the firm unless the terms are to their benefit. Of course, it is crucial to appreciate the distinction between this abstract principle and the actual relationships between employees and employers, which are not just economic but typically involve political and indeed social relationships.

In Figure 14-3a, if the farmer stops accepting haircuts, the whole loop of economic relationships falls apart. One consequence is that the tailor can no longer afford the farmer's eggs. Hence, the farmer is no longer receiving an income to spend on haircuts anyway. Even if the farmer now wants a haircut, there is no money to pay for it. It is a Catch-22 situation. The farmer cannot buy a haircut because the tailor cannot buy the eggs because the cobbler cannot buy the shirt because the barber cannot buy the shoes because the farmer cannot buy a haircut. This is the problem that bothered the economist J M Keynes during the great depression

of the 1930s.¹³⁶⁶ How can economic organisation ever get started?

Clearly, some actor needs to jolt the eddy of organisation into motion by issuing tokens without yet having earned them. In the real world, it is the government that initially issues tokens (i.e. money). Hence, Keynes's solution to the depression was that the government should start spending money on goods and services. The economy would then be able to lift itself up by its own bootstraps and get back to a situation of high levels of organisation, with strong circulation around large, multi-stranded eddies. Indeed, the government is not the only source of money. Financial institutions can also issue money in the form of credit. Thus, easy credit tends to stimulate booms in the economy, and, when the banks make credit hard to obtain, booms turn into recessions. Controlling interest rates, which make credit more or less desirable, is therefore regarded as a way to control activity in the economy.¹³⁶⁷

The need for spending to get the economy moving may seem obvious. However, many governments responded to the great depression with austerity measures – precisely the opposite of the formula recommended by Keynes. Furthermore, while Keynesian methods seemed to work admirably well when they were adopted after the second world war, it steadily became clear that the situation is more complicated. During the 1970s, observers saw that injection of money into the economy was encouraging only inflation and not economic growth.¹³⁶⁸ The new money did not stimulate people to form new economic eddies. All that happened was that a larger number of tokens circulated around the same eddies, with more tokens changing hands at each transaction. By the 1980s, therefore, a number of governments had come to embrace the alternative monetarist theory, which placed emphasis on controlling inflation by restricting the supply of money. Inflation came under control, but there is little reason to think that governments had thereby found the formula for engineering growth. A few years of boom were eventually followed by a reversal.

All this reiterates the importance of entrepreneurship for the creation of economic organisation. The government may generate opportunities but it still requires individual entrepreneurs to have business ideas and to take the risks for translating them into reality. It would be desirable, for example, if the people who are unemployed during a recession could be using their time productively. They might be making things, which they could then exchange with other people in order to obtain the things they desire, thus increasing organisation and making everybody better off. Yet this does not happen because nobody apparently can think of what to do with the available labour.

Many factors besides government spending influence the ability or willingness of potential entrepreneurs – information about potential opportunities, for example, and the incentives involved. Recognising this, governments have increasingly come to seek ways of encouraging entrepreneurship, by such means as training courses, business loans and tax concessions.

In fact, the creation of organisation does not just depend upon a few high-profile entrepreneurs. All actors around the loop of organisation must enter into the spirit of things, buying as well as selling. However, the bias in favour of exporting (E8) creates a perpetual background tendency for economic relationships to be broken up, for organisation to disappear, and for the economy to run down. Entrepreneurs are continually working against this tendency.

The bias in favour of exporting varies. The more confident people are that they will soon be able to obtain more money, the more willing they will be to spend the money that they have now – and this bias will diminish. *Confidence* – belief that the system is working and will continue to work, i.e. that eddies are strong and will remain strong – is crucial to the achievement of economic organisation. When confidence is high, entrepreneurs will have an easy time. When confidence crumbles, entrepreneurs may be overwhelmed.

Confidence involves expectations about future events. This means that it is a matter of belief rather than fact. In other words, confidence depends on perceptions rather than reality. The fickle nature of confidence is seen especially dramatically in the financial markets, the context in which George Soros developed his ideas about the interaction between perceptions and reality. In speculative bubbles, actors initially develop huge amounts of confidence. Prices rise, but people are so confident they will continue to rise that they commit large sums of money (quantities of potential organisation). Eventually, however, the suspicion grows that all good things must end. Confidence evaporates. Prices crash. Much potential organisation disappears, never to be converted back into actual organisation. There is a net loss of wealth and many people are hurt. That former confidence comes to look like sheer folly. Sobered by experience, people wonder how they could have believed in the unbelievable.

If there is high confidence and entrepreneurship, actors will specialise and exchange, there will be more organisation, they will experience the gains of trade, and they will be better off. If confidence and entrepreneurship diminish, they will revert to self-sufficiency, organisation will decrease, and they will be worse off. Fluctuations in confidence and

entrepreneurship cause fluctuations in organisation and wealth.

Confidence and entrepreneurship stand in relation to each other as perceptions to reality. They are joined in a Sorosian reflexive relationship. Confidence feeds on confidence, while entrepreneurship feeds on entrepreneurship. At the same time, confidence helps entrepreneurship be successful, and successful entrepreneurship generates confidence.

Meanwhile, however much confidence and entrepreneurship are available, there is a limit to the level of organisation that can be attained with a given set of goods and services. Once the optimal level of specialisation has been reached, there will be no more room for further gains from trade. Sustained creation of organisation, i.e. sustained growth in wealth, therefore requires some new factor. It requires innovation.

Innovations can vary from modest improvements in technique to the introduction of whole new goods and services. Some major innovations – such as the telephone or motor car – have spawned enormous industries, employing hundreds of thousands of people around the globe and markedly improving everyone's quality of life.¹³⁶⁹ They have brought about major increases in the level of organisation. Conversely, some commercial undertakings merely rearrange economic relationships instead of creating them. For instance, a study of one out-of-town shopping centre found that it diverted trade from surrounding town centres but did not generate any new trade.¹³⁷⁰ This is not true entrepreneurship, which requires innovation, new organisation and an overall improvement in economic wellbeing.

Entrepreneurship, confidence and innovation involve psychological factors that are beyond the understanding of the present model. Nobody really knows, for example, what makes successful entrepreneurs, what motivates them, or how they correctly judge human nature. Probably, there is no simple formula, and chance may be a significant factor. Similarly, nobody really knows what causes swings in people's confidence. It is not clear why optimism turns into out-of-control euphoria then to the glimmers of doubt and, all of a sudden, to despair. Nor does anyone know how to encourage the invention of future technologies when it is not clear what those technologies might be. The creative act is subconscious and still a mystery. It has proved very difficult to plan methodically for innovation. Despite the R&D budgets of the large corporations, a study by the Massachusetts Institute of Technology found that small businesses are responsible for 70 percent of innovations (a slightly suspect statistic, but the basic point is trustworthy).

One is left with a rather hazy appreciation of what leads to increasing organisation. There is no simple and obvious formula that can be used to

vary the level of entrepreneurship, confidence and innovation. Clearly, this has implications for governments that wish to encourage wealth creation. They can do things that they think will encourage the entrepreneurial spirit, that they estimate will generate public confidence, and that they believe will foster innovation. However, they cannot turn these factors up and down by administrative fiat. In that case, it is inevitable that government measures will, with the best of intentions, have only partial success – a conclusion that accords with experience.

E9 Entrepreneurship and confidence help to raise organisation to the maximum level possible given current know-how. Innovation increases know-how and hence the maximum possible level of organisation.

Ferment

Economic actors are connected by their economic relationships in lengthy chains of dependency. Hence, changes in one part of the economy have consequences that ramify into every other part. Events in distant lands, such as a bumper harvest, election results, or the outbreak of war or peace, have impacts that are felt in the high street and at the corner shop.

Similarly, innovations in one industry reverberate into other industries. The invention of the flying shuttle in the early eighteenth century greatly speeded up the weaving process but thereby increased the demand for yarn. The spinning industry was desperate for improvements of its own and, with prizes on offer, this led to the spinning jenny, followed by the water-frame and the spinning mule. Yet this meant that the weavers were now lagging behind, leading them to embrace the new technology of steam power.¹³⁷¹

Traditionally the discipline of economics has been concerned with equilibrium, the situation in which prices are such that supply and demand balance throughout the economy, and all markets clear. However, it is increasingly appreciated that a real economy is actually far from equilibrium. On short, medium and long time-scales there is an ever-shifting scene of variable demand and supply. In other words, the economy is in a state of continual ferment, and this is not only because of external shocks but also simply as it adjusts to its own adjustments. (The same applies to politics and society, but not in such an intense manner. Political and social relationships form and break rather more slowly.)

The eddies that thread through actors in the economy are never stable. They are subject to a perennial tendency to dissipate because of the bias in favour of exports. A background level of entrepreneurship is needed to counteract this tendency, creating new chains of economic

relationships that can be drawn into the flow through each actor.

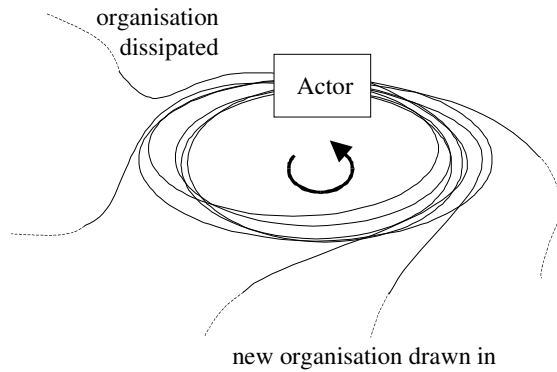


Figure 14-7: Eddies tend to dissipate; a continual background of entrepreneurship is needed just to maintain the flow.

Having said this, economic actors can help to stabilise the flow by producing a pattern or image in the rest of the economy. Towns that have a hugely dominant firm, such as the Halifax bank in Halifax, are assured of a steady underlying level of demand in the local economy. All the sandwich shops and estate agents experience a reliable draw on their services. The big firm acts like a huge pump, keeping many closed loops of organisation in circulation, absorbing the inevitable fluctuations in supply and demand to ensure a consistent and predictable flow. Common markets have proved most successful where one nation is a clear economic leader.¹³⁷² Actors associated with large eddies provide a relatively predictable environment of economic relationships within which other actors may operate. This generates confidence and helps entrepreneurship. The larger the actor, the greater the pattern it produces in the rest of the economy, and the better it can stabilise the flow.

In discussing loops of organisation and the need for closure, the phrase 'on average, in the long run' was used. This is because delays occur round the loop as particular actors hold on to money for a while, perhaps saving up for a car, for example. These hiccups mean that in the short run the return flow may not balance the outgoing flow. Clearly, such hiccups have a proportionately more significant effect when they occur within small eddies. They produce a greater relative imbalance between income and outgo and are more likely to lead to economic failure. Small towns and villages are more likely to disappear than cities. Similarly, size is a strong predictor of the likelihood of failure of a retail outlet. At the same time, retail failure also varies with the general vigour and size of the local economy. This illustrates both the ability of other actors to stabilise the flow and the need for a background of entrepreneurship.

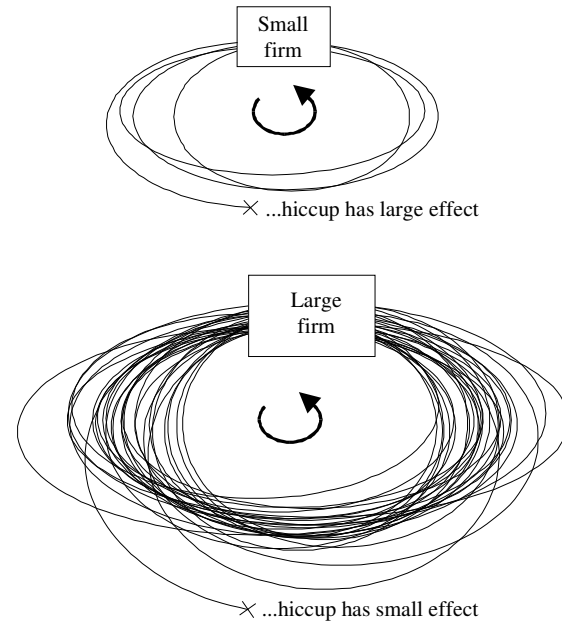


Figure 14-8 Large eddies persist for longer since temporary interruptions in the flow are less likely to lead to economic failure.

The fact that eddies stabilise the flow for each other can also be viewed in a negative light in that, when an eddy fails, it jeopardises other eddies. The problem is that there is positive feedback between different eddies precisely because of the economy's connectedness. For instance, falling demand for the services of the road transport industry reduces the road transport industry's demand for new trucks from the truck manufacturing industry. However, falling demand for new trucks reduces the truck manufacturing industry's demand for the services of the road transport industry, thus amplifying the original problem. Since the road transport industry is a large industry, it may be able to weather a small fluctuation, maintaining its fleet refreshment rate in the expectation of a recovery of demand in the near future. However, in general, positive feedback leads to instability. Small fluctuations tend to become amplified. In this way, it is possible even for large firms to disappear on long enough timescales.

Thus, an economy is in a metastable state. Its size and complexity give it some resistance to shocks and hiccups. Often, reverberations are absorbed and die out. However, reverberations may sometimes become amplified and lead to catastrophic failure. Although large economic actors may appear to be immune over short timescales, over longer ones they become vulnerable to rare concatenations of events that can cause even them to fail. When these large economic actors fail or falter, there will be much collateral damage as the viability is compromised of all the smaller eddies and sub-eddies that are dependent on them.

Chapter 15 - Social cohesion

Shared values

The cohesion of a group refers to the number and strength of its social relationships. To describe the absence or loss of social relationships, it will be useful to invent a word – dis-cohesion.

A social relationship is one in which the actors agree on goals, on the means to attain those goals, and on the need to work co-operatively towards them (TC2). Another way of putting this is to say that a social relationship implies shared values, attitudes and beliefs, or a shared ethos. The Romans encouraged people in conquered territories to adopt Roman customs and a Roman outlook on life, for in this way they came to adopt and support the empire's goals.¹³⁷³

Behaviour that conforms to a person's values, attitudes and beliefs is seen as *moral* behaviour, from that person's perspective. Behaviour that contradicts those values, attitudes and beliefs appears as *immoral*. In a cohesive group, i.e. one characterised by many, strong social relationships, individuals tend to share values, attitudes and beliefs, and so they find each other's behaviour to be moral. In a dis-cohesive group, people follow many disparate mores and lifestyles. There is much immoral behaviour from the standpoint of any given person, and the group as a whole may be characterised as amoral.

S1 Cohesion \Leftrightarrow shared values, attitudes and beliefs, and the existence of a strong moral way.

Values, attitudes and beliefs cover more than just ethics. Typically, they include rules of fashion, taste, manners and technique (e.g. how to make a stone axe)¹³⁷⁴. These rules differ from the laws established by political authorities in that they are not necessarily explicit. They also tend to be unenforceable and are often of an arbitrary nature. They are concerned with what makes a good or bad person rather than with explicitly solving the problems of group living.

For example, cadets at the United States Coast Guard Academy are subject to two sets of rules: the regulations and the traditions. The regulations are political rules and they generally make sense as ensuring the smooth functioning of the community. The traditions, however, are social rules. They are mostly arbitrary yet enormous emphasis is placed on them. The whole experience of the academy is intended to erode the individuality of recruits and reorient them to the goals of the coast guard. They are not allowed to discuss family background. They are all made to wear the same uniform. They are encouraged to develop stereotyped attitudes towards outsiders. The

outcome is a high degree of loyalty to each other and to their organisation.¹³⁷⁵

Cohesion is inherently conservative. Idiosyncrasy and variation are threatening to social relationships and are discouraged. The physicist Per Bak describes how he once asked some cosmologists why their discipline is so conservative. They replied that it was because so little is known that virtually any kind of belief is possible; a conservative commitment to orthodoxy is the only realistic way to bind the discipline together.¹³⁷⁶

S2 Cohesion \Leftrightarrow conservatism.

Social rules can take on different forms in application to the different members of a group. For instance, men may be expected to behave differently from women, and young people differently from old people. Nevertheless, all members of the group share the same view of what is correct behaviour for each particular category of actor.

The inculcation of stereotyped values, attitudes and beliefs is generally a deliberate process. Children are effectively indoctrinated into the ways of the group to which they have been born, just as cadets are indoctrinated in the US Coast Guard. Such indoctrination is lifelong. People who consider themselves members of the same society continually monitor and correct each other, actively maintaining adherence to group norms. Conformity can be oppressive. Self-control has costs for the individual, and the desire for self-expression is always working against the preservation of cohesion. Hence, cohesion requires active maintenance.

S3 Cohesion \Leftrightarrow active maintenance.

Values, attitudes and beliefs are not visible in themselves, but they are often translated into tangible outward symbols, such as flags, clothing, and bodily ornament. In wearing a turban, say, a Sikh man announces his adherence to Sikh values and his solidarity with other Sikhs. Every time people choose what to wear – e.g. between a business suit and a tee-shirt – they are making statements about what they believe and to which groups they consider themselves to belong. When different rules of behaviour apply to different types of person this may be shown by means of so-called status symbols. Sumptuary laws, which indicate who can wear what kind of clothing, have been adopted by societies as diverse as the Incas, pharaonic Egypt, India and ancient Ireland.¹³⁷⁷

Arguments about the treatment of flags often stand in for arguments about cultural and moral issues. In Northern Ireland, the Flags and Emblems Act prohibits the opposing communities from parading symbols that could upset the other's

sensibilities.¹³⁷⁸ The national flags of the Ukraine and the Baltic states were banned in the Soviet Union, but re-emerged in 1989 as a focus for restored national consciousness.¹³⁷⁹ Many American states banned the display of red flags after the first world war.¹³⁸⁰ In India recently a designer found herself in trouble for making a dress out of the national flag.¹³⁸¹

Art may be understood as a particularly important visual representation of a group's ethos. When *cohesion* is strong, art gives expression to common values and a sense of shared purpose. On the other hand, when faith in a strong set of core values is eroded, there is a dwindling commitment to represent and reproduce those values. Art comes to rely on cheap materials and hasty execution. Instead of celebrating the group, artists celebrate and advertise themselves.

Language is another way of signalling affiliation to a group and endorsement of its values, attitudes and beliefs. This involves not only different tongues but also accents and dialects within the same tongue, or even professional jargons. People choose their vocabulary and their way of speaking so as to display a bond with another person, or to emphasise their claims to a particular status. This is not a trivial issue. Language has been a focus for conflicts about national identity in some parts of post-communist eastern Europe, for example, and has contributed to instability there.¹³⁸²

S4 Values, attitudes and beliefs are expressed concretely via symbols – usually visual and linguistic ones.

Turning values, attitudes and beliefs into visual or linguistic symbols has the important effect of reducing ambiguity. It helps the members of a group to identify and recognise each other. Lawyers who talked and dressed like farmers would have difficulty communicating with their colleagues.¹³⁸³ The latter would justifiably assume that these surface details reflected a failure to share more important assumptions.

Religion

Religion is the locus par excellence of *social relationships* and *social cohesion*. The word itself derives from the same root as 'ligature' and has the meaning of binding people together.¹³⁸⁴ The earliest human structures were often temples, and certainly no human society has been without its characteristic religion. Religious ideas tend to reflect and affirm social arrangements. They function like the traditions of the US Coast Guard Academy, giving people a sense of identity through what they hold to be true. People are born to a religion much as they are born to a language. For the most part, they stick with it. The priests who complain about church services being treated as social occasions, as at christenings and weddings, are misguided. When was church not a social

occasion? It may deal with other-worldly things, but religion is also about creating and maintaining relationships among people in the here and now.

A strong sense of religiosity and high *social cohesion* go virtually hand in hand. A very religious society tends to be a conservative one (**S2**). People who live in smaller communities, where they have strong *social relationships* with their neighbours, tend to be more religious (in a social sense, not necessarily a spiritual one). In the localised communities of medieval Europe, church attendance was compulsory and helped to sustain overall conformity (**S1, S3**). Conversely, increasing urbanism, which has loosened *social ties*, has been associated with a decline in the church's hold over people.

Religions that are effective in binding people together place considerable importance on non-negotiable creeds and orthodoxies. People must accept the relevant values, attitudes and beliefs wholesale, so that their outlook is aligned with that of fellow worshippers. The sense of religious duty can be a powerful mechanism of social control. As one writer has noted, Methodism did far more to restrain drunkenness than any licensing laws.¹³⁸⁵

S5 Religion is an important locus of *cohesion*.

The social functions of organised religion should be distinguished from its spiritual functions. Thus, religious ideas can also help to satisfy personal psychological needs, such as for a meaning to life. Not surprisingly, religion appeals strongly to people, including prisoners and the sick, whose sense of meaning is particularly challenged. The philosopher Henri Bergson suggested that religion alleviates the disparity between human aspirations and achievements.¹³⁸⁶ Some research suggests that religious believers tend to be healthier and happier than other people.¹³⁸⁷ A spiritual orientation to the universe can also be regarded as arising from certain natural biases in human styles of thinking. People tend to view the world in interactional terms, acting as though some consciousness lies behind events¹³⁸⁸ (as when they plead with a car to start, for example). They also have an in-built sense of immanent justice – the mode of thinking that is revealed when people ask 'what have I done to deserve this?'.¹³⁸⁹

Spiritual interests help people to deal with the uncanny. Those who regularly encounter danger, such as mariners and miners, tend to show greater attention to religion or quasi-religious notions (e.g. superstitions). Activities that are fraught with danger and uncertainty have their characteristic rituals and counter-factual beliefs. In Melanesia, for example, trading expeditions are surrounded by all sorts of taboos.¹³⁹⁰ Simple religions often involve divinatory practices or rituals, such as rain dances, which help people to cope with risk. One should not underestimate the sophistication of the

thinking that lies behind these rituals. Rain dancers do not literally believe that the dance can cause rainfall any more than people who say prayers necessarily believe that prayers produce a direct magical effect.

The spiritual functions of religion remain important to people even when cohesion is being lost and traditional faiths are being wound down and abandoned. This is why declining societies see a proliferation of new religions to replace the religion that is no longer shared. If anything, the disorientation that many people feel as the old certainties are broken down increases their need for religious certainty. When a civilisation is ending, millenarianism, implying a belief that the world itself is coming to an end, is a particularly characteristic reaction. The lack of cohesion, though, is reflected in a fragmentation of faith, ranging from the most austere ethical systems to movements dealing with all kinds of low-grade supernatural phenomena – magic, psychic powers and so on. With their many private, perhaps secret rituals, these multiple religions of a dis cohesive society do not bind people together and fail to affirm a common heritage and shared interests.

A common response to perceived threats to cohesion is a call to renew the traditional religion. Various Islamic movements can be understood in this light. When a society begins to regain cohesion after the dislocations of a dark age, this is reflected in the re-emergence of a monolithic faith. As Arnold Toynbee has put it in his theory of history, when a civilisation has been destroyed, a new universal church is born from the time of troubles.¹³⁹¹

Legitimacy

Cohesion creates legitimacy. That is to say, by sharing values, attitudes and beliefs, people reassure each other that their goals are valid and worthwhile. Social relationships legitimise people's motivations and behaviours.

S6 Cohesion ⇔ legitimacy.

Feelings of legitimacy are an important human need. People seek a picture of the world in which there is underlying order and life has some meaning.¹³⁹² Psychological experiments have shown that cohesive groups produce greater personal security and more positive self-evaluation among their members. In Israel, where immigrants come from all over the world, people cluster naturally into their various ethnic groups. Individuals apparently prefer to live with their own kind, as a source of reassurance and to avoid any unpleasantness or enmity.¹³⁹³ When legitimacy is being destroyed, in the course of revolutions or social collapse, people show symptoms of personal psychological crisis and embrace fatalism, for example, or extreme asceticism.

The urge to form social relationships is stronger among humans than among other primates. In the genus *Homo*, the parts of the brain associated with pleasure and friendliness are increased in size relative to those for aggression.¹³⁹⁴ Adam Smith argued that people associate with their fellows out of compulsion and not merely because it is convenient to do so. Humans have a bias towards co-operative living. Making up social rules, so distinguishing between legitimate and illegitimate conduct, seems to be deep-seated and instinctive. Children do it all the time during play, while people are continually setting up clubs, societies and associations, with their membership regulations, dress codes and preferred topics of conversation. The never-ending supply of recruits for bizarre, self-denying cults, and the willingness in some cases to pursue the group's goals to the point of suicide, demonstrates the power of this thirst for legitimacy.

S7 Society (connectedness in a network of social relationships) is a major psychological need.

The need for social relationships arises because they have adaptive value. That is to say, legitimacy and cohesion help people to live together with less friction. There is reduced scope for misunderstanding or needless conflict. Legitimisation of the relationship between a ruler and subordinates avoids the need for dominance to be continually reimposed – something that would be exhausting for everyone. Similarly, rules of sexual conduct help to minimise opportunities for sexual jealousy. Conversely, sexual licence is associated with dis cohesion and is often a salient characteristic of amorality.¹³⁹⁵ This is not to say, however, that all social rules are to be understood in evolutionary terms. The capacity to make rules is adaptive, not the rules themselves.

Psychological needs vary between individuals. Some people have a very strong need for legitimacy and predictability. Others are better able to cope with challenges to their prejudices, and seek variety rather than security. Such differences produce creative tension within a group. Innovators develop new values, attitudes and beliefs, and these may then become legitimised and adopted by the group at large. Within any sizeable group, values, attitudes and beliefs can never be entirely homogeneous. There is a variation in commitment to the group's goals, and some actors will have accepted new ideas before others have abandoned old ones.

Religion is an important source of legitimacy (**S5**, **S6**). Religious concepts reflect and validate social arrangements. For instance, the Indian caste system is enshrined in Hindu religion, so that even those who are apparently most disadvantaged by this institution actually accept and affirm the

principles on which it is founded. The Egyptian pantheon explicitly included a goddess Ma'at, symbolising truth and order, and representing the rightness of the existing social structure.¹³⁹⁶ Objections to illegitimate uses of royal power were often phrased as requests for the pharaoh to observe the cults of provincial deities, so that social disputes were re-cast as religious ones.

Political authorities have a particular need to establish legitimacy, given the apparently exploitative nature of their activities. They often appeal to religion for this purpose. Luther's Protestant reformation, for instance, was seized on by German princes to legitimise their political and military challenges to the pope. In many early civilisations, rulers actually claimed to have descended from the gods.¹³⁹⁷ Today, every United States dollar bill has on it the words ANNUIT COEPTIS ([God] has favoured our undertakings), while British coins have D.G.REG. (Queen by the grace of God) next to the Queen's portrait.

In a *discohesive* group, legitimacy is lost. One manifestation of this is the deflation of expertise, whereby great individuals and great achievements are no longer recognised or considered worthy of admiration.¹³⁹⁸ Attention is paid to heroes only to debunk them. Instead, it is ordinary individuals, representing only themselves, who are celebrated in art, literature, and the humanities.

Groups that are on the losing side of wars or sporting competitions experience a direct challenge to their legitimacy in that there is an implied failure of their traditional beliefs. This implies an initial tendency to *discohesion* and such groups become particularly likely to break up. However, if they overcome the crisis (for example, because there is nowhere else to go), the negative experiences of defeat can lead to a re-examination of group goals, to new legitimacies, and subsequently to increased *cohesion*.¹³⁹⁹

Pluralism

Social relationships are conservative (S2) and they require acceptance of a set of values, attitudes and beliefs (S1). People also take an active interest in ensuring each other's conformity (S3). It follows that individualists, who refuse to accept group norms, are in for a difficult time in *cohesive* communities. The Coast Guard cadet who denounces the traditions as worthless and unenlightened will naturally excite tremendous antipathy and be destined for a short career.

Serious challenges to people's cherished values, attitudes and beliefs constitute what psychologists call cognitive dissonance. They undermine the legitimacy of behaviour, and thus deny a fundamental psychological need (S7). Cognitive dissonance is an uncomfortable feeling, so people try to reduce it. In one psychological experiment, students were given the very tedious

job of sticking heads on pins, for which some were paid \$1 per hour and others were paid \$10 per hour. When the students were asked how they had enjoyed the work, the high-paid group complained about being bored but the low-paid group said it had been quite interesting. The high-paid students could rationalise their willingness to perform such a dull task by remembering that the pay was good. However, this self-justification was not available to the low-paid students, who could only reduce cognitive dissonance by telling themselves that the work was worth doing for its own sake.

The commonest way to reduce cognitive dissonance is to downgrade sources of discrepant information. When girls studying English literature were told that X disagreed with their evaluation of a poem, they experienced little confusion if X was another girl – they could dismiss the girl as being ignorant. However, when X was T S Eliot, they felt much more uncomfortable, for this strategy was no longer available.¹⁴⁰⁰

Members of other groups, with their different systems of values, represent a significant potential source of cognitive dissonance. People reduce this cognitive dissonance by downgrading these other groups and their members. In effect, group A tells itself that the failure of group B to legitimise group A's beliefs and behaviours is not significant, because group B is unimportant and its members' opinions are worthless. Many simple societies, for example, describe themselves simply as '*the people*', implying that members of other groups are not properly human.¹⁴⁰¹

Sometimes it is not possible for groups simply to ignore and devalue each other. They may be too intermingled or their goals may actively contradict one another – for example, if one group's holy site is another group's rubbish dump. Such circumstances lead to peculiarly bitter conflicts, in which groups struggle over differences of opinion concerning what the goals should be.¹⁴⁰² These struggles can be characterised as battles of right against right. As Lucretius noted, and as has been confirmed many times since, humans have done much evil to each other in the names of their religions.¹⁴⁰³

Strong *cohesion* is inevitably associated with xenophobia, i.e. negative attitudes towards other groups. The more *cohesive* a group is – in other words, the more conservative and the more strongly attached to its beliefs – the more it must devalue those who think differently. Conversely, pluralism, meaning acceptance of other groups and respect for their right to their own opinions, is associated with *discohesion*. Toleration and social cohesion are essentially opposites of each other.

S8 Religious and cultural toleration implies *discohesion*; *cohesion* implies intolerance and lack of self-criticism.

When dealing with other groups, people have a tendency to think in terms of stereotypes. This makes sense to the extent that members of a given group will share many values, attitudes and beliefs. It is also a strategy for coping with the fact that humans have a relatively limited capacity to process information. People can only deal simultaneously with about seven uni-dimensional judgements – i.e. differentiating a set of objects into about seven categories. More detailed evaluations must be done hierarchically, first separating data into major categories and then subdividing those categories one at a time.¹⁴⁰⁴ People therefore tend to pigeonhole members of other groups, lumping them together rather than recognising their idiosyncrasies and personal characteristics.

The phenomenon of racism derives from the tendency to stereotype, the tendency to downgrade members of other groups and the fact that visual and linguistic signals are taken to stand for values, attitudes and beliefs. Humans are attuned to these signals and they are prepared to jump to conclusions on the basis of them.

A biologist writing in the 1960s suggested that a Martian visitor would initially mistake ‘an Englishman, a Negro, and a Chinese’ for members of different species and would only later recognise their common humanity.¹⁴⁰⁵ This point, however, is utterly wrong. The differences between ethnic groups are objectively minute in comparison to the similarities. It is simply that humans are sensitive to the slight differences and filter out the gross commonalities, like the orientation and general proportions of human limbs in comparison to those of apes, dogs, horses etc. Town-dwellers looking at a field of sheep typically see just sheep. They do not notice that some have black faces and others have white faces, let alone spot the characteristics of particular breeds, though these things would be glaringly obvious to an experienced sheep farmer. In the same way, Martian visitors would immediately recognise humans to be members of a single species, and would very likely protest that all humans look alike – at least until their eyes became attuned.

Racism, therefore, and more generally xenophobia, can be considered as pathologies of human nature, which stem from traits that have proved useful in other contexts. Conservatism, the need for legitimacy, and visual signalling of group affiliation are all prerequisites for a cohesive, friction-free group, and they achieve this very well when groups are small and well separated. However, when groups with different traditions and different appearances (in clothing or physiology) live close together, the downside becomes evident. Those other groups are not considered fully human. Frequent interaction between people pursuing different ends by different means, and thinking

little of each other, then becomes fertile ground for conflict.

S9 Interaction without cohesion potentially leads to conflict.

Pluralism is not an obvious condition for social groups. It runs against some fundamentals of human psychology. In legitimising every form of behaviour, it legitimises none. When any religion is acceptable, they are all revealed as arbitrary. The members of a pluralist society do not agree on goals, or on how to achieve them. This cannot be helpful to the group’s effectiveness.

On the other hand, people have a capacity to put reason over emotion. Intellectually, they can perceive that toleration is preferable to conflict, that some of their own goals may be arbitrary and that it does not always matter if other people have a divergent outlook. Calls for greater understanding between human groups have a very long pedigree. Furthermore, pluralist societies have existed more or less successfully in the past and continue to exist today. Pluralism can be guaranteed by a strong political authority, capable of suppressing conflict (**P2**). It is also aided by strong economic ties, whose material advantages (**E4**) outweigh the discomfiture arising from failures of legitimacy. In other words, integration and/or organisation can make up for a lack of cohesion.

Nevertheless, when integration or organisation disappear, any degree of dis cohesion quickly becomes evident. When central authority evaporated in the Soviet Union, its various peoples emerged intact along with their demands for separate existence, despite seventy years of unity. A pluralist ethic, though reflecting the highest virtue, does not succeed in uniting people of different beliefs. Rather it maintains the social divisions between them. While these divisions are suppressed, they retain the potential for trouble. Truly unified nations – composed of one people, fully loyal to each other – are created by obliterating the identities of the various groups that make them up, never by preserving them.

Creating cohesion

Interaction without cohesion leads to conflict (**S9**) but, more optimistically, interaction also promotes cohesion. In Israel, for example, when Ashkenazim and Sephardim Jews live together in mixed neighbourhoods, they become more tolerant and less suspicious of each other.¹⁴⁰⁶ After the second world war, it was found that 90 percent of those white soldiers who had served in brigades without black troops were opposed to integration, but 90 percent of those who had served in brigades with black troops were in favour of continuing the arrangement.¹⁴⁰⁷ A study of tribal people has also shown that, while they regard their neighbours as lazy, dishonest, licentious and so on, they actually

get on better with them than with people further away.¹⁴⁰⁸

In one classic experiment, boys at a summer camp were divided into two groups, such that already existing friends (identified by an earlier questionnaire) were split up. Over the next ten days each group spent all its time together, performing group tasks and sleeping in the same bunk house, while being kept separate from the other group. By the end of this period, each group was highly cohesive. A new questionnaire revealed that the old friendships had been forgotten and new ones formed within the groups. As they had intended, the experiment's authors demonstrated that interaction could create cohesion where there was none before. It follows that the extent to which social arrangements permit interaction is related to a group's level of cohesion. Opportunities to participate in joint activities increase group solidarity. Decentralised arrangements, in which a group's members can interact freely with each other, turn out to produce the highest feelings of satisfaction and loyalty.¹⁴⁰⁹

It can be said, therefore, that cohesion derives from shared experiences.¹⁴¹⁰ This is one motivation for religious rituals, which promote feelings of fellowship by involving the congregation in a shared experience.¹⁴¹¹ The more intense a shared experience is, the better it is at promoting cohesion. Emotional, traumatic and difficult experiences do more for cohesion than casual, everyday ones. This may be why initiation rites in simple societies are often quite shocking and brutal, involving humiliation and bodily mutilation of the initiates. It is precisely because they are so traumatic that such practices succeed at jolting values, attitudes and beliefs into line with those of the group. The same principles are at work in the US Coast Guard Academy, where cadets are harried and browbeaten. The experience is by no means pleasant yet it produces intense feelings of pride and loyalty. There is awareness of a strong bond of mutual understanding, which cannot be shared with those who have not passed through the Academy. A similar explanation accounts for the fact that the death of a public figure can temporarily unite a nation; the shared shock reminds people that they have at least some values in common.

S10 Cohesion \Leftrightarrow interaction/shared experience, especially in traumatic circumstances.

In the first world war, the firing parties that shot condemned deserters were not told what they were about to do. The whole business was conducted in a rather shamefaced manner. The men were first assembled in a tent. At the appointed moment, they were told to pick up rifles and line up outside. The prisoner was brought out behind their backs. The men were then told that on the order

they should turn around, when they would see 'a target', they should shoot once at the target, and turn around again, after which they would be smartly marched off. No explanations were given afterwards.¹⁴¹² This procedure utterly eliminated any shared experience with the condemned man and therefore the possibility of establishing any kind of rapport (**S10**). It ensured that the firing party did its grim duty efficiently, and was also beneficial for its members' subsequent peace of mind.

The amount of interaction between the members of a group depends on its scale. When this is low, each person interacts with only a few others in a given time interval. Hence, any two members of the group have considerable interaction with each other and share many experiences. Cohesion will be high. In a group of high scale, by contrast, people have only fleeting interactions with a large number of other people. They can form only weak social relationships with each other. Cohesion will be low. An author writing in 1837 noted that people in large towns showed less kindly emotions towards each other than their counterparts in small towns or in the countryside.¹⁴¹³ One may greet strangers one meets on a country walk, but one must inevitably ignore the crowds on a walk down Oxford Street. The city can be a lonely place, isolating people and inhibiting their interactions.

Whereas integration and organisation both increase with scale, cohesion decreases.

S11 Cohesion \Leftrightarrow low scale.

The same conclusion derives from the proposition that cohesion requires active maintenance (**S3**). In a large group it is inherently more difficult to maintain consistent values, attitudes and beliefs across the entire population. High scale releases people from the moral pressures that are found in a small community. In the words of a German proverb, 'city air makes you free'. A long-duration study of an American community ('Hilltown') found that standards of conduct declined as it opened up to the outside world.¹⁴¹⁴ Increasing scale meant decreasing cohesion, less conservatism, and less respect between people for each other's values. Similarly, in a study of a Nigerian village it was found that very few of the younger women knew the traditional food restrictions applicable to pregnant women, yet all of the older women did.¹⁴¹⁵ As the village had opened up to the outside world, these traditional beliefs had become less important. Women were exposed to a greater variety of ideas and the number that any pair held in common had declined.

Improved communications (an element of scale) means a free flow of ideas, and this is inimical to the conservatism required for

cohesion. On the other hand, ignorance, implying a small intellectual community with narrow opinions, is helpful to cohesion. When the Bible was translated into vulgar languages, more priests understood it. They began developing their own opinions and this reduced the cohesion of the church.¹⁴¹⁶ Similarly, President Sukarno of Indonesia observed that television, films and other mass media had alerted the rural population to its poverty. This undermined the legitimacy of old habits, reducing the cohesion of the Indonesian people, and generating unrest.¹⁴¹⁷

While increased scale implies reduced intensity of interaction, it also means that interaction takes place with more people. Instead of there being several small societies, each held together by strong social relationships, there is a larger society, which is held together by weaker social relationships. The general level of cohesion is reduced, but the boundaries of the cohesive group are pushed outwards.

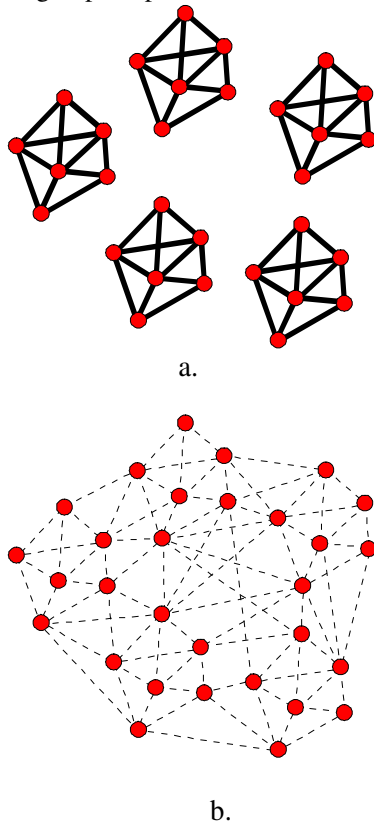


Figure 15-1: **a.** Poor communications, many small scale, local groups, each highly cohesive; **b.** Good communications, few large scale groups, less cohesive but encompassing more actors.

The larger a group is the weaker will be its sense of corporateness and fellow feeling. A larger group contains more potential for conflict. It is also poor at satisfying human needs for legitimacy. It may maintain itself by integration and organisation but, if these disappear, it is likely to revert to the condition of Figure 15-1a, i.e. break

into smaller, more cohesive groups that are possibly at war with each other.

Cohesion implies agreement on goals. It is strongly promoted when the fates of different actors are interdependent, since in that case their goals will necessarily be aligned. Interdependence of goals means that the actors are friends, so it can be said that cohesion is promoted among friends. A common source of goal interdependence is provided by external threats, which can only be resisted if the group works together. It is well known that a common enemy aids co-operation. Robert Ardrey has expressed this as the formula: Amity = Enmity + hazards, or $A=E+h$.¹⁴¹⁸ That is to say, both natural dangers and threats from other groups increase cohesion.

Propagandists wishing to promote cohesion have long recognised the value of identifying a clear external threat; being against something is an easier route to defining a group than being for something.¹⁴¹⁹ When a religion or movement is suppressed or discriminated against, its adherents tend to be more fervent. Crises such as wars and natural disasters cause people to sink their differences and collaborate more strongly. Rome's exposed position between the Etruscans and the Latins has been cited as a factor in the high cohesion of its people and their consequent ascendancy.¹⁴²⁰ Conversely, it has been suggested that peace in Europe after 1815 made possible the considerable social changes that took place in England during the nineteenth century.¹⁴²¹ In other words, the absence of a threat of war meant less cohesion, less conservatism (S2), and therefore the emergence of new values, attitudes and beliefs. Thaws in American-Soviet relations during the cold war were associated with loosening of their respective alliances.¹⁴²²

Ardrey's formula makes intuitive sense and is illustrated everywhere from ancient history to everyday experience. However, it is only part of the story. Threats will only increase cohesion so long as the benefits of co-operation (or the dangers of non-co-operation) are immediately obvious and outweigh any drawbacks. In general, the interdependence of goals can vary along a spectrum from the (co-operative) situation where A only receives the maximum reward if B also receives the maximum reward, to the (competitive) situation where A receives the maximum reward only if B receives no reward. Actors in the co-operative situation would be expected to agree on goals and to form a cohesive group, while those in the competitive situation would not be expected to do so. When such conditions have been created artificially in psychological experiments, these expectations have been fully confirmed.

S12 Cohesion is promoted by interdependence of goals; interdependence varies from fully co-operative to fully competitive situations.

A number of accounts of concentration camps have drawn attention to the lack of solidarity between the inmates.¹⁴²³ This has been attributed to the fact that survival was a zero-sum, competitive situation (for example, because there was only a fixed amount of food available). In this case, A and B had a common enemy, but A's survival jeopardised B's survival, and this ensured the absence of cohesion. It diminished the effectiveness of the inmates in resisting their captors. A similar situation occurred among the famine-stricken Ik and accounts for the extraordinary dis cohesion of their society, as described by Colin Turnbull. The anthropologist Raymond Firth also noted that co-operation on a Pacific island became restricted to the immediate family during times of famine. Respect for chiefs declined at the same time, implying a loss of their legitimacy (**S6**). In cases such as these, hazards or threats did not promote cohesion because they produced a competitive not co-operative situation. The same point explains why resentment over social security payments is found to increase during recessions, when taxpayers are themselves feeling the pinch.¹⁴²⁴

Group effectiveness

Is social cohesion good or bad for a group? It sounds like something that is desirable. Yet, on the other hand, it is associated with intolerance and some of the less noble human characteristics. In fact, the present analysis is not really concerned with value judgements. The above question should be interpreted as being about whether cohesion improves or impairs the effectiveness of a group. The answer, it turns out, is somewhat equivocal.

When people are part of a cohesive group, they regard themselves as conforming to the group's norms rather than merely to each other. The group is perceived to have an autonomous existence, transcending the individuals that make it up. The group's members conceptualise themselves as *belonging* to the group.

This autonomous existence of the group is not found among actors that are held together merely by political or economic relationships. For instance, OPEC is an organisation joining oil-producing nations to each other, i.e. to those with whom they have social relationships (shared goals). There is no equivalent organisation joining oil-producing nations to the countries with which they conduct trade, i.e. to those with whom they have economic relationships. The sense of belonging can be used to gauge the cohesion of a group. The cohesion of an empire, for example, is represented by the extent to which the colonies perceive themselves as belonging to the empire,

rather than merely being subjugated and ruled by the imperial power.

The autonomous existence of a cohesive group means that it takes on a life of its own. Bureaucracies and associations can often survive the disappearance of the original reasons for their existence. The International Monetary Fund, for example, has survived the collapse of the Bretton Woods agreement, which it was set up to manage.¹⁴²⁵

S13 Cohesive groups have an autonomous existence (unlike actors held together by political or economic relationships).

Conceptualising themselves as belonging to the group, and considering their goals to be aligned with it, members of a cohesive group are prepared to sacrifice their immediate self-interest for the overall good. There is a sense of service. People are selfless. In basic training, the United States Marines actually forbid the use of the first person singular 'I'.¹⁴²⁶ During the second world war, American soldiers expressed a desire to stay with their unit rather than be promoted elsewhere or go on sick leave, for fear of 'letting the other guys down'.¹⁴²⁷ When all the members of a group feel like this, it clearly stands an elevated chance of success at whatever task it sets itself. There is less bickering and conflict, and this is good since these would slow the group down and divert its energies. The group exhibits a strong sense of purpose and commitment, and mutual support helps all its members to realise their potential.

Groups that are treated as pariahs tend to be particularly cohesive, as their members' shared experience of persecution creates strong social bonds (**S10**, **S12**). They often do well in business, perhaps partly because other options are closed to them, but also through this high level of mutual support. Examples of this phenomenon include Europe's Jews, Britain's Quakers (once called the Jews of the grain trade),¹⁴²⁸ Rwanda's Tutsi,¹⁴²⁹ and the overseas Chinese of south-east Asia. Among the latter, it is the Fuzhou, who were discriminated against even by other overseas Chinese, who have possibly done the best.¹⁴³⁰

During the Korean war, allied prisoners were subjected to a programme of brainwashing, i.e. harassment and indoctrination, which was intended to break their spirit and cause them to embrace communism. There was widespread collaboration, the prisoners' morale was extraordinarily low and many died in captivity. One nation, though, proved an exception. The Turkish prisoners were targeted for brainwashing just like the other allies. However, they resisted strongly, heckling and making insulting remarks during indoctrination classes, and thus wearing down their captors. The officers continued to assume responsibility for their men's welfare, while the soldiers remained loyal to

their commanders. In short, the Turks held together as a *cohesive* group. Hardly a single one was guilty of even minor degrees of collaboration and although almost half of them were wounded before capture, none died in the camps. In one temporary camp, where none of the 110 Turks died, the Americans lost 400-800 men out of a total of 1500-1800 interned.¹⁴³¹ Clearly, the *cohesive* Turks responded far more effectively to adversity than did the *discohesive* Americans.

The principle involved here – united we stand, divided we fall – is captured in the fascist symbol of a bundle of rods (*fascis*). Separately, the rods may be easily broken, but when they are put together, aligned in the same direction, they are very strong. However, the negative connotations of fascism recall the conservative and oppressive aspect of *social cohesion*. Such conservatism can work to a group's disadvantage. It suppresses initiative and intellectual diversity. When the group faces new and unexpected difficulties, it may find it difficult to generate innovative solutions. *Cohesion* may prove advantageous in the short run, for dealing with immediate problems, but disadvantageous in the long run, when more creative thinking is required.

Meanwhile, the selflessness and loyalty of a *cohesive* group ensure that members give what they can to help the group as a whole. Conversely, *discohesion* means that people seek selfishly to maximise their own advantages. In the extreme, they may simply take what belongs to others. A perfectly *cohesive* society would need no police force. *Discohesion*, however, is likely to be associated with all kinds of fraud and criminal rapacity. After all, criminals are people who do not share the goals of their victims or, in the case of victimless crime, are those who offend against widely shared standards of conduct. Smaller towns, where there is a stronger sense of community (S11), generally have less crime.¹⁴³²

The absence of crime and other selfish behaviour certainly improves the relative effectiveness of a *cohesive* group in the immediate term. However, generosity and sharing also create the danger of free-loading. A *cohesive* group is vulnerable to parasitic elements, who outwardly endorse the group's goals while actually subverting them. Such parasitism is almost bound to arise eventually, simply because it is a successful strategy in a *cohesive* group. Again, the trait that makes a *cohesive* group successful in the short run can turn out to be its downfall in the long run.

S14 *Cohesion* improves short-run effectiveness but may harm long-run effectiveness.

For individual people, *social cohesion* implies something of a paradox. It requires conformity to the community's values, attitudes and beliefs and a habit of consideration for others. This does not happen automatically but requires continual reinforcement of moral standards and of the need to observe them (S3). It involves constraints on personal freedom and self-realisation, and that is oppressive. Depression rates can be unusually high in morally doctrinaire communities, such as those of the Hutterites.¹⁴³³ Yet, as Francis Fukuyama comments, contemporary Americans look back with nostalgia to the small-town life of fifty or more years ago, from whose bonds they at the time yearned for release.¹⁴³⁴ Moral freedom is initially exhilarating but it eventually palls as one misses out on knowing that the rest of society approves and endorses one's way of life.

S15 People have contradictory attitudes towards *cohesion*. They value the emotional certainty of living in a highly moral society but they chafe at the restrictions which that entails.

Chapter 16 - Coupling

Introduction

Political integration, economic organisation and social cohesion represent three sets of principles governing the structure of human relationships and the resulting possible forms that a society or other group (from a rugby team to an international alliance) can take on. They have separate properties, but all three systems will be active in any real situation. There is also an interaction or coupling between them, so that for example political relationships influence the development of economic and social relationships. This interaction may affect both perceptions and reality.

Polity-economy

Economic advantages can readily be converted into political advantages, and vice versa. Those who have wealth may use it to acquire power, and those who have power are likely to obtain wealth. The Dutch and British East India Companies turned their commercial prowess into formal dominion, which then furthered their business interests.¹⁴³⁵ Economic relationships also tend to follow political relationships. Political authorities are more likely to consume the services of their subordinates than the services of those they do not control. European countries continue to trade preferentially with their former colonies.

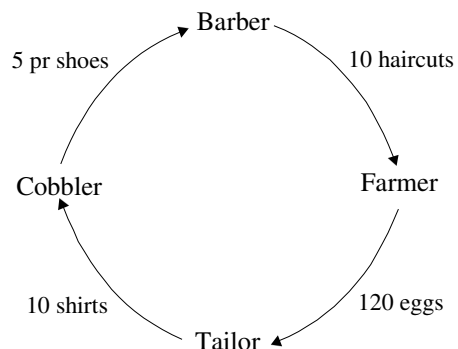
The pursuit of economic opportunities has often provided a motivation for the establishment of political relationships. Commercial considerations led Europe to take on colonial responsibilities in the first place. When economic opportunities are threatened, this can lead to political struggle. Changes in the flow of trade have sometimes stimulated wars, whilst ongoing poverty or the disappointment of financial aspirations has been a source of unrest in many countries.¹⁴³⁶ The twists and turns of the French revolution, for example, were linked with changing market conditions.¹⁴³⁷

It is clear that there is significant interaction between polity and economy. At a simple level, this interaction appears to be one of mutual reinforcement. There are several ways in which political relationships can promote economic ones. Since integration implies peace and the rule of law (P2), it allows people to get in touch with each other, and to trade safely, expecting that contracts will be enforced and without fear of bandits. It creates confidence, which is vital to economic organisation (E9). Integration also overcomes the tragedy of the commons (P6), which prevents actors from destroying their own livelihoods. Markets have never been simply spontaneous collections of traders. They have always had political sponsors, such as the local

chief in contemporary Africa or the local bishop in medieval Europe.

Meanwhile, economic relationships promote political ones in at least two ways. Firstly, a high level of economic organisation, i.e. wealth, attracts political integrators. Wealthy actors are also likely to acquiesce in integration since it gives protection to their riches. Secondly, the backing of a strong economy makes it more likely that political integrators will be successful, both against their own populations and in the struggle with their rivals. Sun Tzu, the ancient Chinese military theorist, stated that money is the most vital element in any armoury.¹⁴³⁸ This principle has been validated many times since, and military conflicts tend to be won by those who have the most resources at their command.¹⁴³⁹ The second world war has been described as a war of attrition that was won primarily in the allies' vastly more productive munitions factories.¹⁴⁴⁰

In these respects, economic relationships and political relationships seem to be mutually beneficial. However, the phenomenon of extraction (P5) reveals a more complicated picture. In raising taxes, the government appropriates some of the potential organisation created by actors when they make the first half of an exchange. Each actor supplies a service and thereby acquires rights to receive services in return. Through taxation, the government takes over some of these rights. It can therefore absorb services without supplying services in return. (It supplies the service of ensuring peace and protection, but this is not something that people voluntarily consume and is not properly economic, any more than the protection offered by a protection racket involves a genuinely fair exchange.) A simple view of the situation is shown in the following figure.



a.

(cont'd)

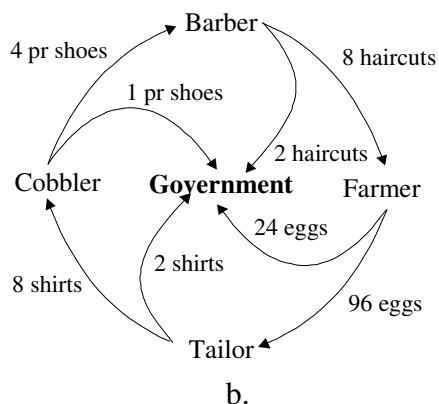


Figure 16-1: *Effects of government extraction (here set at 20 percent) on organisation. a. Before; b. After.*

Figure 16-1b implies that taxation simply makes people worse off. Their income is reduced by whatever amount the government consumes. This is known as the *income effect* of taxation. However, people could well respond to this situation by working harder, restoring their income to its original level. In this way, government extraction might stimulate production.

On the other hand, people can respond to taxation in less useful ways. For example, when a window tax was introduced in the eighteenth century, people responded by bricking up their windows. This is called an *excess burden* of taxation. The tax makes people worse off (having gloomier houses) without making the government better off. More generally, taxation can change people's preferences about what to do with their time and money. It can cause them to substitute one form of consumption for another. This is known as a *substitution effect* of taxation.

Beyond these generally agreed points, the effect that taxation has on an *economy* remains a rather controversial topic. It is clear that substitution effects, with their excess burden, are potentially detrimental to *economic organisation*, and tax theorists agree that taxes nearly always have some excess burden.¹⁴⁴¹ However, the actual amount of substitution caused by a tax tends to be difficult to estimate, even after it has been instituted. People's reactions are not easily predictable, while their initial reactions have consequences, which may cause other reactions and so on. Even if one can be fairly sure how people respond to the tax itself, things become increasingly uncertain as the effects propagate through the *economy's* complex, and essentially unknown, network of relationships.

It used to be supposed that direct (income) taxes produce less excess burden than indirect (consumption) taxes (those added to the price of goods). This is because direct taxes have a blanket effect and are inescapable, whereas indirect taxes influence the desire to consume and may

discriminate between goods. However, it has been suggested lately that direct taxes discriminate between work and leisure. That is to say, the more the government takes out of earnings, the less worthwhile work becomes. Direct taxes also discriminate against entrepreneurship – why bother to create chains of *organisation* when many of them are going to be appropriated by the government? It has even been argued that direct tax has a worse psychological effect than indirect tax, since people do not much notice that they are paying the latter.¹⁴⁴²

These theoretical arguments, however, have not been particularly well validated by empirical research. For instance, on the basis of the leisure-work substitution effect, it was argued that tax revenues should increase as direct tax rates go down, because people will work more. Yet when the United States government tried this strategy in the 1980s, the budget deficit only appeared to increase.¹⁴⁴³ It also seems that people seldom know their income tax liabilities precisely anyway, so that psychological effects are often negligible.

In fact, in all societies, from foraging bands to industrial nations, people seem typically to work towards a target standard of living.¹⁴⁴⁴ Any time left over is taken as leisure. If people can achieve their target more easily, they prefer to take more leisure than to raise their target. In this case one might expect that the stimulating effects of extraction should predominate. Furthermore, people like to store up potential *organisation*, creating a tendency for the *economy* to run down (E8). The government, though, is more likely to spend its income than individuals, and so is more likely to keep the *economy* in circulation. This is another effect that should counteract any excess burden.

Whatever the controversies of tax theory, the fundamental point is that extraction by *political* authorities does not have any simple, easily identifiable effect on an *economy*. More precisely, it does not necessarily reduce the level of *organisation*, as might be expected. It is fairer to say that it changes the pattern of *organisation*. Nevertheless, such interference is potentially dangerous, if not actually detrimental. This is because, from an individual actor's perspective, the greater the level of extraction, the more the balance shifts from the advantages of *economic* relationships towards their disadvantages (see E8). In the extreme, if the government extracted 100 percent of everything, there would be no incentive to produce anything at all. The further things move in this direction, the more precarious *economic* relationships become, and the more vulnerable the whole *economy* is to breakdown. The Mogul emperors showed this, with the policy of usurping property that took their fancy. Citizens found it pointless to acquire wealth,

and the emperors ended up destroying the sources of their own prosperity. There is certainly no straightforward, precise relationship between the level of extraction and consequent disorganisation, but extraction does make disorganisation more likely.

Extraction is also not the only way in which integration can prove inimical to organisation. Another potentially harmful effect concerns the blunting of initiative. Entrepreneurship requires innovation (E9), and yet innovation can seem threatening to entrenched political authorities, who are already doing well out of the status quo. Indeed, innovation can also seem threatening to ordinary actors, perhaps because their own economic relationships are likely to be rearranged or for less tangible reasons. At any rate, political authorities tend to take an interest in regulating innovation, either on their own account or to forestall unrest. This can have positive as well as negative effects, but a higher level of integration seems to make it more likely that potentially advantageous innovations will be suppressed, as when the Ottomans banned the printing press and thereby ensured their own backwardness relative to Europe. Similarly, integrated China suffered technological stagnation, while disintegrated Europe took Chinese inventions and developed them to a much higher level. Evidently, a relative lack of political relationships can sometimes be helpful to the creation of economic ones.

Polity-society

In a political relationship, one actor directs the activities of others. The question is, why should the latter submit? Partly it is because of the nature of coercion. Failure to submit will bring retribution. Resistance is simply not worthwhile. However, this does not explain how infants can sometimes rule. Nor does it really explain how one person can subjugate millions. The truth is that successful political relationships must normally be legitimised by social ones, which is to say that there must be a shared belief in the ruler's right to rule. In other words, some degree of cohesion between ruler and ruled is necessary for mature and far-reaching integration. One factor in the success of the Roman empire seems to have been a growing belief in the Mediterranean by the mid-second century BC that it was Rome's destiny to achieve universal rule.¹⁴⁴⁵ This legitimised Rome's rise. Cohesion is also helpful to a potential integrator insofar as it is much harder to impose peace and order on a group that is divided into many competing factions.

An internally cohesive actor is better able to establish political relationships over other actors. For instance, a nation or army whose members have aligned their goals and remain loyal

to each other is more likely to be successful in its struggles with other nations or armies. Without the feelings of legitimacy that come from cohesion (S6), the members of a group will lack confidence in their actions and may be insufficiently committed to achieve successful integration of other groups. The experience of the United States in the Vietnam war showed that, if it lacks legitimacy, an actor may fail even with enormous advantages in the means of coercion.¹⁴⁴⁶ The Aztec state displayed a similar failure of legitimacy when, even after killing 75 percent of the Spanish force, it felt paralysed by the conquistadors and was defeated the following year.¹⁴⁴⁷

While cohesion can promote integration, integration can promote cohesion. A group that successfully dominates other groups is likely to develop a strong self-belief and will hence become more internally cohesive. Similarly, an effective political integrator may be expected to gain legitimacy by delivering peace and order. Political authorities have an interest in deliberately fostering cohesion and they invest in symbolism and ceremonial to create a focus for group identity. They often impose their preferred religions on their subjects. Hinduism, Islam and Christianity have all sometimes been spread at the point of a sword.¹⁴⁴⁸ The early Roman emperors established a cult, with themselves as living deities to whom subjects had to swear oaths of loyalty.¹⁴⁴⁹ Integrators are likely to transfer some resources to the weaker members of a group, in order to show that they share the latter's goals (i.e. have a social relationship). One medieval German duke was so renowned for his generosity that warriors flocked to join his army, which of course thereby enhanced his political power.¹⁴⁵⁰

The legitimisation of political relationships derives in part from a general human capacity for recognising and submitting to authority figures. This capacity was highlighted by the psychologist Stanley Milgram during the early 1960s. He asked experimental subjects to administer electric shocks of increasing severity to another subject, supposedly to investigate the effects of punishment on learning. The shocks were fake and the other participant was a stooge, but the experimental subjects did not know this. As the shocks notionally increased in intensity, the other participant went from mild protests, via screaming, then incoherent grunts, to collapsing in an inert heap. Milgram found that the vast majority of his subjects were prepared to administer the maximum severity of shock, notwithstanding the fact that the stooge gave the impression of possibly being dead by this stage. For sure, the experimental subjects showed extreme discomfort as they did so, in some cases shaking uncontrollably, but nonetheless they deferred to the white-coat-wearing psychological experimenter, who said things like

‘you must go on’, and ‘it is important for the experiment that you continue’ when they appeared to hesitate.¹⁴⁵¹

The kind of willing deference revealed by Milgram’s experiments indicates that social relationships between rulers and ruled can be established quite easily – more easily than might be expected, given the inherent unfairness of the arrangement. It is still true though that the existence of a social relationship depends on a perceived alignment of goals between ruler and ruled, albeit that this may not be true in reality.

The requirement for goal alignment can imply that a network of political relationships inhibits cohesion. This is because a complex polity consists of a hierarchy of relationships in which actors at different positions gain different benefits. For example, an actor in the middle of the hierarchy is generally better off than those lower down. It is therefore in the actor’s interest that the political structure should remain stable rather than be overthrown and possibly renegotiated from scratch. On the other hand, it is also advantageous for the actor if the hierarchy is sufficiently fluid to permit some upward mobility. Whether actors share the goal of preserving the hierarchy is therefore a complex question. In general the different members of a polity will have some parallel interests and some conflicting ones.

When the possibility of deviation between perceptions and reality is added to this picture, the exact pattern of shared goals (social relationships) becomes potentially even more complicated. It depends on the precise institutional arrangements of the given situation, which are themselves a matter for political manoeuvring. For example, a common problem facing supreme authorities is that they are at risk from the powerful people immediately below them. They have often solved this problem by using outsiders as bodyguards. The caliphs of Baghdad chose prisoners of war as their protectors.¹⁴⁵² Such outsiders are personally dependent on the ruler. They have no support from the rest of the hierarchy and are likely to be discarded if the ruler is deposed by others. Hence, there is a cleavage of interest between the bodyguards and any potential challengers. In this case, an element of dis-cohesion helps to preserve the overall polity.

Economy-society

Social cohesion influences the way that people establish economic relationships. For instance, collectivist (i.e. relatively cohesive) societies differ from more individualist ones in their attitudes towards employment. Collectivist Japan provides more jobs for people in service industries than is customary in Europe and America.¹⁴⁵³ Social anthropologists have long recognised that an economy exists within a moral

context.¹⁴⁵⁴ Otherwise there would be no reason for people to leave tips, for example.

More specifically, social relationships appear to promote the formation of economic ones. Actors sharing values, attitudes and beliefs understand each other and will typically find it easier to establish satisfactory economic contracts. Countries tend to choose their trading partners primarily from those with whom they have friendly relations.

At the same time, economic relationships can promote social ones. This is because they provide a motivation for people to interact with each other, and interaction leads to the development of social relationships (S10). Over time, a shopkeeper and a loyal customer are likely to become friendly and to develop some concern for each other’s welfare. Partners in a successful economic relationship have an interest in its continued existence. They are each better off because of it. In this respect, their goals are interdependent, and this is of course the condition for a social relationship (S12).

Simple considerations therefore suggest that cohesion and organisation mutually reinforce each other. However, to be set against this there are again more complex effects involving an element of opposition. For instance, an organised group is inevitably heterogeneous (E1) and so the goals of its actors cannot be fully aligned. Different specialists have different needs and biases. The interests of ice cream vendors, for example, are not those of umbrella shops.

Significant levels of organisation also require that actors possess private property (if all resources were shared, there would be no incentive for entrepreneurship). Yet the concept of private property creates feelings of separateness. What is more, in a complex economy, wealth differentials invariably arise, since some actors are more successful entrepreneurs than others, and these differentials further reduce any feelings of shared interest.

The influence of cohesion on organisation also has some contradictory features. For example, a cohesive group is apt to share its resources in time of need, protecting its weaker members from economic failure. To some extent, this is good for the economy, since organisation is promoted when everyone is well off (E5). Beggaring one’s neighbour is never a shrewd economic strategy in the long run. On the other hand, the same principle can also inhibit entrepreneurship because sharing removes incentives for economic activity. Similarly, the concern for others that is characteristic of a cohesive group may inhibit actors from establishing economic relationships on the most appropriate terms. For example, outmoded and

inefficient practices or businesses may be preserved through consideration for others, when it might be better in the long run for them to disappear.

Polity-economy-society

The interaction between political, economic and social relationships emerges as diverse and contradictory. As far as each pair of relationships is concerned, the same basic story presents itself. To begin with, there is a relatively obvious and straightforward interaction, in which the existence of one type of relationship promotes the emergence of the other. However, this positive reinforcement is balanced by some countervailing tendencies that are increasingly significant the stronger the given relationships become. Too much integration or too much cohesion can, for example, harm organisation.

There is an ongoing tension between the three types of relationship and this makes for a convoluted dynamic. The primary, positive interactions allow the possibility of virtuous or vicious circles, whereby the relationships drive each other up or down. The secondary, contradictory interactions make possible switches between vicious and virtuous regimes. One study of European history over the last few centuries has revealed precisely this pattern of events, with virtuous circles, involving peace and material expansion, switching over to vicious circles, involving heightened competition and social conflict.¹⁴⁵⁵ The linkages were the same in different periods, but they worked in opposite directions.

While all three types of relationship will be active in binding together a particular group, one consequence of the contradictory interactions between them is that not all three networks of relationships can be strong within a given group at the same time. That is to say, a group cannot simultaneously present a strong polity, economy and society, or, in other words, it cannot simultaneously be highly integrated, highly organised, and highly cohesive. Instead, it is inevitable, even in a successful group, that one or two type(s) of relationship will dominate the other(s). For instance, a strong polity may hold the group together, even though organisation and cohesion are at a relatively low level.

On the other hand, it is not possible for a group to be held together *exclusively* by one type of relationship, because the relationship would soon be undermined by disparities between perceptions and reality. For instance:

- A group held together exclusively by cohesion would become vulnerable to free loaders (some integration is needed to deter potential free loaders).
- A group held together exclusively by integration would be continually shaken by

challenges for power (some cohesion is needed to legitimise power relations).

- A group held together exclusively by organisation would destroy itself by failing to honour contracts and allowing gross wealth differentials to emerge (some integration is needed to enforce contracts and some cohesion to maintain viable income distributions).

In some natural systems, self-correcting tendencies can cause a set of interactions to settle on an equilibrium situation whereby the forces balance. This is the case for a body falling through air, for example, where increasing speed produces increasing air resistance, which eventually balances the force of gravity and causes the body to reach a stable speed. In many situations, however, the existence of time lags and over-compensation can cause natural systems to oscillate around their equilibrium. Furthermore, where several variables interact, a system is likely not just to cycle smoothly but rather to fluctuate erratically.

In social systems, the three-way contradictory interactions between political, economic and social relationships are certainly too involved to permit the emergence of a stable equilibrium. For one thing, the interplay between perceptions and reality prevents the different relationships from smoothly adjusting to each other. It may lead instead to sharp over-corrections when beliefs suddenly catch up with actuality. Individual actors cannot afford to base their decisions solely on reality and ignore the perceptions of the crowd, yet they are also at risk if they put too much emphasis on perceptions and ignore the reality. (E.g. it does not make sense to spurn a share that is rising strongly just because one thinks its real value is less than that placed on it by the market, but joining in a speculative bubble is a risky business in itself.) Neither perception nor reality is a reliable guide, and yet there is also no clear way of identifying a suitable middle course.¹⁴⁵⁶

The situation is additionally complicated by the fact that actors differ in their capacity to form political, economic and social relationships. Some actors work harder, are more forceful, or think more independently than others. Given equal starting conditions, a picture of considerable diversity will soon develop. The Homestead Law in the United States gave land to settlers in 160-acre tracts. Yet in very little time, gross inequalities had emerged because of the different talents of the farmers and the uneven properties of the soil.¹⁴⁵⁷ Similarly, English boroughs were of relatively uniform size and importance at the beginning of the fourteenth century, when they were relatively isolated from each other (scale was low). Yet as communications improved, some boroughs advanced at the expense of others and the most

favoured went on to become the cities of medieval England.¹⁴⁵⁸

The diverse picture that results from the differential capacities of actors is not even static. As fortunes change in one part of the system, they affect fortunes in another part. Such interactions never settle down. For example, within cities, the populations and incomes of different areas are continually changing as they go from slum formation to gentrification and back again. Meanwhile, individual cities may be stable over the course of a century or two but, on longer time-scales, they appear, grow and become extinct.

Groups of political/economic/social actors exhibit fluctuating diversity, which involves an ever-changing balance in the coupling between the three kinds of relationship. Institutional arrangements do not converge on some optimum situation. There is a continual ferment in every respect. It is not just that integration, organisation and cohesion fluctuate, but also that they change in their importance relative to each other, and furthermore that the perceptions and the reality follow separate, though reflexively linked, dynamics.

In general, the combination of negative and positive feedbacks in a system of perceptions and reality puts societies in a metastable state, which means a state of contingent equilibrium with an inherent vulnerability to catastrophe. This leads to a view of social groups that not only creates the potential for some drama, but in fact makes such drama inevitable. Problems arise because:

K1

1. Strong integration can mask weak organisation and/or cohesion, and so on cyclically.
2. There is continual ferment in both perceptions and reality concerning:
 - a) The levels of integration, organisation and cohesion.
 - b) The extent to which they affect each other (e.g. the extent to which cohesion legitimises integration, integration threatens organisation, or organisation inhibits cohesion).
3. Mutual reinforcement between integration, organisation and cohesion creates the possibility of either vicious or virtuous circles. Contradictions between them become increasingly significant at high levels so that there is switching from vicious to virtuous circles and vice versa.

States

Institutional ensembles are arrangements of institutions in which the mutual influences of political, economic and social relationships achieve some sort of self-consistency. In detail,

these ensembles are forever changing due to the background ferment, but their gross features are metastable just like the relationships themselves. This book is concerned primarily with the state ensemble, which is characteristic of high-scale groups with large numbers of strangers.

Throughout history, states have presented a characteristic set of institutions that is typically referred to as civilisation. Civilisation has been defined as the kind of culture found in cities¹⁴⁵⁹, and a civilisation as a collection of interacting cities (the word derives from the Latin *civis* – a citizen). States are very much bound up with cities, in which many people are concentrated in a small space and necessarily interact frequently with strangers.

A city is more than a big village. Its scale dictates the features of an ensemble, based on high integration (**P8**), high organisation (**E2**) and low cohesion (**S11**). On the political side, cities inevitably require formal government with taxes, laws, bureaucracy and public architecture. On the economic side, they bring together diverse products, attracting consumers because of the breadth of choice, and providing ideal opportunities for commercial activity. It is no coincidence that the depression of the 1930s saw very little increase in urban populations.¹⁴⁶⁰ Finally, on the social side, the city provides a diversity of ideas and opinions. Life is generally more interesting and less traditional, and people enjoy more varied careers.

The abstract characteristics of the state ensemble translate into a range of concrete institutions that are almost invariably associated with it. For example, monumental architecture emerges as a characteristic feature of the most ascendant states because it depends so exquisitely on very high levels of integration (to control the work force – **P5**, **P7**), organisation (to sustain the workers – **E4**, **E6**), and to some extent cohesion (to have something to celebrate – **S1**, **S4**).

Writing is another typical institution of the state ensemble. It allows people to keep track of complicated transactions for which the human memory is too impermanent and unreliable, and thereby solves the problems of administering a complex polity and economy. Writing is often regarded as an extraordinary intellectual achievement. However, the ensemble concept implies that it exists when there is a role for it and otherwise not. The use of symbols as an aid to memory is actually more common than is generally thought. American Indians used a form of picture writing in this way,¹⁴⁶¹ and there have been found apparently abstract symbols with cave paintings and on ancient bones.¹⁴⁶² It seems that the idea has always been in the back of the human mind.

However, it is only when there is an application to justify the necessary investment that picture writing becomes formalised into writing proper, i.e. with a finite, reproducible and generally understood symbology. In Sumer, it took a few centuries to produce a mature alphabet from the original, simple pictographs. Literacy thus comes and goes quite naturally in the course of wider social changes. While it disappeared and re-emerged in Greece between the Mycenaean collapse and the rise of the classical city states, the two kinds of writing were based on different scripts and were not directly related.

The stratification of states into social classes, ranked in order of prestige, reflects the inevitably hierarchical structure of an *integrated* society. The conceptualisation of the hierarchy in terms of a few discrete classes is an aspect of its legitimisation. States are thereby *inegalitarian* societies. However, though class membership is often a consequence of birth, throughout history talent and enterprise have had a way of working their way up the hierarchy. It would be completely wrong to think that meritocracy is a recent invention. There are countless illustrations from ancient states of slaves rising to become important ministers and even emperors. Nevertheless, the greater the *political integration* of a society, the more impermeable its classes tend to be. Once the Aztec state gave up military conquest and consolidated its power, the creation of new nobles was prohibited. Strong *cohesion* also limits social mobility.

Money is another prominent feature of states. Like writing it is invented very readily when the need emerges. It solves the problems of barter by allowing asynchronous exchanges. Without money it is impossible to achieve anything but the most rudimentary *organisation*. In early times, grain or spices may have served as money, just as cigarettes serve as money in contemporary prisons. Things became more convenient, however, with the introduction of standard-sized discs, and then more convenient still with paper money and, finally, with just the movement of figures around by electronic means. An essential feature of money is that it should be universally acceptable. People take these tokens in exchange for their goods and services because they are sure that other people will take them in their turn. When money is grain or cigarettes, it is easy to have confidence in it. If the worst comes to the worst, at least one can smoke or make porridge out of one's fortune. However, when money is more arbitrary, with a large disparity between the intrinsic value of the token and the value of what it represents, such confidence is less automatic. Traditionally, money has been backed by a sponsor, typically a *political* authority, who vouches for its worth. When *organisation* disappears, there is little point in

holding token money and its use is naturally abandoned.

Formal education is particularly associated with states because it can seem variously like a chore, an overhead and a luxury that is readily abandoned when life is either too easy or too difficult. Only the most capable and self-confident societies emphasise it to the maximum. Academic inquiry depends strongly on the high *scale* of the state *ensemble*. City children have always been far more likely to learn to read and write than rural ones. Large cities nearly always have their universities. In Europe, by 1500, almost half of all cities with populations over 20,000 had spawned universities.¹⁴⁶³ It would be wrong to suggest that people in simple societies never transcend their circumstances to entertain philosophical thoughts. However, in a village or a hunting band, people with a special interest in linguistics, mathematics, art criticism and other aspects of high culture are unlikely to find much opening for their talents. They will have little time for study when they must provide for themselves just like everybody else. Also, in such a small population they are unlikely to find any others who share their rare talents and interests and who could help to found an intellectual tradition.¹⁴⁶⁴ It is only with civilisation that such opportunities can exist. If institutional complexity diminishes for any reason, a civilisation's accumulated knowledge can be lost frighteningly quickly. In the case of a complete failure of transmission, it might take only one generation to go from the space age to the stone age.

The question of how these various institutions arose to create the first states has been the subject of numerous theories. Karl Wittfogel's 'hydraulic' theory suggests that *political* elites were established to supervise the irrigation works needed to support a growing population.¹⁴⁶⁵ However, this is contradicted by evidence suggesting that complex irrigation works pre-dated state formation by hundreds or thousands of years.¹⁴⁶⁶ Alternatively, Arnold Toynbee has argued that civilisation was stimulated into existence by a process of 'challenge and response'.¹⁴⁶⁷ Yet this theory is rather vague, and could arguably be applied to every form of society – to the Eskimo as much as to the ancient Sumerians.

A particularly influential theory involves Robert Carneiro's notion of 'circumscription'. According to this, states arose when people were prevented from moving away from each other, for example because they were surrounded by other groups or perhaps because of the attractions of a particular locality, like a river valley. As population grew in such a circumscribed situation, conflicts were apt to break out, and this led to the emergence of *political* authorities who were able to resolve and suppress conflicts. On the other

hand, civilisation did not arise along America's Colorado River, South Africa's Orange River, or Australia's Murray River, despite a degree of circumscription that is in each case similar to that of the Nile.¹⁴⁶⁸

The biologist Jared Diamond has argued that the formation of civilisation in south-west Asia depended on the fact that the local biota included species that were particularly susceptible to domestication. This allowed the development of agriculture and animal husbandry, hence population growth and so on. The existence of diverse resources and a favourable topography were secondary, albeit important, factors.

As far as this book is concerned, the origin of states is not really a crucial or interesting question. It is a historical issue, i.e. concerning how a particular sequence of events chanced to unfold. The scientific issue, i.e. concerning patterns in the data, is simply that certain institutions go together in an *ensemble*. There is mutual causality between them. States necessarily combine *high scale* with *high integration*, *high organisation* and *low cohesion*, and this in turn implies various manifest characteristics such as intensive agriculture, record-keeping and codes of law. Any one of these institutions logically requires the others. While circumscription may have played a part in forcing *scale* to increase, other chains of causality were no doubt important as well. For instance, the rise of a *political* authority may have compelled the intensification of agriculture,

while the opportunities provided by city living may have attracted people into the early states, thus swelling their *scale*. The many, seemingly contradictory theories each reveal only a part of the issue and in a sense they are all right.

The question of how institutions like writing, money, academic education, social stratification and monumental architecture first arose may never be satisfactorily resolved. However, one does not need to answer this question in order to draw some worthwhile conclusions. In particular, these institutions can be regarded as markers of the state *ensemble* and their health can be taken as a marker of the health of a particular state. When a society is in the ascendant, these institutions will be vigorous, strongly evolving, and highly rated by the society's members. When the society is losing its way, they will be seen to decline, deteriorate, lose prestige, or be abandoned. The crucial point is that these institutions do not have an autonomous existence. They arrive and depart in association with each other and with the general changes in a society's fortunes. They were not given to humanity once and for all in some kind of Promethean revelation. Their appearance is enshrined in the logic of human relationships. Merely having these institutions guarantees nothing. They can be lost as well as acquired. To acquire them does not require any particularly unusual inventiveness, and it is easier to lose them than one might think.

Chapter 17 - Defining dark ages

Decline and collapse

It is now possible to provide a concise definition of a dark age.

DA1 A dark age is an extended period of significantly reduced integration, organisation and cohesion.

(From an individual's perspective, social bonds may become more intense in a dark age. However, overall cohesion is reduced because the social network extends much less far. See Figure 15-1.)

DA1 begs the question of what counts as significant and what counts as extended. To begin with, there must be an *absolute* reduction of integration, organisation and cohesion, and not merely a decline relative to neighbouring societies. The retrenchment must also be large enough to last at least several decades. Finally, integration, organisation, and cohesion must all be affected simultaneously, which is not necessarily true of depressions (primarily loss of organisation) or civil wars (primarily loss of integration).

There is actually no sharp line dividing dark ages from more modest downturns in a society's fortunes. Political, economic and social relationships are being formed and broken off all the time. Hence, integration, organisation and cohesion are in continual ferment (**K1**) and fluctuation in the strength of these factors is normal. Such fluctuations vary in size from very small to very large, and there is no particular size at which a fluctuation becomes abnormal. Dark ages are simply at one end of a continuum that includes more minor setbacks. Civil wars and economic depressions may be thought of as mini dark ages. Alternatively, dark ages may be thought of as particularly severe depressions.

Political, economic and social relationships can form and break up with surprising speed. For instance, it took only a few years for the once-thriving British motorcycle industry to disappear and go to Japan.¹⁴⁶⁹ Similarly, it took only decades for Japan to quadruple its share of world output¹⁴⁷⁰, and only a century for Muslim armies to create an empire stretching from the Atlantic to the borders of China.¹⁴⁷¹

One of the reasons why change is rapid is that perceptions and reality follow separate dynamics. They influence each other only loosely and in general they tend to become separated. When the illusion becomes apparent, perceptions may collapse towards the reality almost instantaneously. They may even overshoot the real value. The society will transform in short order to far lower levels of integration, organisation and cohesion. Changes in perceptions can also initiate

or exacerbate movement in the real situation, via the principle of reflexivity (**TC11**). Hence, people's perceptions tend to exaggerate even relatively smooth changes in the reality into abrupt movements.

Another reason for change to be rapid is that it involves a movement between ensembles, with the in-between states being highly unstable. If the underlying logic changes significantly and a society is dislodged from its existing ensemble, it will be strongly propelled towards a new configuration. At the end of the first world war, civil government in Istanbul collapsed, thereby removing a crucial component of the city's institutional ensemble. Consequently, in just three weeks, a truly terrible situation emerged. Bodies and rubbish accumulated in the streets, and there was widespread fighting, looting, and famine. When allied troops arrived to restore order, the city's population was well on the way to a friend-style ensemble, with dispersed family-level groups foraging for themselves.¹⁴⁷²

In the 1960s, South Korea was still largely a peasant society, with no significant mineral wealth or hydroelectric potential, and was known for its 'immemorial stagnation'. A lack of education and aspiration, combined with rapid population growth, seemed to imply a grim prognosis for many observers.¹⁴⁷³ Yet South Korea went on to become one of the tiger economies of east Asia, achieving in a few decades an economy ten times the size of the North (for which some had detected much rosier prospects). One should not write off even the poorest nations. Their backwardness is of a contingent nature. If conditions change and so the ensemble changes (in South Korea, geopolitical considerations led to substantial American investment), the world's hardest cases of today could become its greatest success stories tomorrow.

At any rate, the entry into a dark age tends to be precipitate and unexpected. Its arrival might be clear to those who have gained some insight into the reality. However, most actors, who rely upon perceptions, remain unaware of growing danger and the need for a correction. When the discrepancy is finally revealed, there is panic and a catastrophic loss of confidence. The political authority loses legitimacy, its bluff is called, and it falls apart. Economic organisation unravels in a swift downward spiral. People discover that their interests have diverged and they retreat from each other in an act of dis-cohesion.

The theoretical biologist Stuart Kauffman suggests that it is a generic property of complex systems to be sensitive to failure from tiny causes, so that they always teeter on the brink of collapse. As examples, he cites the Challenger disaster and power failures in the National Grid.¹⁴⁷⁴ Teetering

on the brink probably overstates the situation, at least as far as social systems are concerned. The system is metastable, which means that, most of the time, tiny disturbances are absorbed. Only rarely can they bring down the system or substantial parts of it. Nevertheless, in the long run, even the rarest events may occur.

The fact that tiny disturbances are usually absorbed gives people a false sense of security. That is to say, the quasi-stability of the system encourages the belief that it can take anything. Yet this belief means that the system is eventually driven to the point of failure – by overtaxation, for example, or by environmental insult.¹⁴⁷⁵ A system that seems to be working well can therefore find itself going over a precipice with very little warning.

The dark age experience

Having defined dark ages by **DA1**, the model of integration, organisation and cohesion immediately indicates the specific features that one would expect dark ages to display. For example, disintegration implies conflict and disorder (**P2**), which are clearly aspects of dark ages. The classical Greek poet Hesiod deplored the post-Mycenaean age as an era of futility and violence. Disintegration also implies the removal of protection (**P1**). Certainly, Britain's dark age followed the withdrawal of the Roman legions, whereupon public safety evaporated and villas everywhere were looted and abandoned.

Some other dark age characteristics that ensue from the present model are as follows:

- Less centralised control (=disintegration).
- Less trade (=disorganisation).
- Less social differentiation (follows from loss of political hierarchy and economic specialism (**E1**)).
- Lack of grand projects (**P7**).
- Smaller territories (**P3**, **P8**).
- Loss of specialised knowledge (**E3**).
- Proliferation of styles in art (**S1**, **S4**).

Few things are more characteristic of a descendant society than the emergence of a squatter mentality. This also follows from **DA1**. When disorganisation forces people to be self-sufficient, they can at best erect only crude shelters, in which there will be few refinements or utilities. If people continue to live within fine old buildings then it is inevitably in a degraded fashion.

State societies as a whole are no longer viable during a dark age, since such a high-scale ensemble can be maintained only with high levels of integration and organisation. Hence, a dark age must also result in the loss of characteristic state institutions. Without writing and education, though, few records are produced and much knowledge is simply lost. This is why dark ages are dark. They leave no account of

themselves. They are blank pages in the historical record. Thanks to the loss of monumental architecture and the general breakdown of the economy, the material culture of such periods is also sparse and non-durable. Archaeologists are in the dark almost as much as historians.

DA2 Dark ages leave few records and they are periods of obscurity in historical retrospect.

The characteristic features of a dark age add up to a time of poverty, low aspirations and low achievement. There is endless petty violence and a moral free-for-all. In this sense, the descent into a dark age can be described quite fairly as a process of cultural degradation. When people from still ascendant societies contemplate one that is verging towards a dark age, or already in a dark age, they are bound to regard it as hopeless and dire. Administrators sent to Greece from Constantinople, during Europe's barbarian era, described it as a god-forsaken hole that offered none of the rudiments of civilisation to which it had formerly contributed so much.¹⁴⁷⁶

Those who experience a dark age develop attitudes to match. To reduce cognitive dissonance, they tailor their expectations to what their means can afford. There is a harder, less self-indulgent outlook on life. People renounce material comforts and rely more heavily on other-worldly fulfilment. At the same time, devoid of rulers, they develop habits of freedom. They have little to lose from conflict and are quite willing to participate in and perpetuate the troubles. Hence, a dark age will seem to be a time that emphasises asceticism, spiritual values, fierce independence, and the martial spirit. This complex of attitudes is bound up with the prevailing social conditions to form a logical ensemble.¹⁴⁷⁷ Life must be simple when people are poor, and naturally people will then value the simple life.

During a period of decline, before the arrival of a dark age proper, the processes of disintegration, disorganisation and dis cohesion, which have already occurred in reality, begin filtering through into perceptions. There is a growing popular consciousness of social deterioration, and this also provokes certain characteristic attitudes.

At one extreme, there are those who actively endorse the way that old habits and old symbols lose legitimacy (**S6**). For them, whatever was fine or heroic about the old order no longer appears as such and instead approval is extended to things that were formerly regarded as common, debased, uncouth and immoral. The Cynic school, which was spawned by the decay of classical Greece, typifies these philosophies that enshrine disdain and positively uphold depraved behaviour. Diogenes declared that he was a citizen of no state, expressed contempt for patriotism and asserted the

naturalness of sexual activity by masturbating in public.

An opposing reaction is typified by the Stoic school. This was also spawned by the decay of classical Greece and became popular again in Rome as the empire's troubles mounted. It emphasises a resigned attitude to the difficulties of life and the need to maintain personal standards of conduct in an imperfect world. This philosophy provides solace to those who continue to cherish the old legitimacies and for whom the negation of these legitimacies is disorienting and depressing.

As perceptions catch up with the reality, people comment on their problems at length and many of them may deplore the direction in which they see things moving. Such concern implies not so much conviction about the shape of the future, as fear for it. People can find it hard to believe that their former advantages are really lost forever, and they cling to the notion that the decline may be reversed. In a letter preserved from fifth century Roman Gaul, the author writes about mounting chaos but nevertheless expresses the hope that it will be a passing phase.

The concern with decline is symptomatic of it. As G K Chesterton observed, fit people do not worry about their health.¹⁴⁷⁸ If perceptions were to remain positive and confident, the reality might indeed recover from a decline. However, when there is more wringing of hands than any practical attempt to seize the initiative and overcome the problems, a society is essentially doomed. Reflexivity (TC11) also implies that negative perceptions may only further corrode the real situation. The entrenchment of pessimistic expectations is a sign that distinguishes an incipient dark age from more transient dips in a society's fortunes.

DA3 Belief in decline is a component of it.

Creativity and continuity

To say that dark ages involve cultural degradation presents a negative impression, which would probably accord with most people's picture of what a dark age involves. However, the optimistic side of a dark age is that, by restoring perceptions to the reality, it forces the members of a social group to arrive at a more realistic picture of the world and their position within it. This is helpful since it provides a firm foundation for future progress.

The breaking down of old certainties presents an opportunity for new ways of doing things to emerge. Conservatism is replaced with radical inventiveness, and diverse ideas may be able to flourish. At the same time, the dark age serves as a kind of testing ground. Nothing is ruled out solely on principle, although only the most successful ideas will persist and be developed. Hence, the dark age yields not only new ideas, but also better ones.

During the last days of the second world war, German planners were considering the re-building of Berlin after the war had ended. They thought about moving the capital to a new site. It soon became clear, however, that this would be prohibitively difficult because of the way that road, rail, gas and electricity networks all converged on the existing capital. Even if Berlin were removed, its image would be visible in the rest of Germany's infrastructure.¹⁴⁷⁹ This illustrates the way that a society's entrenched institutions can inhibit its freedom to evolve and advance. Very far-reaching destruction may be needed before it becomes worthwhile to consider a wholly new direction, so that people can build things up from scratch. Yet without such destruction the society may be trapped down some sub-optimal developmental route or cul-de-sac.

Hence, a dark age is a time of great creativity and progress. Innovation is always in some ways inherently destructive. Edward Gibbon made this need to destroy in order to advance a central theme of his study of Rome's decline and fall.¹⁴⁸⁰ The economist Joseph Schumpeter characterised economic depressions as periods of creative destruction that are essential to economic progress.¹⁴⁸¹ Sweeping away outmoded firms and industries is painful but it has to be done to make way for the next major advance. A dark age is the same phenomenon writ large. It is a time when society is thrown back into the melting pot. Worn-out institutions are broken down and obstacles to social progress are removed. Fantastic opportunities then emerge as people re-build integration, organisation and cohesion. A dark age is certainly not a sombre time for everybody.¹⁴⁸² For those who have talent and initiative, the dark age offers many rewards.

DA4 A dark age is a time of creativity. Old and inappropriate institutions or ideas are replaced with new, more realistic ones.

It follows that a dark age should not be regarded simply as an accident into which societies fall by misfortune. Rather dark ages are an absolutely necessary and integral part of the historical process. They deliver long run benefits. Without dark ages, human societies would have stagnated long ago.

Traditional policies of preventing forest fires have similarly been recognised as counterproductive. Preventing fires only causes undergrowth and dead wood to build up and clog the forest, which not only harms its ecology but also provides a growing supply of combustible material. Periodic fires, often set by lightning, are essential to the health of the forest. Some tree species even require a fire so that their cones will open and they can complete their lifecycles. This is not surprising really. Forests existed for a long time

before humans became involved in managing them.¹⁴⁸³

A forest fire is a good analogy for a dark age. It clears out dead wood. It consumes the old institutions that have become harmful to progress but are so ingrained they are virtually impossible to change smoothly. This seems to be a very general process in nature, and history is just one illustration of it. Another example is found in the fact that damming rivers, and thus preventing flash floods, means that they become clogged with debris to the detriment of their flora and fauna. Floods are necessary to restore a river's health. Similarly, in biological evolution, mass extinction events have been followed by bursts of speciation as life rushes into the many niches that have been created. This logic of destruction followed by creative recovery is a general feature of complex systems.

Dark ages imply renewal and growth. After a dark age, the old civilisation is never simply revived. There is a qualitatively new configuration, and this is largely discontinuous with what went before.¹⁴⁸⁴ The longer and deeper the dark age, the more radical the new configuration. That is to say, significant change requires a significant dark age. The place where destruction begins and proceeds the furthest is likely to make the earliest and most complete recovery.¹⁴⁸⁵ This is the phoenix principle. Catastrophe comes before progress. One cannot occur without the other and the greater the catastrophe, the greater the progress.

On the other hand, the old ways seldom die out completely. There is continuity in some cultural elements.¹⁴⁸⁶ For instance, Roman language, law and other institutions survived in barbarian Europe, albeit transformed. On the broadest view, world history shows obvious progress despite the many setbacks.¹⁴⁸⁷ Few major technologies were lost when Rome collapsed,¹⁴⁸⁸ or at least they were easily re-invented. Superimposed on the ferment of integration, organisation and cohesion, therefore, there is an overall improvement in technology and in human institutions.

DA5 On a global scale and over long time scales, cultural and technological developments show overall progress despite setbacks.

Conceptualising ferment

History is a ferment (**K1**), which involves many reversals and re-reversals. If any sense is to be made of this, it must be assumed that the ferment is driven by a common underlying mechanism. It is necessary to conceptualise the ferment as a particular kind of process, with specific properties that can be measured or evaluated. Any such conceptualisation should exhibit the general characteristics discussed above. It should result in fluctuations on all scales of magnitude and duration, with the larger fluctuations emerging as a natural and inevitable

part of the process, though still being much rarer than the small fluctuations.

Cycles

One established way to conceive of the up-and-down movements in human affairs is as a series of cycles. For instance, economists have identified a short term business cycle of 5-8 years, a Kuznets cycle of about 20 years and a Kondratieff cycle of 50-60 years.¹⁴⁸⁹ The interaction of such different length cycles can produce fluctuations of varying size, according to whether the cycles contradict or reinforce each other at a given moment.¹⁴⁹⁰ In this case, the properties appropriate for analysing the ferment and detecting its underlying pattern, are the number of different cycles and their various periods and amplitudes.

Around the middle of the twentieth century, the Foundation for the Study of Cycles produced an enormous catalogue of cycles, touching on everything from commerce to lynx populations and measles epidemics. This included prominent economic cycles of 3.5, 8 and 10 years duration, along with many weaker ones.¹⁴⁹¹ Although this work was admirably comprehensive, the sheer number of cycles involved is somewhat suspicious. The truth is that one can identify apparent periodicities in any fluctuating data series, if one's criteria are loose enough. The resulting cycles are probably epiphenomena, like constellations in the night sky, patterns that have no significance for the underlying processes.

More recent studies have backed away from the idea of absolutely regular cycles (which, if they existed, would soon be undermined anyway by government or business action). The US National Bureau of Economic Research found that, over the period 1857 to 1978, there was a recession on average every 4 years, but the actual intervals varied from 2.5 to 9.5 years.¹⁴⁹² Similarly, in a study of the Kondratieff cycle, the economist Joshua Goldstein found no evidence for a strict periodicity but he did identify a succession of up and down phases of reasonably regular duration.¹⁴⁹³ Goldstein also found a succession of phases in war activity but again no strict periodicity.¹⁴⁹⁴ André Gunder Frank and colleagues have identified an alternation of politico-economic phases stretching back to 3000 BC but no regular cycles.¹⁴⁹⁵

These observations suggest a situation similar to that of throwing dice, where the results are reasonably regular without having a strict periodicity. For example, a study of great power wars found that they occurred at a mean interval of 10 years, although the probability of entry into the next war is independent of the passage of time. This is exactly the same as the fact that sixes come on average every six throws, yet the probability of throwing a six is independent of time – it is always just $1/6$. Any supposed cycles in social phenomena

may similarly reflect the chance an event will occur without providing evidence for an underlying periodic oscillation.

Overall, the notion that history's ferment is made up of cycles is unsatisfactory. Human affairs simply do not present regular oscillations.

Chaos

A more sophisticated conceptualisation of history's ferment is in terms of non-linear dynamics or chaos theory. Work on chaotic dynamics goes back at least to the nineteenth century, though its significance has only been fully recognised from the 1960s onwards. A classic illustration involves Edward Lorenz's attempt to model the atmosphere using a computer simulation of certain key variables (pressure, temperature etc.). Lorenz made two significant observations. Firstly, the variables wandered about all over the place in a seemingly random fashion. Secondly, running the simulation twice with only very slightly different starting points soon produced wildly different results – an effect now called sensitive dependence on initial conditions. Lorenz realised that these two factors would make it impossible to predict the behaviour of the model very far ahead. It occurred to him that this must also apply to the real atmosphere, which is far more complicated than any model.¹⁴⁹⁶

Since Lorenz's pioneering work, mathematicians have discovered chaotic behaviour in all sorts of places, from the dynamics of fish populations to the flapping of a flag in the wind. Hardly surprisingly, economists and others have come to see chaos in the behaviour of social systems.¹⁴⁹⁷ As Lorenz showed, chaos can arise with just three simple non-linear equations,¹⁴⁹⁸ and societies and economies are certainly more complicated than that.

Many studies have confirmed the necessary non-linearity in economic variables, such as foreign exchange rates and unemployment¹⁴⁹⁹. The mathematician Benoit Mandelbrot has demonstrated the existence of apparently chaotic behaviour in cotton prices.¹⁵⁰⁰ It has also been shown that the accuracy of economic forecasts is not improved by using much longer series of existing data as an input,¹⁵⁰¹ and this is precisely what one would expect for chaotic dynamics, where sensitive dependence on initial conditions means that past influences quickly become irrelevant.

Chaotic meanderings would mean that integration, organisation and cohesion should wander about apparently aimlessly, never converging to an average or equilibrium, never exactly repeating themselves, and occasionally producing large deviations from the norm. This is of course exactly the sort of behaviour that characterises history.

On the other hand, an objection to the chaotic model is that it implies the existence of quite simple, underlying, deterministic equations. History, however, depends on the unpredictable contributions of very many individual human actors and so is unlikely to follow a simple set of equations. Some economic time series have also been shown to contain more randomness than would be expected from a chaotic process.¹⁵⁰² Meanwhile, properties such as integration, organisation and cohesion are not really variables, like pressure and temperature, which can be reduced to a single number and subjected to algebraic equations. Although an improvement on the cycles concept, therefore, chaos is not completely satisfactory as a characterisation of history's ferment.

Self-organised criticality

More recent than chaos theory is the idea of self-organised criticality. This seems to resemble chaos, but its discoverer, the physicist Per Bak, insists that self-organised criticality is quite a different kind of phenomenon. In particular, whereas chaotic meanderings are built up equally from cycles of all periodicities, self-organised criticality has the property that events with the lowest periodicities (i.e. most infrequent) have much larger amplitudes than those with the highest periodicities (i.e. most frequent).¹⁵⁰³

The classic experiment of self-organised criticality concerns a sand pile on to which sand is dropped steadily, one grain at a time. The pile is situated on an electronic balance. Every so often there is a slippage and sand falls off the sides. The change in the reading of the balance represents the size of the slippage. Given sufficient time, this experiment will yield slippages of all different sizes. However, the smallest slippages turn out to be the most frequent, while medium size ones occur less often, and very, very rarely there is a huge avalanche. Crucially, there is no typical size of slippage. Slippages occur on all scales, even though they are derived from the same mechanism, i.e. dropping sand one grain at a time.

The sand pile experiment provides an easily remembered picture of self-organised criticality. However, the results are not quite as neat as this simple account suggests. This is because the smallest slippages, in which no sand falls off the side, are not recorded and, in general, the readings from the balance are not a good measure of the size of each slippage. Some critics have used this to debunk self-organised criticality.¹⁵⁰⁴ However, this is unfair. The difficulties of the demonstration are not relevant. It is the concept that is important.

This kind of behaviour, where events of the largest amplitude are least common, has certainly been observed in many natural systems. Records of earthquakes, of lake levels, and of floods on the Nile, show that the longer one waits, the more

extreme the events that one observes.¹⁵⁰⁵ The usefulness of self-organised criticality is that there is no need to introduce any special factors to explain the largest events. Major earthquakes, say, can be understood as being due to the same processes that cause minor ones.

Self-organised criticality has potentially revolutionary implications. It could, for example, provide a straightforward account for the mass extinction events that have occurred in evolution.

Species are going extinct all the time, as habitats change, prey evolve new defences, or predators evolve new lethality. Mass extinctions may simply be a natural extension of these small extinction events, just as large slippages on the sand pile are a natural extension of small slippages.¹⁵⁰⁶ In other words, there may be no need to introduce cometary collisions, or other exotic phenomena, to account for the demise of the dinosaurs and similar dramatic events of evolution.

Bak suggests that the basic picture is one of nature perpetually out of balance, poised in a critical state where anything can happen.¹⁵⁰⁷ This resonates with the idea that social systems are in a metastable state, where small disturbances, like the sand grain, are often absorbed but can occasionally initiate a catastrophic unravelling of human relationships. It also accords with the uniformitarian prejudice that the same basic principles apply everywhere and at all times. There is no need to introduce any special circumstances to explain dark ages. (Bak believes his theory to be anti-uniformitarian¹⁵⁰⁸. He is wrong. His theory is a triumph of uniformitarianism.)

The key characteristic of self-organised criticality is the predicted relationship between the size of an event and the frequency of its occurrence. This kind of relationship is widespread in social phenomena, such as (according to one author) statistics for sickness, road accidents, and battle casualties.¹⁵⁰⁹ The agreement with self-organised criticality extends to quantitative considerations. Figure 17-1, for example, plots the frequency of recessions against their size and shows that they conform to the expected relationship.

Similarly, Mandelbrot has shown in an analysis of commodity prices that minor hourly fluctuations lie on the same straight line as the major recessions and even the 1930s depression. This suggests that both the most trivial market events and the most devastating ones are manifestations of the same underlying process.

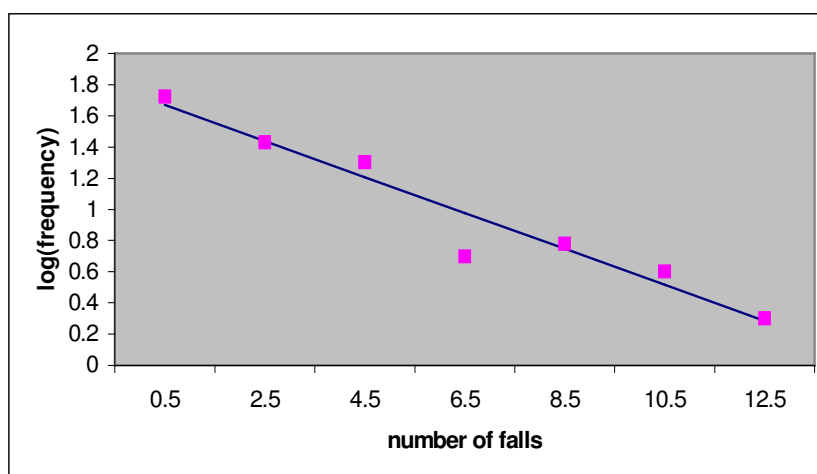


Figure 17-1: Log-normal graph plotting the frequency of recessions (1871-1989) against their size (measured as the number of European countries in which a fall in GDP was registered in a given year). (Source: Maddison 1991, pp. 115-117.)

A system exhibiting self-organised criticality evolves of its own accord (organises itself) to the (critical) state in which events can occur on all scales. If a large amount of sand were swept away from the sand pile, it would become shallower and the distribution of slippages would no longer match the expectations of self-organised criticality. However, as sand continued to fall, the pile would steadily build up, until it again reached the critical angle of slope. There it would then stay, exhibiting the rich behaviour of self-organised criticality. Other ways of changing the rules, such as inserting a barrier or making the sand more sticky, would similarly produce only a transient regime. The sand would eventually reconfigure itself – piling up behind the barrier say – so that the critical state is restored.¹⁵¹⁰

Bak draws conclusions from this for those who seek to modify social phenomena. Governments who try to avoid recessions, say, can never succeed. Whatever initiatives they introduce, the economy will tend to evolve back to the critical state. Bak's work suggests that the critical state is the best state for the economy to be in anyway. In this state, resources are used most efficiently, albeit at the price of periodic retrenchment. (Interestingly, the anthropologist David Phillips intuitively developed the notion that societies evolve to a state of maximum efficiency, in which they become especially vulnerable to shocks, about a decade before Bak arrived at the concept of self-organised criticality.¹⁵¹¹)

To summarise, self-organised criticality provides a useful picture for understanding how the normal process of making and breaking connections in a network of human relationships can produce everything from barely noticeable

hiccups to recessions, depressions, and dark ages. However, one should not mistake the model for the reality. There is obviously more to social phenomena than sand dropping on a sand pile. For instance, technology tends to grow overall, but this has no representation in the sand pile, which always returns to the same basic shape. Self-organised criticality is, in the terminology of the biologist C H Waddington, simply a tool for thought.

Breaking the mould

Dark ages constitute a global and recurrent phenomenon. There is a very long list of collapsed societies. The whole history of the world is one of fitful up and down movements. Dark ages are the most severe manifestations of this perpetual turmoil.

It has been like this from the beginning. The early development of proto-states in Mesopotamia starting before 4500 BC saw large centres rising then disappearing again. There was no smooth, cumulative evolution leading to the world's first historical city at Sumer. It was a messy sequence of boom and bust cycles.¹⁵¹²

Some societies and some regions have risen further and lasted longer than others. Yet none so far have permanently defied the logic of decline. On average, the period of ascendancy has been surprisingly short. Most empires have maintained themselves within 80 percent of their maximum extent for only one or two centuries.¹⁵¹³ The absolute pre-eminence of any society has typically lasted barely 25 years.¹⁵¹⁴

The turbulent process that has been going on for at least five thousand years has surely not come to a sudden halt. The logical corollary is that the future will be characterised by reversals at least as dramatic as those of the past. Yet this is something that many people find hard to accept. They imagine that some new characteristic of the modern age has finally rendered such reversals impossible.

The belief that the present is different from the past is itself one of the constants of history. Students of stock-market crashes know that these are generally preceded by talk of a new paradigm that supposedly guarantees ever-buoyant equities. Similarly, many commentators have predicted a future of increasing peace and international harmony just before the biggest bloodbath to date. In 1784, the French philosopher/politician Condorcet wrote of the prevailing spirit of moderation and peace, and argued that henceforth wars and revolutions would be less frequent.¹⁵¹⁵ This was five years before the French revolution, and eight years before the advent of the Napoleonic wars. In 1899, a historian predicted that the twentieth century would be marked by a spirit of peaceful conservatism and preservation of the status quo – just fifteen years before the advent of the first world war, and eighteen years before the

Russian revolution. Indeed, the view that humans would never again be so foolish as to engage in all-out great power war prevailed through most of the nineteenth century.

People always believe that it will be different this time. Yet it never is different this time.¹⁵¹⁶ In the end, the familiar patterns have returned and the uniformitarian view has been vindicated. If one looks at the surface features of societies – their technology, their dress, their art, their particular institutions – things can look very different and the present can seem to be nothing like the past. However, if one focuses on the underlying principles then every era reproduces the same eternal themes, for example that a forceful authority is needed to supply order.

People rightly surmise that a dark age could not occur so long as the modern technological infrastructure remains intact. However, the false assumption is that this infrastructure will always remain intact. The reality is that the dark age creates its own conditions, which include the comprehensive destruction of the prevailing infrastructure. Dark ages have variously affected civilisations that were in the stone age, bronze age and iron age. They can similarly affect civilisations that are in the space age.

To a large degree, people have a biased or superficial view of the past and they draw sharp distinctions that are simply not justified. They are then ready to believe that there have been qualitative changes in human experience implying that future events will depart from the pattern set by past events. For instance, much has recently been made of so-called globalisation, i.e. the defeat of distance and the breaking down of barriers between nations. Of course, it is true that aeroplanes and communications satellites have brought people around the world into far more immediate contact than ever before. Yet it is also true that the world has always formed one connected system. No doubt, inter-regional traffic is at a higher level today, but in the future it may be at a higher level still. It is not clear that the present situation represents a radical new departure.

At the beginning of the twentieth century, people were already saying that modern communications had made the world into a single unit.¹⁵¹⁷ They might have said the same thing long before that. International trade and diplomacy have been important all through history. There has never been a time when societies were not influenced by their neighbours.¹⁵¹⁸ People, ideas and inventions have been diffusing from region to region since prehistoric times. The development of metallurgy during the first two millennia BC was the subject of a world-wide research programme, just as modern technologies are. Even contemporary foraging peoples are far from being pristine remnants of the original condition of humankind. They have always

been in contact with their agriculturalist neighbours and have exchanged goods and ideas with them. The development of modern communications is a quantitative not qualitative change in human experience. There is no new and distinctive factor in the international system.

It is also wrong to portray the increasingly homogeneous global culture as the recent export of a predominantly North American way of life and set of values to the rest of the world. This is again a conceit and a distortion caused by viewing the world from a particular place and a particular time. It fails to recognise that other parts of the world have an active role in selecting and reshaping cultural exports. Not only is Japan's adoption of American things voluntary and discriminating, but also some of these things are then transformed in Japan and re-exported to America. If the flow is predominantly in one direction today, it has been in other directions in the past. There is in effect a global culture, in which all humans participate, and with which they have been moving forward together for many millennia. Globalisation is the oldest news of all.

Related to the globalisation thesis is the notion that technology has now reached some kind of critical mass or take-off point which will ensure unstoppable growth. For sure, archaeologists found in one palaeolithic excavation exactly the same stone tools at the top and bottom of a layer of gravel 12 feet thick.¹⁵¹⁹ When one considers the time taken for a river to deposit 12 feet of gravel, this indicates a remarkable cultural stability. It presents a dramatic contrast with today, when people expect new inventions to be arriving in the shops with every season.

The notion that the pace of social change has increased steadily through history and is today pitched at a phenomenal rate is a cliché and one that people accept virtually without question. Yet an objective characterisation of this cliché is not so easy to establish. Attempting to demonstrate an acceleration in important discoveries raises the question of what criteria should be used to decide what counts as important. For instance, how much difference does it make that this book is produced on a computer rather than a typewriter, compared to the difference between say a new way of hafting a flint blade onto a spear? In practice, this question is often simply ignored because the belief in acceleration is taken for granted.

The biochemist Gunther Stent has suggested the following list of inventions to emphasise the accelerating pace of invention: fire, 50,000 years ago; then 45,000 years to water power; 3500 years to wind power; 300 years to steam power; 100 years to the internal combustion engine; 40 years to nuclear power.¹⁵²⁰ This seems convincing evidence for an acceleration until one considers that fifty years have now gone by without any new

departure. By Stent's measure, change has now stopped. Obviously, the series is no longer trustworthy after the discovery of nuclear power. Yet is it trustworthy before that?

It is a commonplace assertion that in previous centuries the world that people left at their death was much the same as the one that they entered at their birth – supposedly in contrast to the present day. Yet in the eighteenth century, Josiah Wedgwood commented that the pace of change made his head giddy.¹⁵²¹ Some authors have identified the nineteenth or the sixteenth centuries as periods of momentous change. The fifteenth century saw the renaissance, the reformation, the black death, and the discovery of the new world.¹⁵²² The spread of windmills from the eleventh century, or even the introduction of the wheelbarrow in the twelfth century, had consequences that might be compared with steam power or the internal combustion engine.¹⁵²³ This pushes back the time at which change became noticeable. However, was there ever a time when the world stood still? It tends to be forgotten that people lived seventy years. Take any seventy years of the Roman republic and there were clear cultural, political and economic developments. Take seventy years of any other period of history in any other part of the world. If the detail seems obscure, might this not be because the scene is so distant and not because there was no detail? Arguably, the last seventy years have seen rather modest changes compared to the seventy years before that, when electricity, radio, motor cars and the aeroplane were all introduced.¹⁵²⁴

Human societies have never been culturally or technologically stagnant. The palaeolithic hominids who left identical tools throughout 12 feet of gravel were not humans. Modern humans are creatures of the last 40,000 years. Arguably, the pace of change has been both accelerating and subjectively rapid throughout the human era. Certainly, from the time that people first lived in cities, change was already swift and obvious.¹⁵²⁵

Having said all this, the growing scale of societies surely has increased the rate of technological change in some respects. Talented people can get in touch with each other and pool their ideas. Information flows more freely, further, and in larger quantities. Technological developments themselves assist this process in a positive feedback. It could well be that technological change really is following an exponential curve, at least according to some definition. Even so, whether a particular part of the curve looks steep or shallow depends on the choice of axes. The rightmost region will always have the steepest slope, but that does not make it intrinsically different from what has gone before.

Deep and abstract themes

On the long view, there has been an overall progress in human affairs (**DA5**). Hence, it is fair to say that, in some respects, the world is at a unique point in history and its present situation is unprecedented. However, the changes have been quantitative rather than qualitative. On a considered view, there is no reason to believe that the present is fundamentally different from the past. The obvious and overt differences are not as relevant for understanding the past and the future as the abstract themes that unify history at a deeper level. These include the concepts of *integration*, *organisation* and *cohesion*, which are rooted in very general and timeless notions about human relationships. The logic of these relationships prevented past societies from gaining a permanent advantage and is in no way invalidated by quantitative changes in globalisation or technology.

DA6 Change is certain. No people, nor any part of the world has ever remained permanently in the ascendant. Neither will they do so in the future.

Despite all the marvellous developments of the last several millennia, the fundamentals of human experience have not changed. Technologies have come on dramatically, but the same principles govern human relationships now as they ever did. The same logical *ensembles* constrain social forms. It has been shown, for example, that the level of urbanism in the world has always been the maximum possible given contemporary technologies.¹⁵²⁶ This very clearly indicates that the same basic habits underlie urbanism in every period.

The notion that today's global civilisation will collapse like its predecessors is not based upon some particular, superficial parallels with Roman times or with pharaonic Egypt. It is based on the most general considerations about social systems and indeed about complex systems of any kind. The interplay of *integration*, *organisation* and *cohesion* will continue to follow its ruthless logic, irrespective of changes of *scale* and such detailed matters as the arrival of this technology or that.

From this perspective, the present time is just a snapshot of an ever-changing scene. It is a fleeting moment in a long established ferment. The configuration revealed by this momentary snapshot is simply the latest of a long series of configurations. It is not inevitable or necessary in any way. Recent advances in science and technology do not stand out as some kind of climax or culmination, whatever the usual claims may be. There are still enormous gaps in human knowledge and many things people would like to do but cannot. This is no reason to think that such things

are impossible, or that such knowledge is inaccessible.

The nations that are wealthy and powerful today are only successful while the rest of the world has its present form. When the rest of the world changes direction, those who are at the front may find themselves suddenly at the back. What is optimal now may not be optimal tomorrow.¹⁵²⁷ As the political scientist Arnold points out, no actor can win or maintain an advantage over others in the long run. Eventually, all actors must achieve a draw.¹⁵²⁸ This is because, among other things, one's competitors are also one's customers. By destroying their livelihoods, one eventually destroys one's own (**E5**). Every period of relative wealth must be paid for by a period of relative poverty, every period of power by a period of subordination.

The stewardship of cultural advance inevitably moves from place to place, and it is usually to less complex, marginal groups, whose fortunes may seem unpromising thereto.¹⁵²⁹ Europe has held the stewardship for perhaps five or six centuries. However, this is a temporary state of affairs. There can be no escape from the logic of the self-reversing ferment, which is a logic that is well entrenched in human history and reflected in the most ancient philosophies. The Chinese speak of yin and yang. Heraclitus mused that the same path leads uphill as down.

In discussing the crises that are a perennial feature of history, some authors stress the issue of continuity. Others emphasise the transition to a new age. The truth is surely a combination of the two. Every age, every moment of history, is both a turning point and a point of continuity with the past. In the imagery of Teilhard de Chardin, the world is on a spiral trajectory, always changing direction but seamlessly connected with what has gone before and with what is to come.¹⁵³⁰

Overall, one should take a very sceptical view of statements that draw a fundamental contrast between the present and the past, or suggest that today is qualitatively different. At a sufficiently fundamental level, history exhibits certain perennial themes and its variations on these themes are merely quantitative. This is to reiterate, in a stronger manner, the uniformitarian principle, which is itself essential in order to have any scientific or predictive understanding of history at all. This principle, in its two versions, can now be summarised as follows:

DA7 (Uniformitarianism)

- Weak version. Humans have been much the same at all times and in all places. (See Chapter 11.)
- Strong version. This time and this society are not at any special vantage point. No one lives in a historically privileged epoch. Nor does anyone live in a geographically privileged part of the world.

Chapter 18 - Problems and non-problems

Introduction

From time to time the alarm is raised about some unfolding logic that threatens to overcome world civilisation. Examples include the following:

- Humanity's rapidly growing numbers may soon exceed what the planet can support.
- Some kind of vital resource, such as oil, may finally be exhausted.
- Society may break down because new technology will make too many people idle and purposeless.
- Human activity is damaging the environment and may undermine the basis of productive activity.

Some of these concerns are quite ancient. They have certainly been discussed widely and at length, and the ideas they involve are for the most part lodged in and fully acceptable to the popular imagination.¹⁵³¹ They have sometimes been enshrined in government policies. Nevertheless, what can seem to be obvious threats are mostly not threats at all. They are the kind of issue that people deal with quite naturally in the course of normal historical development.

Population

At the end of the eighteenth century, Thomas Malthus published the argument that population is forever pushing against the limits of food production technology. According to Malthus, the more people there are, the more babies are added in each generation, and so population grows at an ever faster rate. Food production, by contrast, grows only at a steady pace, adding a fixed amount with each generation and not an amount that is itself growing. In this case, Malthus pointed out, the population must eventually outstrip the capacity to feed it, as shown in the following figure.¹⁵³²

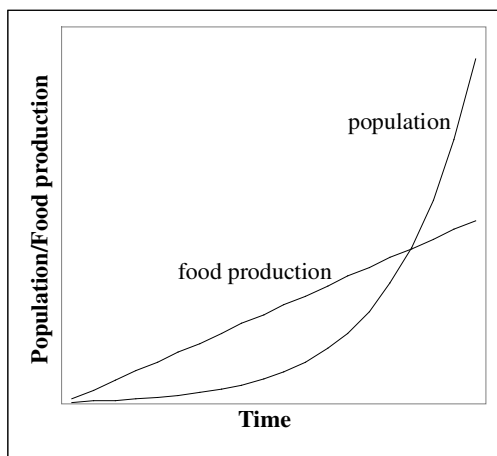


Figure 18-1: *The Malthusian model: population grows exponentially and must eventually outstrip food production, which grows at a steadier rate.*

Since population cannot really surpass what the available food will support, Malthus stated that

various checks must operate – either the positive checks of war, famine and disease, or the negative checks of restraint on reproduction. Given this theory, Malthus proposed certain social reforms linking poor relief to the number of children in each family. For all the admirable qualities of such charity, Malthus argued, it cannot get around the inexorable logic suggested by Figure 18-1. Subsidising children only encourages reproduction. Far from relieving poverty and misery, in the long run it will only make things worse.¹⁵³³

Malthus's ideas have a strong intuitive appeal. As long ago as 500 BC, a Chinese author made a similar connection between population growth and poverty, and was led to the same conservative conclusions.¹⁵³⁴ These ideas die hard, despite the fact that they have been denied by both theory and experience.

It is true that, when their fertility is unrestrained, human populations can grow at an astounding rate. The seventeenth century colonists of North America produced an average of 13 children per family.¹⁵³⁵ At that rate, population could have increased by a factor of more than six in every generation. On Pitcairn, the uninhabited island settled by the Bounty mutineers, population doubled nearly three times between 1810 and 1840.¹⁵³⁶

In general, however, humans have a long tradition of controlling their numbers, regardless of the technologies available to them. In Romania, abortion and contraception were banned in 1966, and women were forced to undergo monthly examinations to ensure compliance. Yet after a short-lived rise, the birth rate soon fell back to its previous level. Such reproductive restraint seems to be motivated by the desire to maintain an adequate standard of living.¹⁵³⁷ In England over the last few centuries, the birth rate has varied with the strength of the economy. Malthus's negative checks generally operate well ahead of time.¹⁵³⁸ Human numbers do not grow to the very limits of subsistence.

The theoretical maximum number of people that a particular region could support is sometimes called its carrying capacity. This is not an absolute given but depends on food-producing technology and on the gains of trade from internal commerce or exchanges with other regions.¹⁵³⁹ In other words, carrying capacity depends on the level of economic organisation.

Human numbers increased rapidly on Pitcairn, or among American settlers, because the population was originally well below the carrying capacity of such virgin territory. As numbers approached the carrying capacity, these explosive growths petered out. The American case is particularly instructive, for it shows the

dependence of carrying capacity on technological sophistication. The indigenous groups, based on simple technologies and minimal organisation, were in equilibrium at a lower population level. The more elaborate economy of the European settlers greatly expanded the carrying capacity of exactly the same land, and allowed them to increase faster than the original inhabitants.

Anything that changes organisation one way or the other will result in a corresponding change in human numbers. When trade began to flourish in Japan under the Tokugawa shogunate, population grew by 40 percent.¹⁵⁴⁰ This principle underlies the so-called demographic transition, which is illustrated in Figure 18-2.¹⁵⁴¹ It is a movement from a regime of high fertility and high mortality to one of low fertility and low mortality. Population rises during the transition but eventually stabilises at a higher level. Three such transitions have occurred in Europe over the last millennium and they were each associated with economic expansion. The most recent was sparked off by the industrial revolution, and was largely complete by the twentieth century. As industrialisation has spread to other countries, a demographic transition has been occurring there.

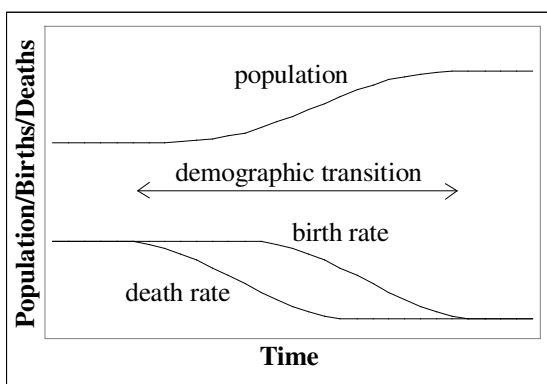


Figure 18-2: *The demographic transition. This is a movement from a regime of high fertility and high mortality to one of low fertility and low mortality.*

During the transition population rises but it eventually stabilises at a higher level.

It is often assumed that the demographic transition occurs because people take time to realise that death rates are falling and that they no longer have to raise many children just to ensure that a few survive. On this view, population growth is simply the consequence of the lag before birth rates come down. For Malthusians, furthermore, the increased numbers can only mean a future of enormous misery, and indeed such thinking has occasionally stimulated calls for the abolition of international aid.¹⁵⁴²

The crucial thing, however, is that the new economic opportunities create a higher carrying capacity. This is the fundamental reason for the increased population. People raise their numbers

and their standard of living at the same time. It is true that many third world countries are today in a miserable situation, but this is not due to population growth as such. After all, some countries, including Taiwan and South Korea, have seen vast increases in prosperity in conjunction with record population growth. The simple reality is that population growth is nothing other than a consequence of improvements in human capabilities. It means that there are more people enjoying greater life expectancies. Whatever way it is looked at, population growth can only be regarded as a fundamental human good.¹⁵⁴³

Having said all this, it might be argued that, even if it is possible to support very high numbers, this is not necessarily desirable. Crowding can bring with it pathological reactions and psychological costs. Yet if the costs were to outweigh the benefits, people would rein back their numbers. Places like Hong Kong and Singapore show that people can live satisfactorily at densities far higher than are found in most regions of the world. Even if such densities were achieved over the 40,900 square miles of the earth's potentially habitable land – and that is a long way off – this would still leave 33,930 square miles of desert and 29,300 square miles of mountains – not to mention the oceans. People could travel into these areas for recreation and temporary respite from high-density environments. Hence, there is no reason to think that the eventual stable population of the earth, even if several times its present value, would be anything like intolerable in psychological terms.

Resources

The first worries about running out of oil were expressed in the United States back in 1866.¹⁵⁴⁴ Similar concerns have been raised many times since. Yet the dread day when the oil wells finally dry up never seems to arrive. The same story applies to many other natural resources. Despite frequent scare stories about potential exhaustion, human progress has never actually been halted by this means.

Like population carrying capacity, the resources afforded by a given territory are not an absolute given. Instead, what counts as a resource is determined by such factors as the existing level of technology and the degree of interaction with other groups. Soil fertility, for example, is a function of the way that land is used. Iron and uranium are only resources to an industrial society.¹⁵⁴⁵ Whether a mineral deposit represents a viable resource depends upon the level of demand, the ease of extraction, and the political stability of the area. In short, resource availability is a function of organisation.

Sometimes, important resources have become scarce. However, people have been able to find substitutes or efficiency savings, and general industrial progress has not been seriously

hampered. When Europe's known sources of precious metals were becoming exhausted in the fifteenth century, the result was a burst of improvement in prospecting and in mining and smelting technology.¹⁵⁴⁶ Around 1900, a looming shortage of nitrogen seemed to threaten a cap to world agricultural productivity, but within ten years the invention of the Haber process had removed any limit.¹⁵⁴⁷ In the decade following the energy crises of the 1970s, the United States gained seven times as much new energy from efficiency savings as from new supply.¹⁵⁴⁸ In general, the price mechanism encourages people to cut down on scarce items and look for alternatives.

In the long run, there are no absolute limits posed by the finiteness of particular resources. The important thing is what the economist Julian Simon has called the ultimate resource, i.e. human ingenuity. Such ingenuity has shown the ability to create continual improvements in living standards by exploiting new materials or finding new ways of exploiting old materials. With semiconductor technology, for example, an abundant resource like silicon, which was of little use to past civilisations, has become the basis of an extraordinary global industry.

It follows that currently impoverished regions are not condemned to that condition forever, even if their lands seem to be resource-poor today. Suitable entrepreneurship could make these regions seem resource-rich and wealthy (E4). In Brazil, 80 percent of the land is potentially productive, but only a fraction is actually used and Brazil is a net importer of food. In the United States, by contrast, only 40 percent of the land is potentially productive, yet the US not only manages to feed itself but also exports food.¹⁵⁴⁹ The difference is one of organisation. Malthusian arguments that deplore population growth in some countries and oppose aid as counter-productive are based on an erroneously static view of their potential. Hong Kong is built on unproductive, granitic rock, its land area is virtually resourceless, it has to import most of its food, and it is thousands of miles from its most important markets and sources of raw materials. Yet it is one of the world's wealthiest and most populous areas.¹⁵⁵⁰

The wealth of a society is correlated with its consumption of energy and raw materials. The inventor Buckminster Fuller suggested that, in terms of energy use, people in the world's richest countries now each have at their disposal the efforts of several hundred slaves.¹⁵⁵¹ This is some fifty times more energy per person than is available in the poorest countries.¹⁵⁵² Buckminster Fuller pointed out another characteristic of technological progress, which he called ephemeralisation. This is defined as doing more with less. Today's desktop computers are much less demanding of energy and raw materials than the old mainframes of forty

years ago, yet they are also vastly more capable. People are coming to rely on technological 'slaves' for their brains more than their brawn. Through ephemeralisation, the overall consumption of raw materials might level off or even fall, while economic organisation and quality of life continue to rise.

All the same, while the ultimate resource, i.e. human ingenuity and entrepreneurship, may provide long term solutions, resource shortages can still be problematic in the short term. As the economy adjusts to changing patterns of resource usage, it can hamper some people's aspirations, create frustrations, and raise tensions. Disputes over access to dwindling resources have sometimes been a source of conflict. The 1970s cod war between Britain and Iceland, for example, arose out of Iceland's perception that local fishing stocks were being dangerously depleted by the vessels of other nations.¹⁵⁵³

Technology

Technical innovation has been described as an autocatalytic process,¹⁵⁵⁴ i.e. one that feeds on itself. Technology stimulates the development of new technology. It presents people with new problems and gives them ideas about possible solutions. Also, many new technologies depend on the combination of earlier technologies, so the more technologies already available the faster innovation can proceed.

This means that technology, like population, may grow at an ever-increasing rate. Hence, contra Malthus, food production, which is a function of technology, might outstrip population even in the long run. In India, for example, population doubled between 1965 and 1980, but production of wheat went up by a factor of three. In this case, Figure 18-1 might be changed to look more like Figure 18-3 and population could in principle accelerate forever.

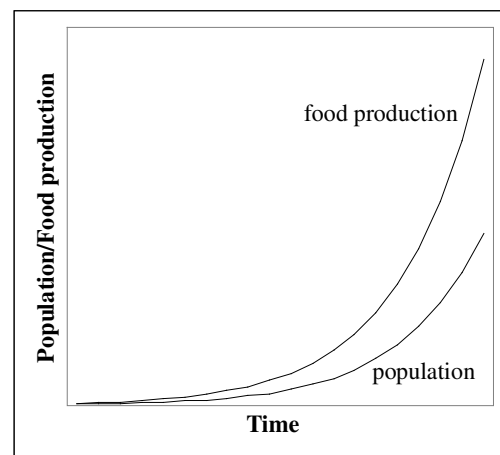


Figure 18-3: Since innovation is an autocatalytic process, technology may increase fast enough to support exponential population growth (compare with Figure 18-1).

On the other hand, technology is not an autonomous variable. While some authors argue that it just develops anyway and drives history forward, this is not borne out by experience.¹⁵⁵⁵ Technology is bound up with other institutional arrangements in the form of an *ensemble*. Without the telephone, for instance, many businesses today would not be able to function, yet the availability of a global telecommunications infrastructure depends on the existence of those same businesses. There is mutual dependence. The level of technology is related to such factors as specialisation and commerce. Hence, technology stimulates and depends upon the creation of *organisation*.

It follows that reductions in *organisation* can result in technological retrenchment. While Romans of the first century AD were already using window glass in their dwellings, after the empire's collapse people reverted to more primitive methods, such as shutters, gratings, slabs of mica and specially treated parchment.¹⁵⁵⁶ Similarly, the Spanish mines of Roman times were deeper and more ingenious than they would be again for another 1000 years.¹⁵⁵⁷ In general, technological progress has reflected the ferment of *organisation* (**K1**) and its overall growth has been characterised by spurts, stagnation and retreats.

Technological innovation can occur on different levels and have different potential for the growth of *organisation*. Radical innovations, like the telephone, are relatively rare. More common is adaptive innovation, in which an existing technology is applied to new products (e.g. the Walkman was based on existing tape recorder technology), or incremental innovation, involving the improvement of existing products.¹⁵⁵⁸ Innovation is only the precondition of technological advance. The new technology then needs to be accepted by the community, and this is by no means certain to happen. It has been estimated that only one invention in a thousand is ever adopted.¹⁵⁵⁹

People can be quite ambivalent about the benefits of advanced technology. Few who benefit from it would genuinely like to swap places with the average third world citizen and so give up their access to electricity, mains water, television, antibiotics, and private motor transport. Yet there is still a strong undercurrent of thinking that sees the ambition of subduing nature and uncovering its secrets as somewhat sinister and potentially dangerous.

One concern is with harmful side effects, such as the soil erosion and pesticide resistance which have been caused by certain agricultural technologies. The notion that these problems might be solved through further technological improvements – a so-called technological fix – is then condemned as only likely to compound the

problem. Yet experience shows that technological fixes have worked in the past. Indeed, every innovation is in some ways a solution to a problem. To condemn technological fixes is to condemn the whole inspiring story of human invention. On an emotive level, this may appeal to certain people, but as a rational orientation to the issues of human existence, it fails dismally.

New technology may also be resented on the grounds that traditional jobs will be taken away. This fear, typified by the Luddite movement, has a long history. In third century Rome, the emperor Diocletian declined an engineer's proposal for a temple-building machine and said instead 'let me feed the common folk'.¹⁵⁶⁰ Such an attitude is based on a static view of the world. In 1897, several motor cars were destroyed by arson at a workshop in Paris – presumably the work of those whose living relied on horse-drawn carriages.¹⁵⁶¹ Yet motor vehicles have created far more jobs than they ever removed – from garage attendants to taxi operators and long distance lorry drivers.¹⁵⁶² There is no evidence that technological improvements eliminate roles for people in an absolute manner. Quite the reverse, technological progress has always been associated with growth in human numbers.

While objection in principle to technical innovation is illogical, the failure to adopt specific technologies need not be. As with changing patterns of resource usage, the making and breaking of *economic* relationships due to new technology can disadvantage some people in the short run. People's receptiveness to a given innovation depends, quite rationally, on their incentives and the risks involved.¹⁵⁶³ A new technology is often of more interest to those who have little to lose, than it is to those who are doing well out of the status quo. This is why waterwheels began to spread only after the Roman empire had come crashing down and people had lost everything anyway. Similarly, the Sony Corporation, a small Japanese start-up, was able to purchase the rights to the transistor in 1953, while the large Japanese and American electronics companies ignored this epochal invention.¹⁵⁶⁴ The founders of Sony could recognise and exploit the transistor's potential in a way that the established firms could not. This is an important self-correcting principle that helps the baton of progress pass from ascendant groups to less successful ones.

Culture

In 1952, two anthropologists recorded 164 different definitions of culture,¹⁵⁶⁵ a total that has no doubt grown since. Most of these definitions boil down to just a few distinct ideas, and typically to the concept of social learning. Culture has been defined, for example, as the things that people do because they have been so taught.¹⁵⁶⁶ Culture thus encompasses abstract knowledge, such as theology,

as well as practical knowledge, including art and technology.

Humans have a natural tendency to emulate others and therefore a strong capacity for culture. They take considerable interest in what other people are doing and they are in turn very much concerned with what other people think about their own behaviour.¹⁵⁶⁷ When humans interact they quickly and unselfconsciously evolve a shared culture. Although monkeys and apes also display a rudimentary capacity for culture, for example learning from each other which berries are poisonous, most animals rely heavily on instinct. This capacity is almost uniquely human. It has been acquired through natural selection and contributes to humanity's evolutionary success. It would be very unsatisfactory if the skills for making a television, say, had to evolve in the form of an instinct.

Children are the greatest agents of cultural change. They are still actively learning, whereas adults tend to be less receptive to new ideas. Peter and Iona Opie, who devoted a lifetime to studying the culture of schoolchildren, showed that rhymes, sayings, sex roles and career objectives tend to be transmitted more from child to child than from parent to child.¹⁵⁶⁸ The pool of children can be thought of as the engine room of cultural evolution. Once adults leave the pool, they adhere to the values they learned in childhood. Groups with a high proportion of children are therefore likely to undergo more rapid cultural change. A young population is particularly adept at solving its problems and seizing the initiative in an ever-changing world.

Although the human capacity for culture is innate, any particular culture is not. This should be obvious, but people often act as though it is otherwise. In America, for example, people talk of 'black culture', even though culture is not racial.¹⁵⁶⁹ The attempt by American blacks to forge their own identity is itself a reaction to the resistance that white people have put up to their cultural assimilation. It cannot be emphasised too strongly, therefore, that culture is not encoded in one's genes. Whether a person belongs to a particular nationality should be purely a question of values, attitudes and beliefs, and not a question of biological origins.

Social anthropologists have traditionally emphasised that culture is arbitrary, pointing to examples like the habit of some African groups to shake their fist as a form of greeting.¹⁵⁷⁰ The implication is that nothing people do is necessary and, at least in principle, there could be some other society, somewhere else in the world, that does the exact opposite.

However, these arbitrary features of culture tend to be surface differences. There are important respects in which people everywhere and at all

times are much the same (DA7). The Pueblo Indians, for example, believe that it is improper to show pride or appear better than others. Supposedly, their children play baseball without keeping score. Yet a teacher overheard some children say that their team was the most modest of any!¹⁵⁷¹ A shared human nature underpins and places definite constraints on cultural forms. Indeed, attempts to impose arbitrary cultural values on people have tended to founder. Radically egalitarian communes such as kibbutzim have found people reverting to traditional sex roles against all ideology and preferring to raise their own children.¹⁵⁷²

A group's culture, which encapsulates vital skills and knowledge, is a crucial determinant of its success or failure in the struggle for survival. Willingness to embrace cultural change depends, among other things, on the degree of risk. In peripheral matters of style and fashion, cultural change is practically normal. However, it is less easily achieved in matters that relate directly to subsistence or survival. Here people incline conservatively to what has worked in the past. This makes sense so long as conditions remain stable and is certainly preferable to change for the sake of it. However, conditions never do remain stable forever, and the old ways of doing things eventually become counterproductive. When culture is too rigid, a group may be prevented from adapting its ways and exploiting new opportunities or overcoming new challenges. In this way, medieval French nobles, sticking to their ideas of chivalry, became easy prey for English longbowmen for nearly a century.¹⁵⁷³

Perversely, when people come under pressure they often become less likely to question old beliefs. Studies of human error in airline accidents, for example, show that people resort to ideology and wishful thinking when unexpected difficulties threaten to overload their decision-making capabilities. This has three aspects: people fail to collect data about the problem; they fail to use rational criteria for choosing responses; and they exhibit a lack of conviction in implementing their decisions. This can mean that once problems have passed a certain threshold, there is an acceleration towards disaster. Something of this kind is thought to have been behind the failure of the Norse settlement in Greenland, after the climate took a turn for the worse in the fourteenth century. The Norse retreated into their religion, failed to deal with things on a practical level, and were eventually forced to abandon their colonies.¹⁵⁷⁴ The Eskimo, by contrast, adapted to the changes and held on in the same region.

Environment

Environmental determinism is the thesis that a society's environment, especially its climate, explicitly determines the society's fortunes. Like

most things, it is an old idea. The Greeks attributed their rise, at a time when empires were collapsing in Asia Minor, to the excellence of the Greek climate. In the eighteenth century, Montesquieu explained Europe's apparent world dominance on the basis that people in hot climates are naturally sensitive, lazy and timid, while those in cold climates are tough, brave and hard working. Such ideas continue to be routinely accepted by Europeans.¹⁵⁷⁵ They were given a boost around the middle of the twentieth century in the works of Ellsworth Huntington and S F Markham. The latter observed that humans work best where temperature is in the range 15 to 25°C, with moderate humidity, a gentle breeze and agreeable sunshine. Nations with these conditions supposedly enjoy great advantages.¹⁵⁷⁶

The simplistic absurdity of environmental determinism is well indicated by Markham's conclusion that the problems of the third world can be solved by nothing more than air conditioning. It is also evident in Ellsworth Huntington's argument that Massachusetts has produced more scholars than Alabama due to its long winters, as though the complex dynamics of American history are wholly irrelevant to this situation.

Only a profound failure of historical perspective can lead to the overwhelmingly optimistic view of northern climates. The fact is that the people of northern Europe contributed nothing of fundamental importance to Eurasian civilisation until about 1000 years ago.¹⁵⁷⁷ Meanwhile, the pre-Columbian civilisations of America were concentrated in Mexico and did not embrace the supposed advantages of Massachusetts. It could be argued that more of importance has come out of the supposedly debilitating climates of the middle east than out of the cool, stimulating climates of the north. There have even been major civilisations in warm and humid climates, the most debilitating of all. The Indonesian, Indian and Mayan civilisations fall into this category.

Overall, the idea that any part of the world has a built-in advantage due solely to its climate must be rejected. This is not to say that environment has no influence. Certainly, such factors as climate, vegetation, water availability and the distribution of mineral ores constrain the logical possibilities and present particular challenges or opportunities that may influence social forms. Nevertheless, also crucially important is a society's social environment, i.e. which other countries are nearby and what they have to offer. The significance of this factor changes over time, for example as technological change makes a new resource sought after or an old one no longer desired, or as the centre of the world's wealth and power shifts from one place to another. Human affairs have their own autonomous dynamic, which cannot be simply

compressed away and certainly not reduced to matters of air conditioning and long winters.

Environmental factors do not determine but they do affect the dynamic formation and dissolution of political, economic and social relationships. For example, Britain had a flourishing wine industry during the high middle ages, which died out by the fourteenth century as the climate became cooler.¹⁵⁷⁸ In the late twentieth century, renewed warming encouraged people to start growing grapes again. In allowing an industry to prosper, then die out, then prosper again, the British climate evidently influenced economic organisation at a fundamental level. Warming and cooling also led to the abandonment, re-opening and again abandonment of ancient gold mines in the Austrian Alps, thereby changing the region's commercial fortunes.

Another example involves the El Niño-Southern Oscillation (ENSO). This is a quasi-periodic variation in atmospheric and ocean circulation off the Pacific coast of South America, which affects the fish catch in that area and possibly agricultural productivity in other parts of the world. The changing fortunes of the fishing and farming industries then ramify into the global economy. ENSO is credited with causing the climate anomalies of 1972-3, during which world food production fell after many years of growth.¹⁵⁷⁹ The resulting high price of grain is then believed to have encouraged OPEC to raise the oil price and so inaugurate the first oil crisis of the 1970s.

Climate certainly has an influence on social phenomena, but not in any simple and obvious way. An apparently negative effect, desertification in north Africa during the fourth millennium BC, perhaps herded people into the Nile valley thus raising scale and stimulating social complexification – a positive outcome. The British wine industry may have come and gone with changing conditions, but British commerce continued to grow, largely under its own logic. Students of past climate have been unable to establish any direct causal relations between climate and specific economic indicators.¹⁵⁸⁰ A global climate change will also have different effects in different regions according to whether they are initially drier, wetter or colder than average. Hence, some regions may benefit while others are harmed.¹⁵⁸¹ Climate change helps to break and form relationships, but whether a particular climatic event produces an increase or decrease in integration, organisation and cohesion is a complex and largely unfathomable issue. All that can be said is that this is one other factor that keeps societies in ferment.

This bears on the concern that humans may be the cause of climatic or environmental change, and thereby may undermine the bases of their own existence. It is fair to say that some soils and some

watercourses have been damaged by human activity. However, overall, it is difficult to be sure of the extent of human impacts because climate changes continuously by itself, on all time scales – from daily weather, via short term fluctuations like the ENSO, to changes occurring over millions of years. Some of these oscillations have been correlated with long term changes in the earth's orbital parameters. They may also be the product of changes in the sun's output and of tidal forces due to the moon and other planets.¹⁵⁸² Much of the variation may simply be because the atmosphere is a chaotic system and hence largely unpredictable.¹⁵⁸³

Thus, climate models should be regarded with a strong degree of scepticism. Predictions about future warming or other trends are really quite unreliable. They may be unduly pessimistic – or they may be far too optimistic. No one knows. Certainly, there is no proof that human technology is having an adverse effect on the overall environment, to the extent of making the world uninhabitable. A grassy verge alongside part of the A1, one of Britain's busiest roads, has been designated a nature reserve after the discovery that it was abundant with rare plants. Not only did the vehicle fumes do the plants no significant harm but it appeared that the wind from passing lorries helped them to spread their seed.¹⁵⁸⁴

The much-vaunted notion of sustainable development, producing zero environmental impact, is really a vision of stagnation and equilibrium. It is based on a static view of the world, much like that of the arsonists who destroyed horseless carriages in Paris. The fact is that humans can use technology to manage the environment successfully. In Europe, there is almost nothing natural about the environment whatsoever. The original forest cover has gone and the landscape has been turned into a vast artificial park, serving human needs. Meanwhile, the barren and desiccated landscape of contemporary south-west Arabia may be regarded as the result of human neglect rather than of human intervention. In Roman times, this region was verdant and productive, but when the European discovery of the Cape route eroded its importance in world trade, people migrated away, and nature herself came in to turn the former fields into a desolate wasteland.¹⁵⁸⁵ With increasing wealth and technical knowledge, people actually stand a greater chance of avoiding destruction of the ecosystems on which they depend. Returning to a financially and technologically poorer condition would be disastrous. It is no coincidence that poorer countries possess by far the more polluting industries.

Interaction

Political interaction involves one group forcing its will on another. It implies military

action or the threat of it. This is an ancient pastime. A rock painting from prehistoric times depicts fighting between people armed with bows and arrows.¹⁵⁸⁶ The whole of recorded history is a catalogue of virtually non-stop war. The twentieth century was the most bloody ever.¹⁵⁸⁷ While warfare is a constant, wars themselves are highly diverse. They are fought between different actors, using different weapons, and over different issues. The fact that the last war could not recur does not imply that there will never be a war again. According to one study, none of the major conflicts during the last two hundred years was expected.¹⁵⁸⁸

For the most part, wars are the product of specific incidents and disputes, rather than pre-meditated ambitions of conquest.¹⁵⁸⁹ They tend to be preceded by a period of mounting tension. Once this tension has gone beyond a certain level, it can run away with itself. Negotiations are then doomed to failure by a large amount of mutual suspicion. States with a grievance or feeling of being disadvantaged often deliberately escalate matters to see how much they can get away with. A misreading of the situation by one or both sides, and the face-saving need to put rhetoric into practice, can then precipitate the final break down.

Dispute-proneness appears to be strongly correlated with military capability. That is to say, the countries that are most likely to get into a fight are the ones with the greatest means to do so. Once weapons have been invented, they have tended to be used. Unless humanity has itself changed, and there is no reason to think that it has, history's overwhelming message is that countries which retain nuclear weapons will eventually use them.

Economic interaction between societies is complicated by the fact that they possess different currencies. In theory, under these circumstances the balance of payments must balance in the world as a whole. For each country, a movement of foreign exchange reserves or a change in book debts must match any deficit or surplus.¹⁵⁹⁰ How it all works in practice, though, has defied great economic minds. Mechanisms such as the gold standard and the Bretton Woods agreement, based on excellent theoretical foundations, have eventually broken down. Similarly, economists have engaged in a long debate about the relative merits of fixed versus fluctuating exchange rates without reaching any general conclusion. Both systems seem to be unstable.¹⁵⁹¹

In principle, if left to itself, the system should work. Supply and demand should change the value of a nation's currency in exactly the right direction to counteract any imbalance between imports and exports. However, governments seldom do leave the theoretical self-correcting mechanism to its own devices. They become alarmed by serious imbalances and take additional steps to correct them. Under the gold standard, for example,

governments did not like to see gold moving out of the country, even though that was required on theoretical grounds.

Since the behaviour of the international economy is so obscure, debate and public policy tend to rely on incomplete theory and simplistic notions. A rising exchange rate usually brings complaints from exporters, though it is not clear that exporters are necessarily harmed by this. Changing exchange rates may simply reflect differential inflation in different countries. If the foreign demand for a country's goods is relatively inelastic, a rising exchange rate could even benefit exporters, as foreign buyers would pay more but not greatly reduce their consumption.

As far as the replacement of multiple currencies with a single currency is concerned, the effects are equally controversial. As a fundamental principle, it seems reasonable to say that having one currency is better than having many. One can imagine that businesses would suffer, for instance, if every one of the United States suddenly adopted its own currency. In time, though, businesses might well be able to take this in their stride and go on trading and expanding as before. When each country has its own currency there is at least some resistance to the tendency for economic activity to gravitate towards certain super-centres. Already one or two regions in every country attract the most jobs, wealth and people. Removing the barrier of currency exchange might see the same phenomenon occur on a bigger scale, enriching some countries at the expense of others. It is also by no means clear that the combination of one currency with multiple governments and disparate cultures is either feasible or desirable.

Overall, the problem of different currencies and foreign exchange is probably a far less significant issue than it is painted. The instabilities of currency conversion may further stir up the historical ferment, but for the most part any difficulties seem to be ones that entrepreneurship can easily overcome.

Social interaction implies the transfer of knowledge, institutions and cultural concepts. Local developments occur for local reasons, but when they diffuse to other societies they may take on a new significance and acquire a momentum of their own. Having said this, know-how cannot be transferred just like that. Societies that possess experience of a particular practice or technology have an advantage. In the long run, however, catching up occurs because it is easier to be an emulator than a pioneer, and the pioneers cannot always stay one step ahead.

Being in touch with other societies is important for progress. Crete and Sicily were leading cultural centres when they were at the heart of a vigorous Mediterranean trade.¹⁵⁹² Later on, Britain, Spain and Portugal became important contributors to

world civilisation because they were well placed for trans-Atlantic commerce. Isolated societies tend to stagnate or even go backwards. The Tasmanians, a population of about 4000 individuals who had been isolated for some 10,000 years, were among the least technologically sophisticated people in the world when discovered by European explorers.¹⁵⁹³

They had lost many items of Australian aboriginal culture and did not even know how to make fire (they acquired it from natural sources). The same applied to Australia as a whole. Cut off from the rest of the world, this continent showed the least change in culture and technology of any region. Similarly, when the Canary Islands were discovered off Africa in the fourteenth century, their culture was still at the neolithic level and the islanders had forgotten how to make boats.

Not just information but also people may move between societies, taking their knowledge and cultural practices with them. Like war, migration is an ancient phenomenon and very common throughout history. Although it is often regarded with suspicion, immigration tends to confer benefits on the host group. In recent history, countries with the highest net inward migration have also had the highest growth rates,¹⁵⁹⁴ the two factors clearly being linked in an ensemble. The complaint that immigrants take people's jobs is, like similar complaints about technology, based on an erroneously static view of the world. In fact, immigrants increase the size of the market and thus create jobs. Furthermore, they arrive as already productive adults having never been dependent on the host country. They also tend to be motivated and intelligent individuals with a talent for the creation of economic organisation. Illegal immigrants may be especially beneficial because they pay taxes but cannot claim social services.

Complaints about immigration really boil down to people's preference for being surrounded by people who share their values, attitudes and beliefs (S7). If a country is in the ascendant, immigrants are likely to lose their culture over time and adopt the host culture instead. However, if the prestige of the host culture is already low, they will probably not do so. When immigration has a negative effect on a society's way of life it therefore says as much about pre-existing problems within that society as about the disruptive effect of immigration itself.

Conclusion

Population growth, resource scarcity, technological evolution, cultural shifts, environmental changes, and war, trade and immigration – all these developments have bothered people both today and in the past as causes of social decay. Yet on analysis none of them is revealed as truly problematic. None of them has been crucial to past instances of decline.

The defect of these concerns is that they focus on observable things (such as population size) rather than on underlying principles (such as scale). They also have little or no time depth, and ignore historical experience. The result is some superficially plausible scenarios that fail to match what occurs in practice. This emphasises the importance of a model based on political, economic and social relationships for attaining a

genuine understanding both of how societies change in general and of the prospects for any real society. These are more reliable guides than any surface features. They possess well-defined properties, and are where the true contradictions are to be found. Societies decline not because of too many births or a change in the weather, but because they lose integration, organisation and cohesion. It is as simple and as subtle as that.

Chapter 19 - Proximate causes

A natural process

Rome's collapse is surely the most studied of all. It has been the subject of numerous theories, such as:¹⁵⁹⁵

- Barbarian invasions, combined with the declining military virtues of the Romans.
- Declining moral standards.
- Asceticist ideals of the Christians corroding the will to dominate.
- Slave uprisings.
- Aspirations of the Roman proletariat.
- Failure to work because of leisure class attitudes.
- Gross overextraction of surplus product.

So many explanations seem to be no explanation at all. It is certainly not a matter of there being one correct solution among many incorrect ones. Rather, these different accounts probably all have something to contribute, each one shedding light on what was inevitably a multifarious process.¹⁵⁹⁶

Social institutions form a logically interdependent structure or *ensemble*. When societies are transformed it is on many fronts simultaneously. If one analyst looks at economic factors and another looks at political factors, they may both find an explanation for some particular turn of events. However, they both have only part of the picture, since political and economic factors interact.

Joseph Tainter has resolved the kinds of explanation that are offered for different instances of social collapse into the following categories:¹⁵⁹⁷

1. Depletion/cessation of some vital resource.
2. Establishment of a new resource base.
3. Economic factors.
4. Influence of other societies.
5. Intruders/invasers.
6. Mystical factors (e.g. Oswald Spengler's idea that civilisations go through seasons from Spring to Winter).
7. Chance concatenation of events.
8. Class conflict.
9. Societal contradictions.
10. Elite mismanagement/misbehaviour.
11. Social dysfunction.

The point is that these causes are not mutually exclusive. Many of them are potentially related to each other. For example, resource depletion (1) might bring a major change in economic factors (3) that results in class conflict (8). Or elite mismanagement (10) could simultaneously damage the economy (3) and fail to keep out invaders (5). Or the influence of other societies (4) could combine with establishment of a new resource base (2) in a chance concatenation of events (7).

As a system exhibiting self-organised criticality, society is in continual ferment, with

reversals on all scales. The longer one waits the larger the reversals that will be observed. In the long run, decline to arbitrarily low levels is inevitable. Therefore, dark ages are a natural feature of social evolution. They are not caused by special factors, appearing only at some particular juncture. They are due to the same causes that operate every day and that produce more minor changes of fortune. By the principle of mutual causality, these causes influence each other and none of them has priority. There is never a single cause of the decline into a dark age. Multiple causes interact.

Tainter suggests that the many explanations of collapse conform to three basic models.¹⁵⁹⁸ These are:

- The Dinosaur model – societies adapt so well to existing circumstances that change becomes impossible.
- The Runaway Train model – societies pursue an inexorable logic that makes them unable to deviate from their catastrophic paths.
- The House of Cards model – complex societies are inherently fragile.

Again, these models should be regarded not as mutually exclusive but as different facets of the overall phenomenon.

An alternative categorisation (due to Wigley et al.) sorts theories into the classes of natural events, invaders (or diseases), and internal problems (mismanagement).¹⁵⁹⁹ This approach emphasises episodes whereas Tainter's emphasises processes. Both are relevant. The causes that operate all the time propel societies down particular paths and, in this way, are perceived as processes. However, the significance of these causes varies, both because their own strength varies and because their impact depends upon the society's circumstances at any particular time. In this respect, they emerge as episodic.

Rome was subject to barbarian attacks from the earliest days of the republic. However, the significance of these attacks changed between the times when Rome was a small, highly *cohesive* state and when it was a sprawling, relatively *discohesive* empire. In the latter case, barbarian onslaughts could set off a catastrophic unravelling. In earlier times, there was little to unravel, while the Roman bonds of loyalty and obedience were tighter anyway. Hence, Odoacer's invasion in AD 476 can be analysed either as a specific episode with a specific outcome or as the culmination of a long standing process. That is to say, one can explain Rome's collapse in terms of the particular events and personalities of its last years or decades. However, one can also explain it as the inevitable outcome of Rome's long term trajectory, stretching back to its earliest history.

In general, the causes of dark ages may be examined on two levels: episodic and processual, or proximate and ultimate. Proximate causes are the factors that become significant in the time immediately leading up to the dark age. They make sense of that particular episode. Ultimate causes are the logics inherent to human sociality. They are responsible for a self-defeating process in which episodes of social retrenchment appear as inevitable. This chapter deals with the proximate causes of dark ages. The next chapter deals with ultimate causes.

Proximate causes of decline imply the rupturing of political, economic and social relationships (DA1). They can be considered under three headings, as follows:

- **Mismanagement:** the government accidentally destroys these relationships.
- **Decadence:** citizens allow the relationships to become vulnerable to disruption, or fail to renew them.
- **Exogenous factors:** external agents deliberately or accidentally destroy the relationships.

It should be remembered that these do not represent alternative explanations. In general, all three aspects will apply, although their relative importance may vary between different instances of decline.

Mismanagement

There are all sorts of ways in which a society can be mismanaged. The government may impose too much order and suppress individual initiative. Alternatively, it may impose too little order and allow endemic conflict to prevent any kind of progress. The government may become too extractive and destroy the economy by removing the incentives for entrepreneurship. Alternatively, it may so abdicate responsibility for economic affairs that negative externalities and excessive income differentials eventually undermine the very basis of wealth creation. The government may pursue policies that inhibit trade. It may squander society's resources on costly wars. It may neglect public services and fail to prevent the tragedy of the commons.

The common theme in such circumstances is that the consequences are unintended. Even when the government is acting with the best intentions, it may generate problems through its mistakes. This is popularly known as the law of unintended consequences or, by one author, the law of political irony. Much of what is done to help others actually hurts them, and vice versa. People's initiatives have a habit of swinging back in their faces.

The Indian government, for example, tries to promote improved farming methods. A story of one such programme tells how the ministry officials supplied fertiliser, but the peasants put too much on and the crops all died. The next year, they planted wheat in an empty irrigation reservoir. Rust

attacked the crop, and in their efforts to treat it the peasants ruined an expensive German sprayer. Consequently, the peasants returned to their inefficient, traditional techniques, and the government officials gave up on the peasants as hopelessly ignorant and incompetent.¹⁶⁰⁰ However, it was not the attempt or the basic thinking that was wrong – it was the way it was executed. Sadly, such failures have been repeated on many occasions all over the world.

Governments have good reasons for intervening in social arrangements. They provide public goods, such as defence. They prevent harmful practices, such as pollution. They stabilise trading conditions by means of international agreements. They also promote education, religious values, and social welfare. However, the fact that all these good reasons exist does not automatically mean that governments will be successful when they attempt to pursue such aims. Their interventions can easily prove counterproductive.

The first problem is that of defective understanding. Societies of any significant scale are complex and hard to interpret. Governments in the 1930s thought that thrifty policies were needed even though that probably perpetuated the depression they were trying to solve. Government officials had a wrong view of how the economy worked. Even now much is still very hazy. Governments simply cannot understand the systems they are dealing with.

The problem is exacerbated by the fact that, instead of tackling complexity, people tend to ignore it. They focus on simple ideas or slogans, which gives them the illusion of being in control of the issues, though in fact their picture is very incomplete. When tax issues are debated, for instance, it is usually at a simplistic level – often restricted to consideration of cutting or raising the basic rate, as though this represents the whole system. Yet tax systems, their incentive structures and excess burden, are highly complicated. Politicians may take critical decisions from a position of very limited insight. This is not to mention the fact that they are motivated by the competition for votes as much as by their stated macroeconomic goals.¹⁶⁰¹

Dr D Dörner of Hamburg University has conducted formal investigations of the human ability to manage complex systems. Experimental subjects were asked to administer a simulated development project in Africa. The subjects were given a budget to spend on improving living conditions for the local pastoralists. Typically, things would go well at first and population and livestock would experience a boom. However, a year of low rainfall would then put stress on the system, so that overgrazing would turn the region into a dust bowl, the cattle would all die, and there would be a population crash.

Dörner identified a number of decision-making pathologies that were responsible for such administrative failures. People did not elaborate clear goals but tended to respond to events on a repair-shop principle. They did not formulate any hypotheses about the system they were dealing with and neglected the possible long term consequences and side-effects of their decisions. People responded to the immediate situation without thinking about its development over time; in effect, they kept their foot on the accelerator all the way to the target, forgetting that the system's momentum would cause it to overshoot. People also failed to co-ordinate their different measures and failed to monitor whether these measures were working as intended. Finally, when things began to go obviously wrong and the subjects were under stress, all these pathologies were intensified. People stuck to their chosen course of action, regardless of what was happening around them.¹⁶⁰²

These decision-making pathologies identified in the laboratory have also been documented many times in real life. For instance, most of them emerged during the incident at Three Mile Island, in which a nuclear reactor came close to meltdown (though the situation was eventually resolved and no one was injured). Among other things, the operators made the situation worse by sticking to a wrong theory for over 48 hours.¹⁶⁰³ Indeed, the scenario that emerged from Dörner's computer simulation actually happened for real in the African Sahel during the 1950s and 1960s.

Therefore, governments find themselves perpetually prone to wrong decisions. Humans are not naturally adept at dealing with complex systems, such as societies of several million people. The situation grows ever more difficult. With instantaneous global communications, nuclear weapons, and enormous multi-layer markets, the stakes are higher and the amount of information to be processed much greater. Even if governments and their officials can avoid the grosser pathologies of decision-making, and think through their initiatives in detail, they still face another major problem. This is that social systems are inherently difficult to control.

To begin with, there is the problem of time lags. Government decisions are based on statistics that require time to collect and reconcile. It takes additional time to formulate and approve a desirable policy, and still more time to put the policy into effect by updating forms and procedures.¹⁶⁰⁴ Thus, the problem of controlling the economy has been described as like driving a car with only a rear view mirror and a sloppy brake and accelerator.¹⁶⁰⁵ The government can seriously influence things only at intervals of six months or a year, and its assumptions may then already be behind the times.

Time lags also arise because of the difficulty of believing problems are real. The first symptoms could be just statistical fluctuations and so they may be insufficient to stimulate corrective action. The opposite failing is that of responding too soon or too strenuously to problems that are not really serious or that might sort themselves out.¹⁶⁰⁶ Time lags create the classic conditions for oscillation.¹⁶⁰⁷ The correction continues to be applied after the system is already turning around. Then the same thing happens in the opposite direction. The trouble is that governments find it very difficult just to wait and see how things develop, in order to gain a better idea of the situation they are dealing with. There is frequently pressure to act, especially with respect to more important issues, which can therefore be susceptible to wild swings.

A second source of difficulty in controlling social systems is the existence of feedback loops. Consumer spending affects income, which affects consumer spending. Building roads encourages traffic and increases the need for roads.¹⁶⁰⁸ The discipline of control theory, which has been developed to cope with systems exhibiting feedback,¹⁶⁰⁹ is still largely considered an engineering issue and has not played a very significant part in public policy. The presence of feedback, however, means that it is impossible to make just one change to a complex system.¹⁶¹⁰ Inevitably, there are ramifications. These ramifications may make it practically impossible to achieve some desired effect without a lot of other effects that are definitely not desired. The stated aims of macroeconomic policy amount to a heroic task: full employment, with high growth in income, low inflation, and a balance of payments. Given the complicated feedback between these factors, it is scarcely surprising that they are seldom all moving in the preferred direction.

Feedback may cause a system to revert naturally to a stable configuration after a disturbance (so-called homeostasis), or perhaps to revert to a stable developmental path (homeorhesis).¹⁶¹¹ In this case, attempts to modify the system's behaviour may be compared to opening a window in a room whose temperature is controlled by thermostat. The developments in Vietnam of the 1960s, for example, had a very deep keel. When the United States became involved in this conflict, it was not merely taking on an irregular army of communist rebels. It was taking on the overall historical trajectory of south-east Asia, and in the event this trajectory proved impossible to divert.¹⁶¹²

A third source of difficulty for those attempting to control social systems is the presence of chaotic behaviour. Sensitive dependence on initial conditions means that particular measures will produce increasingly unpredictable effects as time goes on. There is no chance of fine tuning the

system to some equilibrium, and there is no point in planning far ahead. Similarly, self-organised criticality implies that changing the rules may cause a transient state in which different behaviour occurs, but eventually the system will evolve back to the critical state.

These various sources of difficulty stem from quite general properties of complex systems. They are if anything intensified by the nature of human beings. Even individuals behave in complicated, difficult to understand, and unpredictable ways, let alone people *en masse*. Taxes introduced with the intention of modifying people's behaviour seldom produce exactly the desired results because people are not so easily fooled. They do not necessarily react to government measures that are likely to be short-lived, and may instead pay attention to lifetime expenditure, perhaps using their savings to smooth out fluctuations.¹⁶¹³

Defective understanding combines with the difficulty of control to frustrate successful management of social systems. The more a society is managed, the less successful it tends to be. Numerous independent companies acting without central co-ordination manage to keep the population of New York supplied with fresh food, without ever having more than a few days supply and without running out. In stark contrast, cities in the former Soviet Union, where everything was controlled from on high, were always running out of toothpaste or other essentials. From ancient history to the present day, centralised planning has consistently been revealed as inferior to the self-adjusting price mechanism of the free market.¹⁶¹⁴ The issue has been put to the test with nations having similar heritages – North versus South Korea, East versus West Germany, China versus Taiwan/Singapore/Hong Kong – and in each case the centrally planned economy has been characterised by bureaucratic inactivity, failure to adapt, and economic stagnation.

To summarise, management of social systems almost inevitably involves mismanagement. Governments are perennially taking bad decisions and undermining the political, economic and social relationships that hold their societies together. Collapse will often seem to involve decisions that turn out to be badly judged and counterproductive. At the time, those decisions will have seemed to be justified by an overwhelming logic. In retrospect, their flaws will become apparent to all.

Decadence

Decadence, as an explanation of social collapse, conjures up images of the ancient Romans and their excessive appetite for food, drink and sex.¹⁶¹⁵ As the archaeologist Robert Adams has argued, the complex process whereby a civilisation declines cannot simply be blamed on some people's overindulgence. To be sure, it is not

because of overindulgence that civilisations decline. Yet such behaviour is symptomatic of problems with integration, organisation and cohesion, and in this way it is associated with decline (DA1).

The popular picture of a society of bloated and effete debauchees, eating and fornicating their way to oblivion, is too extreme. Certainly this is an inaccurate picture of conditions in late imperial Rome, where many middle and upper class people had become conscientious Christians. There is a more subtle interpretation of decadence, however, as a matter of self-absorption, insubordination and the emphasis of consumption over production.

While indulgence suggests a strong taste for consumption, *overindulgence* suggests that this taste has exceeded the taste for production. In other words, entrepreneurship is deficient, implying disorganisation. Similarly, self-indulgence suggests that actors are primarily interested in pursuing their own pleasure, not in subordinating their interests to those of the group as a whole. This is the condition for *discohesion*. Finally, the search for self-gratification is not really consistent with the disciplines needed for leaders to lead and subordinates to obey. Hence, there is a tendency for *disintegration*.

Given that people are much the same at all times and in all places, decadence cannot result from the fact that people themselves have changed. Rather, it is that changing circumstances cause their constant human nature to be expressed in different behaviour. There is always a conflict between the desire for order, wealth and legitimacy (i.e. the products of integration, organisation and cohesion) and the disciplines needed to maintain them (P9, E8, S15). Decadence occurs when integration, organisation and cohesion are already at high levels, and people's commitment towards them diminishes accordingly.

Political decadence

Plato argued that democratic ideas are associated with decline.¹⁶¹⁶ The problem is not exactly democracy as a system of government, since an elected government can be just as forceful as an autocrat and achieve just as much integration (and conversely, an autocrat can be weak and achieve low integration). The problem is more the general belief that whatever the common mass of people wants is the thing that should prevail. Such a belief is highly corrosive of political relationships, in which one person should exercise authority over others.

Political decadence occurs when the notion that the rulers rule (however they got there) is replaced by the notion that they are merely proxies performing the will of the people. When the government gives great heed to popular will, and does not rule exactly as it sees fit, the group as a

whole will be less effective in tackling its problems. In the same way, an army could not be effective if the generals allowed their decisions to be dictated by the ordinary soldiers. Unity of command (one person takes the decisions and gives the orders) is one of the key principles of war, learned from thousands of years of military experience (see **P2**).

Political decadence means that social institutions become increasingly concerned with the welfare of the average citizen. A politically decadent society appears as progressive and humanitarian. However, it achieves this at the expense of the benefits of integration. For example, it places the welfare of individual actors above the need to avoid the tragedy of the commons.

The security provided by high integration allows people to lose their enthusiasm for protecting their society. When the society is small, vulnerable, and threatened by its neighbours, citizens can directly see the need for military service. However, when people have enjoyed comprehensive protection for a long period, they come to believe that this is the natural order of things. The rigours of military life are less attractive. The military loses prestige. Untested, it becomes weakened and, behind a perception of power, the society is in reality increasingly vulnerable.

Economic decadence

Social theorists have generally disagreed about whether wealth makes people more or less vigorous in economic affairs. One view of the matter is that wealthy people are primarily interested in a life of leisure and luxury, and have little motivation for hard graft. On the other hand, it has been pointed out that in any contemporary society the poor show little obvious entrepreneurial spirit while the wealthy often have extensive business interests.

The latter observation surely arises because of complicating factors. People may be wealthy precisely because they are motivated to work hard, or they may have inherited businesses that require their involvement. Similarly, wealthy people can afford accountants to help them manage their investments, while poor people do not have the resources to get started.

If these complications are stripped away, it appears strongly that the greater people's economic security, the less interested they are in the disciplines of work. From foraging bands to urban industrial societies, people value leisure. They have a view of what is an acceptable standard of living, and once they have attained it they increasingly prefer to enjoy the fruits of their labours.¹⁶¹⁷ There is little evidence that satisfied workers work any harder.¹⁶¹⁸ Though people may say that they would carry on working if they were to win the lottery, the reality is that they often do not.

Economic security erodes the willingness to take risks. People are understandably disinclined to tamper with something that seems to be working well. It has frequently been observed that the children of a business's founder do not show the same drive as their parent. Nor does the incoming board of directors show the same willingness to innovate as its predecessors.¹⁶¹⁹ Yet innovation, along with hard work, is the basis of entrepreneurship. Hence, people who are enjoying the fruits of a high level of organisation tend to have a reduced capacity for the creation of new organisation.

When people inherit wealth, they take it for granted. The effort and entrepreneurship that went into creating it is forgotten. Instead, people assume that it comes automatically. This is dangerous, because organisation has a tendency to dissipate and must continually be re-created. Those who are born into a wealthy society, in which many people obviously enjoy considerable wealth, are apt to have high expectations. Yet those expectations will be unrealistic if people do not have the talent or application to create wealth for themselves.

Similarly, high organisation implies a high material standard of living. People must inevitably acquire the habits of high consumption, i.e. they must become hedonistic (**E6**). However, it is difficult to be both hedonistic and industrious. Hence, economic decadence is associated with an enthusiasm for get-rich-quick schemes and even for criminal routes to wealth. There is a lack of enthusiasm for any thing or any project that does not deliver immediate practical advantages. Emphasis is placed on short term utility rather than on investing for the future. Such attitudes are inimical to economic growth, which implies consuming less today in order to have more tomorrow. Superficial eddies of organisation take precedence over robust and substantial ones that take much longer to get going.

Having said all this, the effects involved should be regarded as slight and subtle and cumulative over a long period. As early as the second century BC, Cato was complaining that Roman society had become decadently materialistic, with a pretty boy slave fetching more than a field, and a tub of caviar worth more than a ploughman.¹⁶²⁰ Yet still some six centuries of the western empire lay ahead, including Rome's most glorious days.

Social decadence

In a poor society, life offers few material satisfactions. People look to spiritual things for their emotional rewards and to relieve their feelings of vulnerability. Sharing the experience of hardship with others creates strong bonds of fellow feeling. Values, attitudes and beliefs are closely aligned. Conversely, in a wealthy, secure, ascendant

society, people have much less need for supernatural comforts. The lack of an external threat also means that they have less commitment to their neighbours. People become worldly and self-interested. This is *social* decadence.

When suffering and hardship are the general conditions of life, and when *social* relationships are strong, people are more inclined to accept life's insults. They may feel hard done by, but there is little point in pursuing complaints concerning accidents and misfortunes that no one can do anything about. In an ascendant society, however, people do not expect to suffer. Generally, they are protected against adversity. When hardship does strike, there is an expectation that it must somehow be put right.

One element of *social* decadence is intolerance of misfortune. Institutional arrangements become increasingly oriented towards compensating people for their setbacks, whether or not anyone is genuinely culpable. People expect this, revelling in their outrage and sense of injustice. Contrary to popular wisdom, however, those who bottle things up seem to cope better with adversity or bereavement than those who give vent to their feelings. The more people are encouraged to dwell on their bitterness and resentment, the more intense those emotions become.

Social decadence is also visible as individualism and selfishness. This includes a cult of celebrity, with the leading individuals receiving lavish attention and emoluments, while the contributions of the general community are de-emphasised and under-compensated. It also means a lack of consideration for others. Corruption seeps into public life. People are very concerned with their rights but have little awareness of any duties to the group as a whole. Norms and standards of conduct are less compelling. The assertion of Diogenes that 'what is natural cannot be dishonest or indecent and therefore can and should be done in public',¹⁶²¹ with which he justified defecating in the street, is indicative of the *social* decadence of late classical Greece. Clearly, Diogenes had no time for the thought that other people might prefer to be spared intimacy with his bodily functions.

Having said this, such moral degeneracy can be regarded in a positive light as growing toleration. People are less likely to be defined as deviant on the basis of sexuality, religion or ethnicity. Barrington Moore has said that one should be suspicious of political and religious leaders calling for moral renewal, because many poor devils are likely to be hurt. The trouble is that the reverse is also true. When *discohesion* reaches the point that society ruptures in moral anarchy, many poor devils are also likely to be hurt – though they may not be the same poor devils.

Social decadence implies that the very attitudes that brought the society to its ascendant condition are de-legitimised (**S6**). The virtues of progress, self-assertion, and mastery over the natural and social world – hitherto unquestioned – become open to doubt. In the Faust myth, Dr Faustus epitomises the thirst for knowledge, discovery, conquest, and control. To some, Faust is a hero. To others, he is a monster. To some, science and technology are the most glorious human endeavours. To others, they are evils, destructively indifferent to nature and humanity. In a relatively disadvantaged society, where people have little, sentiment tends to be in favour of making life easier through achieving domination over the natural world. In an already successful and comfortable society, however, that Faustian attitude need no longer be endorsed or supported.

Anti-Faustian feeling is by no means confined to decadent societies. Galileo was put on trial in the seventeenth century for suggesting that the earth moves round the sun. Mary Shelley's 'Frankenstein' expressed reservations about scientific progress during the most Faustian moments of the British empire. It is not that this view springs suddenly into existence. It is that it becomes increasingly powerful and significant in a decadent era. Then it can lead to an actual failure of nerve and the arrest of scientific inquiry and technological progress.

Biological decadence

For the most part, this book is based on the notion that social phenomena should be explained in social terms, and not, say, in terms of psychological or evolutionary factors. Nevertheless, it is appropriate to consider some ideas that are given currency from time to time and which may be summed up as the thesis of biological decadence.

Biological decadence involves the notion that easy living conditions remove the discipline of natural selection from human groups and allow weaklings to survive. This in turn allows bad genes to flourish and ensures that more weaklings will be born in the following generations. Some authors have used the idea of biological decadence to account for past instances of decline. It has also found some resonance in popular thought.

The biologist C D Darlington has attributed the collapse of many societies to the problem of in-breeding within the elite – a process which concentrates the effects of bad genes and increases the likelihood of congenital defects. Apparently the most in-bred dynasties are also the most short-lived, while new dynasties are often founded by bastards, i.e. the products of out-breeding.¹⁶²² A related thesis involves the idea that the lower sections of society reproduce faster, thus swamping the population with the sub-standard genes that are

supposed to be responsible for their subordinate condition.

These ideas of biological decadence can have a strong intuitive appeal. However, trying to account for social forms in non-social terms invariably leaves an explanatory shortfall. For example, the fact that new dynasties are often founded by bastards could have more to do with the latter's need to resolve their marginal sociological position than with any genetic factors. Meanwhile, it is true that social and medical progress allows genetic defects to become more common. For example, colour blindness is more than twice as common among urban, industrial populations as among foragers.¹⁶²³ Yet the question is, so what? The whole point of medical progress is that it is forgiving of weakness and compensates for it.

In any case, the effects and transmission of genes are considerably more complicated than the biological decadence thesis generally assumes. That is to say, the genetic differences between people are not all manifest. Those who seem to be genetically disadvantaged may have very good genes for other characteristics. Sickle cell anaemia is a classic illustration of the complex connection between genetic endowment and evolutionary fitness. While two copies of the sickle cell gene cause sickness, one copy provides protection against malaria. Hence, the gene both confers benefits and exacts a penalty. What is more, sickle cell anaemia is disappearing from those African populations that are no longer exposed to malaria. In this case, amelioration of living conditions has led to a reduction in genetic disease.

Similarly, concerns about excess reproduction among the lower orders are based on an equation between genetic endowment and social position that simply cannot be justified. Even if there is excess reproduction – and in fact the rich may be more successful at raising children than the poor – there will be plenty of good genes among the lower orders. There is no single gene for high achievement that can easily be selected out from one sector of society. Throughout history, many great figures have been of quite humble parentage.¹⁶²⁴

Although on this basis the simplistic idea of biological decadence is irrelevant to the present analysis, it does point to a problem when social circumstances change for the worse. That is to say, it should not matter if the number of people needing spectacles, say, tends to increase, since the whole point is that this condition can be easily corrected. However, difficulties arise if there is some kind of retrenchment and spectacles become less readily available. The various interventions that make up for physiological deficiencies – from vaccination to open heart surgery – rely on the specialisation of economic organisation.

Consequently, disorganisation is potentially disastrous for those who rely on them.

Exogenous factors

The third type of proximate cause for social collapse consists of things that come from outside. In his theory of history, Arnold Toynbee drew attention to the role of what he called the external proletariat. By this he meant people on the fringes of a dominant civilisation, such as the barbarians beyond the Roman or Chinese imperial frontiers. Such an external proletariat acquires the civilisation's techniques, but not its values.

The external proletariat, being non-ascendant and relatively poor, is internally cohesive, with religion playing an important part in its social life. As it learns from its advanced neighbour, this proletariat will be becoming more effective just as the dominant civilisation is undermining itself with decadence and mismanagement. The external proletariat represents a major challenge to the declining civilisation and eventually it is likely to play a major role in revealing that civilisation's deficiencies and precipitating its downfall. It is likely to exert its devastating influence right at the heart of the ascendant society – as German economic migrants did in Rome. The ascendant society attracts these outsiders. According to the OECD, the higher the income of a country, the higher the proportion of foreign workers within it. When a society is politically, economically and socially decadent, these immigrants represent a considerable danger. They are in the society, but not of it. Hence, they challenge it from the inside, softening it up for those who will invade more forcefully and with violence.

The external proletariat does not bring down the previously dominant civilisation by sheer mindless vandalism. Just because people call them barbarians, one should not underestimate the German tribes that put an end to western Roman civilisation. They were actually far from being utter louts and, indeed, Tacitus greatly admired their competence, organisation and discipline.¹⁶²⁵ The role of the external proletariat is to produce competition and pressure for the dominant civilisation, both military and commercial. It provides an unforgiving environment, which helps the dominant civilisation to fail. As the external proletariat becomes stronger, approaching the sophistication of the core civilisation, it ceases to be content with its role as a second class citizen of the world. Rather it is increasingly ready to test the reality behind the perceived dominance of the established civilisation.

Another kind of external agent is the problem of disease. In fourteenth century Europe, depopulation caused by the black death was closely associated with economic and cultural stagnation.¹⁶²⁶ The experience of the Amazonian Cayapo tribe, which received a single missionary in

1905, illustrates how devastating an unfamiliar disease can be. From a starting population of six to eight thousand, the tribe had entirely died out by 1950.¹⁶²⁷ Following Columbus's arrival, the same phenomenon on a larger scale afflicted the new world as a whole. The diseases introduced by European explorers probably did more to subdue the indigenous American peoples than anything else. (The exchange of diseases was highly unequal because most human diseases have been acquired from livestock, and the new world had few domestic animals.)¹⁶²⁸

Certain diseases, including smallpox, measles, and bubonic plague, seem to have emerged only within the last two thousand years.¹⁶²⁹ It is therefore eminently possible that further new diseases will appear in future. If these diseases were to sweep through the world like the black death or like measles among the Cayapo, the progress of world civilisation would certainly falter and the retrenchment might even be severe enough to be called a dark age. However, no major civilisation seems to have been brought down by this cause alone.

A third kind of external agent is represented by the environment. Ecological problems may precipitate a society's downfall, as when the Vikings were forced to leave Greenland. Humans can even be the source of these problems, as with salination along the Indus and Tigris/Euphrates. However, there is little to suggest that the human impact is inevitably devastating. When the incentive is there, people can manage the landscape to their own advantage and they can adapt to changing climatic conditions. Environmental deterioration is unlikely ever to be a sole cause of decline, though it may increase the pressure on a society that is already in trouble.

Exogenous influences can be very popular as explanations of decline but they turn out to be among the least significant of proximate causes. Human history unfolds because of human relationships, which follow a dynamic of their own and do not simply react to changes in the weather or other such factors. Barbarian invasion, as a consequence of certain social relationships, must certainly be regarded as a probable problem. However, disease is only a possible problem and ecological disaster a probable non-problem. When these issues arise, they are very visible in their effects, but they should be regarded as secondary influences. They really do harm only when mismanagement and decadence have already diminished a society's resilience.

Changing rules

Human societies are subject to a continual ferment, in every area. This ferment is itself a problem. People adapt to one situation, but that situation then changes. They are caught out. What is adaptive in the short run may prove to be

maladaptive in the long run.¹⁶³⁰ When the conditions disappear on which present institutions depend, some kind of painful adjustment must take place, as people grope their way to a new accommodation with their circumstances.

For example, the Swedish economy was cycling relatively stably until the 1980s, when the government decided to remove controls on capital movements in the foreign exchange markets. Consequently, Swedish banks invested heavily in overseas property markets – just as the bottom fell out of those markets. The banks lost large amounts of money, and the Swedish economy suffered considerably.¹⁶³¹ The point was that the banks had not yet learned the lessons of the new situation that was suddenly opened up to them. They were well adapted to previous conditions, but in the new situation their naivety quickly punished them. It was the fact that conditions changed that caused difficulties.

Banks are themselves quite often responsible for changing institutional conditions by chopping and changing their attitude towards credit. The tendency to lend generously at one moment and then nervously to rein things back at the next has been a factor behind all American recessions since the 1950s.¹⁶³² The changing rules introduced by the banks cause instability. If their attitude to the extension of credit remained consistent, individuals and businesses might have a better chance of becoming adapted to those circumstances.

Having said this, as time goes on, people become accustomed to the idea that fluctuations will occur. The first time that they encounter adverse conditions will be the most devastating. They are at their most inexperienced and are therefore most exposed. Once they have had their fingers burned, they are less naively optimistic. The second time that adverse conditions arrive, they will be better prepared. The third time, they will be better prepared still. Such a scenario characterised the settlement of the American mid-west. After Europeans first arrived there, the population boomed. However, in the 1890s, a terrible drought occurred and took the settlers by surprise. Crops failed and farmers fled. The mid-west was almost completely depopulated for some four years. Eventually, though, farmers returned. This time they had a better idea of what to expect. When similar droughts occurred in the 1930s, the impact, though serious, was much less than the first time, and when they occurred again in the 1950s, the consequences were less serious still.¹⁶³³ As people learned what fluctuations could be expected, there was a lessening of their impact.

This is illustrated in the following figure. The maximum potential level of some variable (population for the sake of argument) varies due to changing circumstances. The first fluctuation causes society to expand to this improved

maximum. When circumstances worsen again, the forced retrenchment teaches people a bitter lesson. The next time, they are more cautious. After many fluctuations, they have become fully accustomed to the changing circumstances. They restrict themselves to a lower, more assured level of the particular variable, rather than taking full advantage of every short term possibility that presents itself.

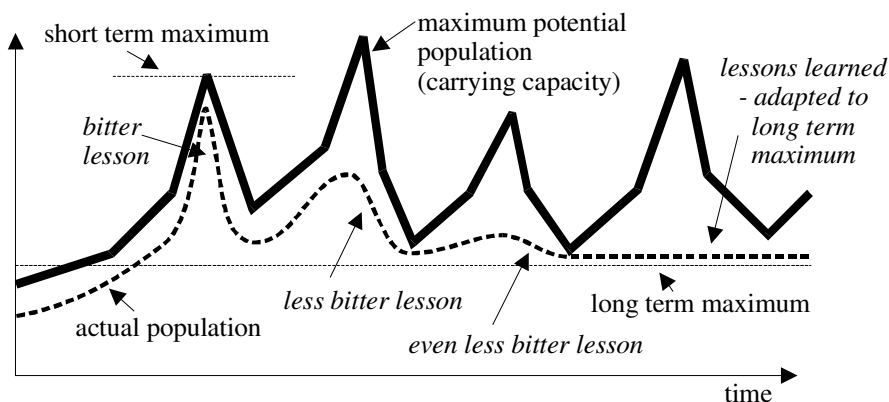


Figure 19-1: A social group gradually learns the lessons of fluctuations in its circumstances, eventually sticking to the long term maximum rather than pursuing the short term maxima that repeatedly present themselves.

As Figure 19-1 shows, the social group eventually adjusts itself to the long term maximum (i.e. the maximum population that is always guaranteed to be viable). In general, the situation of Figure 19-1 may be complicated by the fact that there is a secular trend in this long term maximum, as suggested in Figure 19-2. However, the basic point remains the same. Experience leads to a lessening of the impact of fluctuating circumstances.

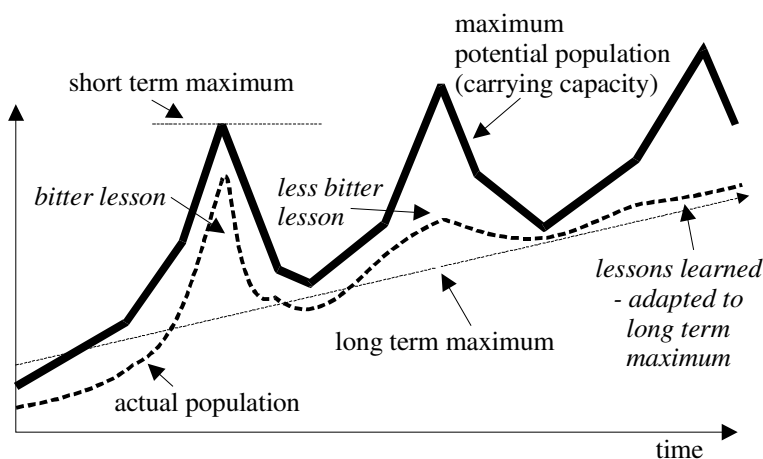


Figure 19-2: Through experience, the social group gradually accommodates to the secular trend in the long term maximum.

It has sometimes been considered strange that forager populations are usually smaller than the available resources would support. The explanation lies in the above figures. The productivity of the local environment varies and, in occasional bad years, can dip well below the average. Forager groups, which may have been exploiting a particular environment for hundreds or thousands of years, have long since learned to remain within what even the worst years can support, even if this means that most of the time they are failing to exploit fully their environment's objective possibilities. Similarly, people who live by low technology agriculture often plant a mixture of crops preferring different weather conditions so as to ensure maximum returns in any sequence of good and bad

years.¹⁶³⁴

In highly complex societies, the situation is more complicated than it is for foragers and certainly more complicated than in the above figures. The long term maximum does not follow any simple trend. The trend itself fluctuates. There are always significant innovations – such as the discovery of the new world, or the invention of radio – that lead to significant increases in the possible levels of integration, organisation and cohesion. When these innovations occur, it is impossible to know how much of the up-turn is sustainable, and how much represents merely a short-run advantage. Every time that a society experiences the benefits of a major innovation it is likely to undergo an overshoot, as in the early part of the above figures. This will be followed by a drastic retrenchment and then subsequent lessening of the fluctuations.

This implies one key conclusion. After a society has attained some particular level of complexity for the first time, it is at its most vulnerable. There is likely to follow an especially devastating retrenchment or dark age. When human achievement has never been more magnificent, it has also never been more precarious. The mightiest civilisations make for the biggest fall.

Chapter 20 - Ultimate causes

Introduction

Mismanagement, decadence, and possibly exogenous factors are manifest causes that can characterise an episode of decline. There are, however, deeper, invariable processes that propel all societies towards this kind of reckoning. The deeper processes stem from the fact that power, wealth and legitimacy are in some ways self-defeating, and that a society's success ironically creates the conditions for its failure.

History's self-defeating processes fall into two categories. The first derives from the inherent logical contradictions whereby high levels of integration, organisation and cohesion, which define an ascendant society, exert a mutually corrosive effect (K1). The second involves the tendency of a society's obligations to accumulate in a ratchet-like manner, even though its ability to meet those obligations is not ratchet-like. In this case, an eventual collision between ambitions and capacities is inevitable, causing the society's ensemble to be exposed as unworkable and then to fall apart in short order.

A society's environment is continually in flux, for example because of climatic influences, technical innovation, and interaction with other societies. Institutions that make a society successful today may therefore prove to be a big handicap tomorrow, when things have changed. The assumptions on which vast edifices of integration, organisation and cohesion have been constructed may no longer be valid and those networks of relationships will then be forced to unravel.

A society can respond to changing circumstances by adapting to them. However, it exists within a system of competing societies. Formerly disadvantaged peoples may be well placed to exploit the new situation before the other has a chance to adapt. The better a society is adapted to the old situation, the more it must change in response to the new one and the harder it will be to maintain an advantage. A society can of course avoid short term gains, with their corresponding reversals, and learn only to exploit permanent gains (Figure 19-2). Yet on long enough time-scales, it seems that no gains are permanent. The longer one waits, the larger the fluctuation one will observe in both the physical and social environments. No matter how successful a society appears to be at coping with change, there is some sufficiently long term in which it will prove to be maladapted.

The longer a good run continues, the more comprehensively a society will be optimised for those benign conditions. If there are no large fluctuations for a long period, the society's institutions are likely to become increasingly

predicated on the assumption that no such fluctuations will occur. When the inevitable large fluctuation does finally arrive, the society will be more decidedly maladapted, and the process of adjustment will be that much more painful. In the same way, the longer a forest fire is delayed, the more combustible material builds up in the understory, and the more devastating the fire will be. So it is with a dark age. The more it is postponed, the more severe it will eventually be.

Contradictions

An ascendant society is one with high levels of integration, organisation and cohesion. Such strong networks of relationships achieve a large part of their effect through reputation alone. Their strength does not need to be continually re-tested. A society that is known to be overwhelmingly powerful attracts few challengers. It must originally establish its dominance through force of arms. However, once that has been achieved and there is peace, the society does not need to keep on warring against those it has already subdued. Integration is necessary in reality to create the perception of integration, but thereafter the perception alone is usually enough. The benefits of integration may continue to accrue, whatever the situation with respect to the reality.

The phenomenon of decadence boils down to the fact that high levels of integration, organisation and cohesion remove the need to exercise the virtues which created them. The experience of peace lessens enthusiasm for the martial disciplines, which established peace in the first place. The experience of wealth lessens enthusiasm for the thrift and hard work that originally brought wealth. The experience of legitimacy and moral well-being lessens enthusiasm for the self-restraint on which these depend.

Decadence does not arise accidentally. It is actually encouraged by a state of ascendancy. Cohesion, for example, creates an environment in which dis cohesive attitudes pay. The mutual loyalty of a cohesive group is ripe for exploitation. Actors may benefit by taking advantage of the solidarity that ensures even the society's most indigent members are not allowed to starve. They may also take advantage of the society's tendency to extend legitimacy even to those who overtly renounce its values.

In a similar way, organisation stimulates the attitudes that lead to disorganisation. In a poor, disorganised society, the only way to achieve material advancement is through entrepreneurship, i.e. the genuine creation of new economic relationships. There are no significant funds to misappropriate. However, in a wealthy

society, potential organisation can be acquired by non-entrepreneurial means, such as by taking on debt. Strategies based on various degrees of fraud may be more worthwhile than real, painstaking entrepreneurship.

Finally, integration promotes disintegrative attitudes in that people who subvert the hierarchies of an ordered society may gain advantages relative to those who submit meekly to authority. By threatening the general peace, minority actors can gain concessions out of all proportion to their real coercive capabilities.

In essence, ascendancy means that actors are relieved of the individually borne costs of integration, organisation and cohesion but can still enjoy the global benefits. As decadence spreads, the situation must become increasingly unbalanced, with too many actors exploiting the perception of ascendancy and too few continuing to supply the necessary virtues in reality. Hence, there will be a dangerously widening gap between the perceptions and the reality.

Ascendancy also increases the likelihood of mismanagement. The slogan of the Nazi party, *Ein Volk, Ein Reich, Ein Führer* – One People, One Government, One Leader, was essentially the formula for high integration and high cohesion. Hitler had absolute authority. There were no explicit mechanisms for challenging his reasoning or judgement. With the notion of ‘ein Volk’ there could be little room for internal debate and self-criticism. Such loyalty and implicit obedience made the Nazi state in some ways extraordinarily strong. However, there was a major drawback. The state was vulnerable to bad decisions. Hitler’s plan to invade the Soviet Union, for example, seems to have contravened all sense, all evidence and certainly the wishes of the military high command. Yet the high integration and cohesion of the Nazi regime meant that the proposed policy was never properly tested in debate and was allowed to unfold, with disastrous consequences.¹⁶³⁵ The same has been seen in Iraq, where Saddam Hussein has executed officials merely for suggesting some devolution of authority to army commanders. With its excessive integration, the Iraqi army has correspondingly suffered from a lack of operational responsiveness.¹⁶³⁶

The trouble is that one individual cannot get it right all the time – especially after a series of successes has created an illusion of invincibility. Debate and criticism are necessary to rehearse ideas and to filter out the bad ones before they are put into practice. A strongly integrated hierarchy discourages the flow of information that challenges authoritative decisions.¹⁶³⁷ It suppresses differences of opinion, and so the group cannot benefit from its collective wisdom and insight. Similarly, cohesion means that the members of a group

strongly share a common set of views. The members of the group check and reassure each other to produce full commitment to the group’s goals and the proposed methods of achieving them. There are no differences between people. There is no creative tension, and no adaptability or innovation. The group’s members are reluctant to challenge the received wisdom. This is potentially disastrous, since the received wisdom may be wrong.

The collective decisions of a strong group may therefore be of lower quality than the decisions that its individual members might take when acting alone. A tightly knit group, such as a shift of power plant operators, may be especially prone to risky behaviour. Its members validate each other’s beliefs and become imbued with a false sense of confidence. Individuals, by contrast, with no cohesive group to legitimise their decisions, may experience greater self-doubt and be more ruthless in criticising their own assumptions.

President J F Kennedy blamed this ‘risky shift’ phenomenon for the Bay of Pigs fiasco, in which the United States sponsored a doomed invasion of Cuba by Cuban dissidents. In retrospect, he could not understand how he had endorsed such an ill-conceived mission, and he resolved never again to allow a small cohesive group of advisers to counsel him exclusively during national crises. A broader group ought to throw up more internal debate and disagreements, and this would presumably allow a more realistic view to emerge.

There is a kind of inexorable logic, therefore, whereby a state of unchallenged ascendancy leaves a group vulnerable to poor decision-making. This logic is compounded by the fact that ascendant societies are hostage to a complex polity and economy, whose very maintenance demands sophisticated reasoning and administration of decisions. There is more to look after and preserve, and this can absorb growing amounts of attention and resources.

A simple, self-sufficient society is dependent only on itself. Its well-being is under its own control and its efforts are focused on directly productive activities. A complex, highly organised society, by contrast, is dependent on far-flung trading networks and its well-being is partly under the control of distant trading partners. The society’s networks of relationships are threatened by competitors and aggressors. It must divert effort into protecting what it has already achieved. As organisation increases, proportionately more consideration must be given to protecting the society’s growing vulnerabilities and less to making new gains.

Success inherently attracts challengers. Many ascendant societies have found that spending on defence has mushroomed once they have achieved a dominant position. When it is small and

insignificant, a nation has little need to maintain a large military. As it becomes wealthier, though, it acquires international interests and is attracted into the sticky business of geopolitics. Initially, backed up by its accumulated wealth, the nation may find it relatively easy to establish a formal or informal empire. Yet it attracts enemies at the same time that it has acquired more to control and defend. The military becomes increasingly prominent and diverts energy from productive activities. The drain on the nation's resources grows steadily, even as its competitive advantages are disappearing. This burden of self-protection tends to be unjustly heavy insofar as the ascendant society is providing a public good, i.e. one that benefits others even though they do not contribute to the cost. The bill for maintaining global order lands entirely at the hegemon's door. The costs of protection can then strain the resources of what is being protected.

A successful society tends to empower potential competitors by giving away its advantages. The institutions, technologies and infrastructure that it provides for its own benefit also benefit its enemies. The rule of law and extensive communications are helpful to those who would demolish a civilisation as well as to those who wish to build it up. The Roman peace in the Mediterranean allowed St Paul to travel freely, preaching what Pliny called a 'degenerate cult' which was subversive of traditional Roman values.¹⁶³⁸ The roads that carried the legions outward to impose Rome's authority were the same ones that brought the barbarian war bands who eventually destroyed it.¹⁶³⁹

The knowledge and practices that give an ascendant society its edge have a habit of leaking away to subordinate societies on its periphery.¹⁶⁴⁰ The latter are eager to learn, and the dominant society may well be complacent about giving away its secrets. Britain's pioneering role in the industrial revolution tended to become irrelevant as industrialisation spread to other countries. Similarly, Europe's colonial powers were eventually compelled to withdraw from countries that had become more sophisticated and less easy to dominate than the ones they originally invaded.

In the second world war, the United States wished to use Brazil as a launching pad for its move into north Africa and in return agreed to assist Brazil with its industrial development. The US officials assigned to this task began by drawing up plans for expansion of the railways – on the basis that this had been a crucial first step in North America's industrialisation. However, it soon became clear that this view was utterly misguided. Not only had railways already been rejected by Brazil (in the Amazon, the jungle covered the tracks faster than it could be cleared away) but also Brazil at that time had more aeroplane pilots per head than the US.¹⁶⁴¹ Clearly, Brazil was not

starting from where North America had been in the nineteenth century and its industrialisation did not have to repeat exactly the same process.

Pioneers face the problems of early obsolescence. They become lumbered with out of date capital equipment, whereas late-starters can install the most efficient and modern versions.¹⁶⁴² It has been suggested that Britain's lagging behind the continent during the sixteenth century enabled it to leapfrog into the lead by the eighteenth¹⁶⁴³ – only to be leapfrogged itself by the twentieth century. When the industrial revolution spread to Europe, the relatively backward countries tended to be the ones that industrialised most effectively.¹⁶⁴⁴ In the world as a whole, the countries latest to industrialise have grown the most rapidly, closing the gap on the early adopters of these technologies.¹⁶⁴⁵

To maintain a relative advantage is therefore an inherently difficult task. An ascendant society must be resilient, continually recovering from the political and economic shocks of military and commercial challenges. It is helped in this task by its social cohesion, which provides a backstop and allows a society to avoid complete disruption even when there is a temporary decline in its integration and organisation. Social relationships are the most difficult to disrupt (TC4), and they legitimise the other kinds of relationship. Ironically, though, social relationships are especially likely to deteriorate in an ascendant society. Ascendancy is associated with high scale, and high scale is associated with dis-cohesion (S11).

The fundamental problem is what Herbert Spencer called the instability of homogeneity,¹⁶⁴⁶ i.e. the generic principle that it is difficult to maintain uniformity across a complex system. Cohesion requires reinforcement of a set of shared values, attitudes and beliefs (S1, S3), but this is difficult to guarantee when a society has millions of members. Non-conformists are not necessarily isolated and they may reinforce each other's non-conformist views. Differences of opinion can thrive, and cultural uniformity tends to be degraded.

Once differences arise, they tend to be self-promoting. Rival orthodoxies may win converts as well as be passed from parent to child. Their existence diminishes the legitimacy of the dominant orthodoxy and makes demands for conformity less compelling. Dissent stimulates calls for increased toleration, which allows further dissent. Immigrant communities that have established a cultural bridgehead make conditions easier for those that come after. The more that cohesion has already crumbled, the more it is likely to crumble further.

Ascendant societies tend to lose the crucial safety net of cohesion. This happens readily and

invisibly because *cohesion* normally plays the least important role in holding together an ascendant society (TC4). Decline in the other factors can proceed a long way before *social cohesion* is tested and its deterioration is revealed. However, when this stage has been reached, it will become obvious that the society has no rationale for remaining intact at all and it is likely to fly apart.

An additional irony is that, when *cohesion* crumbles, it imposes burdens on *integration* and *organisation*. Not only is the safety net removed, but also the society's existing balance is compromised. The selfishness of *discohesion* imposes a burden on *integration* since it leads to criminal behaviour in defiance of the civic order. Young males, who are responsible for most crime,¹⁶⁴⁷ have few obligations in a *discohesive* society and they emerge as a threat to the community that appears to disown them. Crime is also harmful to the *economy*. Vandalism, a characteristic crime of alienation (i.e. *discohesion*), is purely destructive of material wealth. Crumbling *cohesion* also imposes a burden on *organisation* because selfish actors are likely to become parasites on the *economy* – as bogus welfare claimants, for example, or as litigants requiring compensation from public funds.

The very phenomenon of ascendancy is beset by contradictions. Having eased the problems of existence, a successful society becomes prone to mistaken policies. This is at the same time that it has never had more to lose and becomes preoccupied with merely preserving the status quo. Furthermore, *cohesion* disappears inexorably and invisibly, stressing other relationships and removing a final line of resistance.

The fundamental contradiction of ascendancy lies in the human ambivalence towards social relationships (P9, E8, S15). People welcome order, wealth and morality, but they also desire autonomy, self-sufficiency and moral freedom. Neither situation entirely satisfies human needs. Aristotle suggested that history moves in cycles because every system is imperfect. People are continually striving for an alternative. Since there are limited possibilities, one system will transform into another, only to be transformed back again.¹⁶⁴⁸

Ambitions and capacities

The second form of self-defeating process to afflict ascendant societies involves the proliferation of overheads. These are institutions and activities that are considered necessary but nevertheless tend to be ineffective at strengthening *political*, *economic* and *social* relationships. They are dead weights on those relationships. For the most part, such overheads imply the transfer of *organisation* (wealth) from those who have created it to others who have not. This reduces the

rewards of entrepreneurship and makes it less likely that new *organisation* will be created.

One of the most constant themes in the history of ascendant societies is the tendency of tax burdens to grow with time. Tax grows not just in absolute terms but as a share of national income. The non-entrepreneurial public sector expands faster than the *economy* as a whole.¹⁶⁴⁹ In other words, the ambitions of the state expand faster than the capacity to fulfil them. In Europe, taxation has been increasing steadily since the continent emerged from the post-Roman dark age (when it was reset to nil). In France, taxes have grown by a factor of 15 in real terms during the last 400 years.¹⁶⁵⁰ In the world as a whole, it is invariably the ascendant, industrial nations that have the highest tax rates.

The question is, where do all these tax revenues go? To some extent, they are spent on the public goods provided by *political* authorities, such as protection against bandits and avoidance of the tragedy of the commons. However, this does not account for their ongoing expansion. One reason for their tendency to increase is that the government apparatus expands under its own steam. C Northcote Parkinson (famous for his 'law' that work expands to fill the time and budget available) pointed out that bureaucracies grow whether the need for their services is expanding, contracting or remaining the same. The principle of bureaucratic self-enlargement is very general and has operated as much within *laissez-faire* states, such as Britain and the United States, as in more traditionally autocratic ones like France and Germany.¹⁶⁵¹

The members of a bureaucracy share among themselves certain goals and attitudes, and thus form a *social* group in their own right. The bureaucracy has an autonomous existence (S13), concerned with furthering its own power and influence.¹⁶⁵² Bureaucrats are insulated from pressures for efficiency and are instead motivated to extend their activities and increase their staffs, since that increases their own importance. They are always finding new areas for intervention, from police forces to food inspectorates and hurricane warning services. Although bureaucracies have sometimes been cut back after a period of expansion, there is a kind of hysteresis. The contraction is seldom as much as the preceding expansion. Parkinson observed that there is a law of diminishing returns for taxation, because an increasing share of the revenues goes on the administration itself.¹⁶⁵³

Big government is not solely a fault of the bureaucracy. It can also be traced to the demands and expectations of those who are governed. Citizens create a requirement for all these additional services and interventions. Ironically, they deplore the state's growing appetite for funds

at the same time that they are calling for it to act in new and ambitious ways.

Complex societies are necessarily unfair. Power and wealth are inevitably distributed unevenly, while misfortune cannot fall equally on everyone. This kind of unfairness is not borne easily by human beings, who have a perennial desire for freedom, equality and insurance against life's vicissitudes. If they tolerate political dominion or economic differentials, it is as a relative rather than an absolute good. When order and material welfare are reasonably secure, they seek a redistribution of power and wealth in their own direction.

In the kind of history that is taught in school, the ordinary people tend to be presented as passive extras who facilitate the grander schemes of monarchs and generals, accepting their lot and furthering the ends of their masters. However, the reality is that peasant revolts, lynching of tax inspectors, and riots against unfair laws and taxes have been a feature of every century and every country. Many people have been enslaved throughout recorded history, but this does not mean that they have ever been willing – quite the reverse. There have been continual pressures on the institutions of ascendant societies impelling them to evolve in the direction of growing respect, opportunity and independence for the ordinary individual.

In Britain from the fourteenth century onwards, the labour services that serfs owed their landlords were increasingly commuted into money rents. This was driven by the serfs, who felt themselves freer when they paid rent than when their time was not their own. More recently, labour legislation has ameliorated working conditions, while the electoral franchise has been extended to all categories of men and to women. None of these things were just granted from on high by enlightened parliaments. They came in response to concerted campaigns and demands that appeared irresistible.

There is no end to movement in this direction. The more people have achieved, the more they seem to want. It is impossible to draw a line under any particular set of demands. People will never be completely satisfied or say that this level of welfare is sufficient and no more is needed. After the state has improved its citizens' welfare in a small way, it receives demands to improve their welfare in a big way. After the major hardships and injustices have been removed, the medium-size hardships and injustices seem to loom, and then after that the minor ones. Social progress is like Hercules's combat with the hydra. The more that is done, the more there is to do.

Once a particular freedom or indulgence has been granted, it is very difficult to take it away again. There is a ratchet effect. Each advance

becomes the new baseline from which further demands go forward. This is why the Roman dole was always increasing. Some Roman emperors extended the scope of the dole in order to quell a crisis, or gain popular endorsement of their accession. Their successors then found it impossible to reverse the change. Similarly, Roman soldiers came to expect bounties as part of their normal salary. Having been given once, they had to be given again and again.

People tend to accumulate rights. The fundamental dis-cohesion of an ascendant society encourages this. People are selfish and they put their own interests above those of the community. Special interest groups press their particular claims regardless of the interests of society as a whole. As social psychologists have repeatedly shown, people's motivations are high when they participate in small groups on tasks whose purpose they can see, but plummet dramatically when their contributions are largely anonymous and have little impact on the overall performance of the group. The latter situation describes a high-scale ascendant society. Its members are relatively de-motivated and indifferent to their community's problems. People expect more but are inclined to contribute less. Rights are important, but duties and obligations to others pale into irrelevance.

Extension of the franchise, itself a response to popular aspirations, largely accelerates this whole process. There is more incentive to attend to the welfare of those who have the vote. People can acquire power for themselves and thus implement the reforms that they desire. Policies that appeal more to selfish instincts tend to win out over those that emphasise self-denial and community accountability.

The French revolution came at a time when the government was introducing reforms and the condition of the proletariat had never been improving more rapidly.¹⁶⁵⁴ Seemingly perverse, this illustrates a general principle. The process of satisfying demands may create expectations that cannot be satisfied or at least not satisfied in time to appease those in whom they have been raised. The danger of social breakdown is often greatest when conditions are improving but not improving fast enough. The same thing occurred in eastern Europe in 1989, and in China's Tianenmen Square in the same year. A small amount of liberalisation did not satisfy the people at all. It merely sharpened their hunger. When conditions are miserable and set to remain miserable, people can resign themselves fatalistically to their lot. When things are getting better, fatalism disappears, impatience grows and the social order is threatened.

Giving people liberty and equality does not necessarily make them better off. Seeming improvements can actually leave them less satisfied

than before. When people are free to determine their own paths through life, this does not just mean they are free to acquire wealth and status. They are also equally free to fail. In ancient Rome, freed slaves discovered that freedom had a downside. Suddenly, they were on their own and could no longer rely on their former masters for board, lodging and occupation. Some slave-owners found that it was actually convenient to free their slaves and then hire them as waged labourers. Workers who have to fend for themselves tend to be more willing, and it is easier to get rid of an employee than a slave.

The emancipation of the serfs in Russia similarly proved to be a mixed blessing. The free bargains that they contracted with their landlords often left them worse off than in the old days, when the master had a stake in their welfare.¹⁶⁵⁵ The ending of slavery in America led to the same experience. The slaves gained freedom at the expense of security, and found that their options were still very limited.¹⁶⁵⁶ Since the destruction of the Berlin wall, some former East Germans hanker after the days of socialism. For many less developed countries the ending of the colonial system has not lived up to its promise and, if anything, they have fallen further behind.¹⁶⁵⁷

It follows that an ascendant society's efforts to accommodate its citizens' demands for self-determination will only lead it into further problems. An unfettered *laissez-faire* regime may in principle afford equality and liberty but is in practice associated with inequality and limited opportunities. The more able members of the society advantage themselves at the expense of the weaker members. The truth is that many ordinary people are not actually very good at fending for themselves. As slaves or serfs they are subject to the discipline of their lord or master. They are given work, rather than needing to find it, and their fecklessness is curbed by a social system that assigns them a role and certain traditional modes of behaviour. When they become free, however, they are at liberty to plan their time poorly and waste their resources. No one stops them from drinking and gambling, or instructs them to store up food for the winter. They can fall into destitution and no one is responsible for them. A paternalistic society is certainly oppressive to those who have wits, drive and initiative. However, to many others it provides a safe environment. They have a place in the world and self-respect. If they get into trouble, they might get a whipping in the public square, but that could be considered better than falling into a life of crime and ending up with twenty years in jail.

The governments of ascendant societies respond to these problems of social disadvantage by taking responsibility for those who are unable to use their opportunities effectively. In nineteenth century Britain, at the very time that Marx was

predicting that capitalism would deepen the workers' degradation, their living conditions were being improved by the Factory Acts and the Board of Health.¹⁶⁵⁸ Against a background of growing beneficence, though, people are apt to take the way of least effort. London's eighteenth century paupers did not work if they did not have to.¹⁶⁵⁹ The Yir Yoront prefer to sleep once they have secured their meals for a day. It would be absurd if it were otherwise. The human species would hardly have enjoyed so much evolutionary success if its members were inclined to expend their energy unnecessarily. People will therefore take advantage of any opportunities for an easier life that are presented to them. The Romans became parasitic on the corn dole precisely because it was possible for them to do so. In consequence, a welfare system is inherently plagued by perverse incentives. Some people are always better off as dependants than as productive contributors to the commonweal.

The seemingly morally desirable aim of cushioning people from failure makes failure a viable lifestyle and encourages more failure. When Herman Melville visited Liverpool in the 1830s, he observed a woman with two babies who lay dying in full view of the pavement. He could get no one to help them, and their bodies were removed only when they began to decompose.¹⁶⁶⁰ This was a terrible thing. One consequence of such a brutal reality, though, was that few young women were so reckless as to become unmarried mothers. By contrast, now that it has become unthinkable for the state to allow mothers and babies to starve to death in the gutter, single young women are mostly only pleased to find themselves pregnant,¹⁶⁶¹ and unmarried motherhood has emerged as a major social concern. The perverse incentives are an essential characteristic of the system. They cannot be excised without re-creating the very cruelties that the rules have been designed to eliminate.

The expectations of ordinary people combine with the aspirations of the state to create rising ambitions regarding the perfection of human welfare. However, the fulfilment of expectations only creates more expectations, while the satisfaction of aspirations only generates new problems and stimulates further aspirations. Hence, a society's ambitions tend to increase inexorably and ratchet-like. By contrast, the society's capacities certainly do not increase in a ratchet. They are related to the levels of *integration* and *organisation*, which remain in continual ferment, sometimes retreating, sometimes advancing. Indeed, the capacities are often under attack, with selfishness and dependency corroding entrepreneurship. As ambitions close the gap on capacities, it becomes increasingly likely that they will overtake them.

There is also a problem of diminishing marginal returns, which means that it becomes ever harder for a society to add to the benefits it has already achieved. This phenomenon can be discerned in such areas as scientific research, technical innovation and power production. Basic improvements in public health, for example, are relatively inexpensive and greatly improve the overall vigour and life expectancy of the population. They pay for themselves easily. However, the more heroic treatments that come afterwards, such as sophisticated drugs, surgery and medical instruments, are increasingly expensive while delivering fewer certain benefits in terms of the population's overall health. The demand for health improvements is relentless. The ability to deliver them is not.

Joseph Tainter suggests that ancient empires had to keep expanding in order to counteract the logic of diminishing marginal returns. Net extraction at the newly incorporated periphery was necessary to subsidise net consumption at the core. In the long run, this proved unsustainable, overheads exceeded the system's tolerance and collapse ensued.¹⁶⁶²

An even more fundamental reason why capacities must eventually fall short of ambitions derives from the fact that people are more concerned with their relative position than their absolute one. Pay differentials are a far greater source of contention than income levels per se.

However much they are earning, people tend to be upset if they think that colleagues of equal merit are earning more. Therefore, however much capacities rise, ambitions will always rise more. People will never be satisfied so long as there are still some who enjoy relative advantages in wealth and power, and those advantages cannot be eliminated without destroying all incentive and precipitating the catastrophic breakdown of political and economic relationships.

Having said all this, the details are not so important. Every instance of decline will involve its own peculiar combination of challenges and difficulties, and its own realisation of these various processes and episodes. The fact of decline, however, is a constant. The fundamental issue is that numerous paradoxes and contradictions eat away at integration, organisation and cohesion. A state of ascendancy is always under threat. Perceptions invariably deviate from reality. Discrepancies emerge within the society's institutional ensemble, and recognition of this fact is often long delayed. When the imbalance is finally revealed, the result is not a gentle adjustment but an abrupt crisis of confidence. As ambitions are disappointed, the whole system loses legitimacy. There is a crunch, and perceptions collapse to the reality. That is how revolutions, depressions and dark ages begin.

Part Three

*a world of
contradictions*

Chapter 21 - The story so far

An unfolding saga

Humans have never been more capable than they are today. They have never been more knowledgeable. The notion that there could one day be a return to dark age conditions may be regarded as an amusing debating point but surely not as a serious threat. How could this highly developed, global civilisation succumb to the mistakes of the past?

The previous paragraph could have been written at any time in the last five thousand years. Every civilisation has believed itself to be highly developed and global, to be possessed of sophisticated institutions, and to be invulnerable. Each one has been impressed by its own imperishable mightiness. Each one has believed itself to be at a turning point. Yet they have all come to grief. Those who consider the accomplishments of the present era to be so outstanding that nothing can reverse them owe that conviction largely to an ignorance of history.

It is wrong to think that people are now enlightened in some absolute sense while in the past they were naïve and backward. Throughout history, there have been discoveries – papermaking, metalwork, principles of navigation – that were very bit as epoch-making as the discoveries of the present era. People may look down on former societies for their brutal social institutions, yet today there are still beggars, prisons, and disease, and still people do very little to intervene as their global neighbours starve to death by the thousands. In the future, people will surely look back on this time and pity contemporary humans for their crude machines, their misguided theories of the natural world, and their humanitarian deficiencies.

History is a seamlessly unfolding saga, and this is merely the latest point of it. There will be future reversals just as there have been past reversals. If a dark age had occurred just once, or a few times, one might have less confidence in that view. However, declines and setbacks have occurred time and again, on every inhabited continent. They are among the most salient features of the historical process. At this latest point of the saga, the world is in a particular situation. Some countries seem to be gainers, others losers. Yet these fortunes will inevitably change, for change has occurred and continues to occur on every time-scale – weeks, years, centuries, and millennia.

There has been, from the broadest perspective, an overall progression. Institutions like the United Nations and the internet are new developments. Yet behind such surface changes, the fundamental principles of human experience remain as they ever were. The concepts of integration, organisation and

cohesion* are timeless in their relevance. They strip away the details of personality or event and reveal history's deep patterns. It becomes possible, with them in mind, to see the world's present circumstances not as unprecedented but in many ways as very much precedented.

The analysis of these circumstances will mostly eschew detailed statistics of GNP growth, crime rates and the like. The patterns of interest cannot really be captured in graphs or tables of figures, where so much depends upon how the axes are chosen or where the thresholds are assumed to lie. This does not mean that the analysis is undisciplined. It is based on a clear model, and one that is rooted in some five thousand years of history. In that light, it is the very brightness of today's achievements that is so worrying. On past experience, a truly devastating dark age must lie ahead.

History as the growth of scale

To sum up history in a single concept, the overriding theme has been the growth of scale. Scale measures the number of different people with whom one person is likely to come into contact in a given time period. It is very low among people like the Kalahari foragers, who roam the empty landscape in their tiny family groups. It is very high in downtown New York. Differences in scale are associated with different ensembles. The ensemble of institutions and technologies that maintains satisfactory relations among the Kalahari foragers would not do in New York, and vice versa. The association between ensemble and scale is one of logical consistency rather than causation.

Contemporary nations are examples of the ensemble in which interaction commonly takes place with strangers. This ensemble was first established on the Tigris/Euphrates floodplain over five thousand years ago. If any people can think of themselves as entering a new phase of human existence, it should be these first city dwellers, not their modern descendants. Since their time, the basic story has been more of the same. The growth in scale, dramatic though it is, has changed only the subsidiary characteristics of the stranger ensemble. It has not so far produced a new one.

Scale has grown partly through population increase. After spreading into all the empty lands, humans were eventually forced to live at higher densities and hence to interact with more people. The huge overcrowded shanty towns of third world cities can be seen in an optimistic light as the early

* Technical terms will no longer be marked by a special typeface. They should now be sufficiently familiar to be recognised in context.

stages of increasing scale.¹⁶⁶³ Their condition is certainly dire, and ameliorating conditions there will be no easy task, but it is with good cause that these places have been called slums of hope. The residents certainly have little desire to get out.¹⁶⁶⁴ The shanty towns do not compare especially unfavourably with European cities of anything more than one and a half to two centuries ago. These were also brutal, unhealthy places where desperately poor people struggled to make a living at insecure and dangerous occupations. That turned out to be the prelude to the ordered, wealthy and free institutional ensembles of today.

Scale has also grown as people have become better able to move around and get in touch. Nearly a billion homes can now talk to each other within seconds via international direct dialling. Newsworthy events anywhere in the world are reported world-wide by breakfast the next morning, producing reactions as if they were in the next village.¹⁶⁶⁵ When Nelson Mandela went on a tour of world leaders after his release from prison in 1990, his aeroplane stopped in a remote airfield in northern Canada. He was astonished to find that the local Inuit children knew who he was and had watched his release on television – something unimaginable when he went into prison twenty seven years before.¹⁶⁶⁶ Over the last ten years alone, mobile telephones and the internet have helped take scale to seemingly phenomenal levels. Through the internet, someone in Frankfurt can meet and chat with strangers in London or Tokyo, then order goods from an on-line store based in San Francisco and pay instantly by credit card.¹⁶⁶⁷

These latest technologies represent further increases in the scale of human existence. Their impact is not quantitative but qualitative, not a new departure but a movement along a continuous curve. The motor vehicle and the aeroplane are less revolutionary than they may appear. They simply continue this well-established trend of bringing people closer together. They build on the railway and the canal, and before that on improved roads and on the fast, light sprung carriages that replaced the crude carts of medieval times.¹⁶⁶⁸ The internet is just a better medium of communication. It is the newest twist in a process that can be traced back through television, telephone and telegraph to the introduction of printing and the original invention of writing in the earliest cities. For thousands of years, the aim has been to get more information, more quickly, to more people, allowing them to interact at a distance and disseminating their ideas to a wide audience.

As scale has grown over the last millennium or so, there have been predictable implications. Integration and organisation have increased, while cohesion has become more diffuse and spread over a larger population. There has been complexification, i.e. the development of more

elaborate institutions to deal with the problems and opportunities of high-scale living. As implied by the ensemble concept, technical innovations, population growth and institutional change have been intimately interrelated. Newspapers, for instance, did not just depend on developments in press technology. They also relied on the growth of cities, which created a market, on improvements in transport, which made it possible to serve that market, and on political and economic elaboration, which gave them something to report. All these broad currents in human affairs can be understood from the abstract model of political, economic and social relationships.

Integration

Growing scale helps political integrators to exert control over a wide area. It shifts the balance from the local lord or princeling to some more distant authority. In Europe there has been a trend towards larger polities. About a thousand different states existed in the fourteenth century but were cut down to a mere twenty five by the beginning of the twentieth.¹⁶⁶⁹ As the political authority has become able to project itself further and more fully, people have experienced the increasing presence of the state in their lives. Every activity or life event is subject to rules and must be registered with some office or other. Meanwhile, authority is exercised less arbitrarily. Citizens have acquired rights and the government is subject to its own law. The franchise has been extended so that, in principle, people now govern themselves. The state's authority relies on the tacit co-operation of those whom it presumes to govern, implying a growing importance for perceptions rather than the reality of coercion.

Integration has been associated with a greater monopoly of force, involving better weapons and surveillance techniques. When castles were almost impregnable and sieges took many months, it was simply not feasible for one adventurer to impose overall authority on the many individual princedoms that might dot some region. However, when cannon came along, castles were no longer so effective. Feudal lords were compelled to submit to the strongest authority. They began to live in undefended châteaux and country houses, indicating the achievement of regional peace and order.¹⁶⁷⁰

On an international level, the monopoly of force probably peaked around the end of the nineteenth century, when the Gatling gun helped European powers to colonise most of Africa within the space of two decades.¹⁶⁷¹ After the second world war, the United States and the Soviet Union emerged as the latest world political integrators, possessing nuclear weapons as well as sizeable and well-equipped conventional forces. By managing to avoid fighting each other, these superpowers were able to impose a fair amount of order on the world.

The departure of the Soviet Union as a credible authority has left the US as sole hegemon and the source of all global-scale integration. Yet while those living within the US-dominated heartland enjoy a substantial peace, the monopoly of force is incomplete and the US does not try to impose its authority to the maximum everywhere.

Organisation

The growth of scale has been associated with great increases in organisation, i.e. wealth.¹⁶⁷² Commercial activity has expanded due to both communications improvements, from regular postal services to the latest electronic messaging, and developments in transportation that mean even perishable products can now be traded half way round the world. The United States benefited enormously from being a single market of huge scale. In Europe, the logic of growing scale stimulated the German customs union,¹⁶⁷³ which has graduated into the continent-wide common market. The relatively poor regions of the contemporary world are those where scale remains relatively low.¹⁶⁷⁴ Russia, for example, continues to be held back by its decrepit roads, which are inimical to scale.¹⁶⁷⁵

Scale has meant a move away from autonomous generalists to interdependent specialists. People have left the land and the undifferentiated lifestyle of peasants to take up an enormous variety of occupations. In the fifteenth century, farmers did not bother to sow more wheat than they needed for their own consumption.¹⁶⁷⁶ Now farming is an intensive industry and relies on all sorts of specialised equipment, supplied by a network of manufacturers and retailers.¹⁶⁷⁷ The nature of work generally has shifted from primary occupations (harvesting raw materials, i.e. mainly agriculture and fishing), to secondary (manufacturing, i.e. processing raw materials to make products) and subsequently tertiary ones (services, i.e. everything from barber shops to health care and business consultancy).

The growth of scale has been associated with technical innovations, whose basic effect is to let people live better and do more.¹⁶⁷⁸ Campaigning by social reformers has depicted industrialisation as involving the ruthless exploitation of poor and disadvantaged people. However, this involves an unjustifiably romantic view of the former rural existence of the people who crowded into the factories. Of course conditions in the early factories were genuinely grim, and some propaganda was no doubt necessary to bring about desirable social change. Yet these people's living conditions had always been miserable and insecure. Poor harvests could see a doubling of the death rate and were by no means rare.¹⁶⁷⁹ More devastating famines affected at least every generation. When people became factory workers, they were buffered against agricultural failure. They were also the consumers

of the new, much more affordable goods coming out of the factories. What had once been rare luxuries became more widely available.

Innovations have never created wealth automatically. That has always required entrepreneurship. The successes of the industrial revolution depended as much on business skills as on new discoveries. Josiah Wedgwood, for example, and the Manchester cotton manufacturers largely created the markets for their new products. James Watt did not just invent an improved form of steam engine but was actively involved in the financial and managerial problems of developing and marketing it.¹⁶⁸⁰ Charles Macintosh did not just invent a means of waterproofing cloth. He set up a factory, found suppliers of raw materials, hired workers, got his product out to the market, advertised its advantages, collected the money, paid his workers and suppliers, and so on. In other words, he conjured into existence a whole eddy of economic organisation.

The growth of scale and organisation has also been closely associated with the lowering of tariff barriers around the world. This reached its peak during the nineteenth century. In the 1930s, the United States re-erected its barriers with the swingeing Smoot-Hawley tariff and protectionist sentiment underwent resurgence everywhere. This was in conjunction with a huge contraction of global trade and a great world-wide depression.¹⁶⁸¹ Informed by this experience, a conference at Bretton Woods in New Hampshire in 1944 mapped out a new world economic order emphasising free trade. This produced the International Monetary Fund and the General Agreement on Tariffs and Trade (GATT), whose negotiations progressively reduced tariff barriers over the ensuing decades. In 1995, the GATT was transformed into the World Trade Organisation, which is intended to take the liberation of trade to new levels. These world-wide initiatives have been supplemented by the establishment of numerous free trade areas and economic co-operation zones.

Cohesion

With increasing scale, people have become aware of belonging to a greater community. They have acquired a national consciousness.¹⁶⁸² Wars were once merely the affairs of monarchs, fought out in some distant field and irrelevant to the concerns of ordinary folk. Increasingly, however, whole countries have been drawn in to each conflict. With the advent of long-range bombing, everyone has come to be on the front line.¹⁶⁸³

Broadening cohesion has been associated with the decline of regional languages. France became a nation at a time when only half the population spoke French,¹⁶⁸⁴ and its sense of nationhood has grown as a common language has spread. French language is an important symbol of French identity and is protected by an official academy. France's

former colonies, the Francophone union, also retain a sense of cohesion through their continuing shared use of French.

Widening cohesion has meant that the wider society now takes responsibility for people's welfare. In the past, when cohesion was confined to the local village, its inhabitants might easily starve to death after a poor harvest and not receive help from further away. Now that people are conscious of the wider context this is less able to happen. Charity draws on the resources of an entire country and has become more ambitious. There has been a huge growth in social security programmes, even in the traditionally individualist United States.

While social cohesion has become more encompassing, it has also become more diffuse. The transfer of social responsibility to the distant state has effectively absolved the rich of any direct obligation to pay attention to the needs of their less fortunate neighbours. The connection between the recipients of welfare and those that provide it has become tenuous and impersonal. However, this is better from the perspective of human dignity and that too has become increasingly emphasised.

The last few centuries have seen the weakening of institutions that formerly reinforced traditional values. Under feudalism, people's duties to each other were very explicit and strictly enforced. A rigid social pattern bound people tightly together and made them adhere to a common moral standard, even dictating how they should dress. The effect of increasing scale has been to erode all such restrictions. Feudalism was fading away by the end of the fifteenth century, when monarchs began to rely increasingly on professional armies. A couple of hundred years later, the guild system, which had imposed strict customary standards on the members of trades and professions, fell into disrepute.¹⁶⁸⁵

With every decade, people have become freer to behave as they like, less tied to a particular position in the community, less obliged to follow community-imposed standards, and therefore less likely to share the values, attitudes and beliefs of their neighbours. There is increasing tolerance of what would formerly have been deviant behaviour. Living together outside marriage, once scandalous, is now commonplace.¹⁶⁸⁶ Since Oscar Wilde was released from prison in 1901, homosexuality has become mainstream. The National Health Service actually gives money to gay groups, such as one called 'Rubberstuffers', to provide advice on bondage, cruising and orgies.¹⁶⁸⁷

Relaxed cohesion has helped the growth of organisation, which requires risk takers and original thinkers. People who adhere inflexibly to customary practices cannot produce much organisation.¹⁶⁸⁸ Places like Latin America, where near-feudal institutions survived into the 1970s,¹⁶⁸⁹ have fallen behind economically. The fact that the

traditional power of landowners is being broken in Latin America is at least one optimistic sign for its future development.

High scale has made people more aware of the suffering of those in other countries, and numerous international charities have come into existence. The compass of cohesion now reaches around the globe, although it is very diffuse. Overseas aid budgets are tiny and the funds are often allocated with a view to benefiting the donor country. Most people remain relatively sanguine about the thought of those who are starving or drowning in distant countries. This is not because they are bad human beings but because at that distance cohesion is stretched as thin as it gets.

International communities, such as the European Union and Association of South East Asian Nations, are also indicative of spreading cohesion. These are based not just on economic motives but also on the perception that their members have, or should have, common values and interests. The United Nations and numerous other multilateral organisations promote a sense of shared purpose between all the world's nations. At the same time, national autonomy has become more important, in the same way that individual autonomy has. There is greater awareness that other countries have different values, attitudes and beliefs, and greater acceptance of that fact. Imperialism, once commonplace, has lost all legitimacy.

The rise of the west

Arnold Toynbee regarded 'the west' as a civilisation, one of several currently existing, which is characterised by a broadly shared culture. It comprises the societies located at the western end of the Eurasian land mass, plus certain other places, notably North America, where these societies have been transplanted around the world. Precise membership is arguable. Norman Davies points out that the term is used in many different ways, usually selected to advance an author's particular theory. One must be aware of this imprecision, and the fact that the west may mean different things at different times. Yet the concept is a useful one, and alternative terms (e.g. christendom) or wordy circumlocutions (e.g. Europe, Australia and North America) would be no more satisfactory.

The west leads the world socially, politically, economically. It has done so for many centuries. Most of the world has been conquered and ruled by western countries in the relatively recent past. Western culture and technology have spread to the rest of the world; very little has come back. Western explorers travelled out to meet people on other continents, and not vice versa. Western countries are the richest and most stable. Global institutions like the World Bank and the IMF are dominated by the west. Three or, depending on one's point of view, four of the five permanent

members of the UN Security Council are western countries.

Insofar as the preceding paragraph is true and accurate – and in many ways it is not – it does not represent anything like an inevitable state of affairs. The west, however defined, may be in the ascendant, however one defines that, but this is a very temporary situation in a very changeable world. Japan's achievements, for a start, challenge the notion that there are any special virtues – Judaeo-Christian, or whatever – that ensure the west's effortless superiority. Japanese achievements are sometimes attributed to the borrowing of western knowledge and techniques, but all parts of the world have been borrowing from each other since time immemorial. If other parts of the world are now adopting western technology, it is really a matter of them taking back – improved and extended – what westerners had from them in the first place.

Technological development did not begin in Britain in the eighteenth and nineteenth century. The term 'industrial revolution' for this period wrongly suggests a unique leap forward. It is merely a pun inspired by an analogy with France's political revolution occurring around the same time. The preceding centuries, with such momentous inventions as the clock and the printing press, have been described as the lull that never was.¹⁶⁹⁰ The era of cathedral building, when quarrying was done on a large scale and great numbers of waterwheels were applied to a variety of tasks, has also been called an earlier industrial revolution.¹⁶⁹¹ Europe's recent industrialisation was not so much revolutionary as part of a process whose roots extend far into prehistory.

Watt's steam engine was based on that of Thomas Newcomen, which had in turn been inspired by the researches of a Frenchman. It is invidious to identify any turning points in this seamless story and to suggest that say the French have to thank British ingenuity for starting the industrial revolution. Watt's invention of the steam engine is just a local myth, a tale for the nursery, by no means recognised elsewhere. As borrowers and developers of other people's ideas,¹⁶⁹² the early British industrialists played a role similar to that of the Japanese in more recent times. The fact that the Japanese exploited the transistor, an American invention, does not imply that the Japanese are derivative as a nation, any more than the British or Europeans generally are derivative. Such borrowing is absolutely characteristic of the process by which technology advances. The notion that the west has somehow donated the fruits of its greater expertise to an otherwise static world is quite simply incorrect.

Having said this, the west plainly did outstrip the rest of the world from a technological point of view for some five hundred years. It was

particularly vigorous during the nineteenth century, and continues to have few rivals. What was it doing right? In fact, explanations abound.¹⁶⁹³ One can reject some of the more crass ideas, such as that there is something uniquely innovative about western culture. One can also reject theories suggesting that natural disasters or tropical parasites held non-western peoples back. This fails to deal with such crucial facts as the earlier ascendancy of these peoples, their major achievements, and the equally appalling role of plague and famine in European history. Another failed notion is that Europeans simply plundered their way around the world. It may be true that much European wealth is ill-gotten. Yet that does not explain why the Europeans were in a position to plunder in the first place. No one at all acquainted with world history could honestly argue that Europeans are inherently more aggressive or rapacious than other peoples.

While this is the sort of question to which there is no single definite answer, the thesis that seems to have stood the test of analysis is that Europe enjoyed favourable institutional conditions. Other civilised regions were largely victims of their earlier success. They began the second millennium AD with some quite good technology, but their strong political authorities were unsympathetic to the kind of private activity that is necessary for innovation and the creation of organisation. The Chinese failed to develop trading opportunities in the Indian Ocean not because they did not know how, but because the Ming emperors banned long-distance voyaging. In Europe, private initiative had more of a chance to flourish. Yet it was definitely weakness rather than enlightened thinking that prevented western authorities from suppressing innovation. Both European rulers and Ottoman sultans were alarmed by the subversive potential of the new printing press, but only the Ottomans managed to ban it.

Similar points apply to western territorial conquest. Conquest and imperialism are pan-human activities, not specifically western. There was certainly no western master-plan to bring the rest of the world under its dominion. Instead, the European empires tended to grow up through the private initiatives of the people on the ground. The British subjection of India grew out of the activities of the private East India Company. These accretions were by no means always welcome to the home governments, who often had enough to deal with already. When one British naval commander claimed part of Argentina for Britain in 1806, the government disavowed him.¹⁶⁹⁴ In west Africa, the British government of the 1860s was determined to halt 'creeping imperialism', but the frontier continued to move inland.¹⁶⁹⁵ Only in the later part of the nineteenth century did imperialism become a matter of national pride, and

fear of their rivals gaining an advantage led the European powers into a scramble for overseas territories.

To say that western development was favoured by institutional arrangements largely boils down to the notion that the level of integration was in just the right range: high enough to provide a stable environment for entrepreneurship, but not so high as to pinch off initiative altogether. The key elements were autonomy, freedom to experiment, and diversity.¹⁶⁹⁶

The history of western development is a painful one. Many people suffered. The Luddites and the Ming emperors had a point. People did lose their livelihoods because of the new machines. True enough, in the long run, they found new ones. Yet this did not happen easily or automatically. Nor was it always conducive to human dignity. Looking back on it now, it may seem that it was all for the best. However, it was not this realisation that originally motivated the whole process. It was simply that, at the time, no one cared, or to the extent that they did care they were unable to do anything about it. Entrepreneurs and imperialists could pursue their private initiatives regardless of the damage they might be doing to the landscape or to the lives of the people who were being displaced and uprooted.

That has all changed. Lives are valued more highly. People and governments do now care. They are also better able to do something about it. Even as the west has climbed to its ascendancy, the conditions that facilitated this have been being eroded. Just like its predecessors, western civilisation is liable to become the victim of its own success. Its recent triumph may or may not have been particularly glorious and long-lasting. There can be no grounds for believing in its inevitability. It was not even solely a western achievement. In the words of Isaac Newton (which he stole from elsewhere), the west has stood on the shoulders of giants. There are those in the world today who are preparing to clamber on the west's own shoulders.

The state of play

A snapshot of the world's social ferment at the beginning of the twenty first century reveals the different regions in varying states of ascendancy or decline. To understand the circumstances of a particular country, one only needs to look at its current ensemble. If it is poor and backward, say, this can be explained by its low scale or its non-existent cohesion. The problems, or the successes, are linked to conditions that exist in the here and now. Nevertheless, history may reveal why the country comes to be in that ensemble and not in another one.

Britain dominated the nineteenth century. At one point, it was responsible for a quarter of world industrial output.¹⁶⁹⁷ At another point it ruled over a quarter of the earth's surface. Its influence was out

of all proportion to its size. In the twentieth century, Britain's fortunes declined, not least because of two exhausting world wars. It still remains among the top 10 percent of nations by wealth, and retains considerable influence in a number of key world forums.

Europe, the home continent of western civilisation, has dominated the last five hundred years. During the twentieth century, it slipped into second place behind North America. Yet it is by no means faded. Enthusiasts for the European Union are seeking to create a unified political and economic entity that will be capable of regaining global leadership from the United States.

The American continents lagged behind the rest of the world for a long time. Even their great civilisations were largely based on stone age technology. Being off the beaten track, America was not able to share in the general flow of invention. It thus succumbed relatively easily to the vigorous European intrusion and has now become home to a civilisation that is almost wholly derived from Europe. This is truer of the north than of the south.

The United States succeeded in creating a single continent-sized entity with considerable political decentralisation. Its energetic, entrepreneurial population progressed in the twentieth century to world political, economic and social leadership. After 1945, when it controlled about 50 percent of world industrial production, the United States actively encouraged the dismantling of the European colonial empires.¹⁶⁹⁸ It has become the primary source of innovation. Its brands and culture dominate the planet,¹⁶⁹⁹ though they are by no means welcome everywhere. The US has its internal problems but shows no immediate sign of giving up its overall number one position.

Latin America followed a different path, which has left it relatively poor and lacking influence on the world stage. Here, the indigenous population tended to remain in place, with a European elite being placed over it.¹⁷⁰⁰ Some South American countries were as rich as Europe in the early twentieth century, while central America experienced strong growth between the 1950s and 1970s. However, economic injustice has been a threat to the political order,¹⁷⁰¹ and rapacious and arbitrary government has suppressed initiative and discouraged business activity. Popular revolutions expelled original elites but the strongly hierarchical social structure is proving more difficult to dismantle.

Russia has had similar problems, having long been characterised by autocratic rule. The serfs were only emancipated as late as 1861. Before that, they were the property of individual nobles, who could buy and sell them by the village-load.¹⁷⁰² In the twentieth century, communism replaced czarism but took on many of the same forms.¹⁷⁰³

Russia tried to modernise through bureaucratic state entrepreneurship rather than by private entrepreneurship. Sheer size gave it an important position in the world, but eventually the contradiction between its ambitions and its methods caught up with it. The Soviet empire broke up and state socialism was ended. An impressive explosion of entrepreneurial activity has been hampered by the lack of supporting infrastructure. Russia is finding it hard to change attitudes and institutions overnight, and frequently appears as dangerously unstable. Nevertheless, with its human capital and its natural resources, it retains a huge amount of potential.

Japan has been regarded as the economic success story of the last half of the twentieth century. It began modernising rapidly around the middle of the nineteenth century, especially after the US pressured the country to open up to trade (hitherto it had allowed the visit of only one trading ship per year – the same as the Spanish had allowed in the Philippines). A photograph of downtown Osaka or Tokyo in the 1920s could easily be mistaken for an American or European city of the same period. The Japanese defeat of Russia at the beginning of the twentieth century was a shock to western assumptions of white superiority. Japan went on to construct an empire in east Asia,¹⁷⁰⁴ just as the western powers had been doing. This eventually brought it into conflict with the west and into the second world war. After the war, Japan reconstructed itself through the activity of able entrepreneurs in a favourable environment. There was nothing miraculous about this, and Japan has suffered its fair share of economic setbacks on its generally upward path. As a defeated power it has been inhibited from turning commercial success into international political influence.

China has a particularly venerable history. The remarkable continuity of Chinese civilisation is reflected in the fact that some noble families can trace their ancestry back to the fifth century BC.¹⁷⁰⁵ Such continuity has not necessarily been a blessing. For the last five hundred to a thousand years it has seemed to be lumbering along, living on past glory. In the twentieth century it underwent popular revolution, but this did not free the people and development long remained slow. The fact that China's revolution was based on an imported western ideology must be a check to the idea that China is wholly insular and unreceptive.¹⁷⁰⁶ The country is certainly not stagnant and indeed the last couple of decades have seen breathtaking economic growth and social liberalisation. With a huge, homogenous market encompassing a fifth of the world's population, China must be regarded as having the greatest potential of any nation on earth.

South-east Asia has a history of commercial activity going back several millennia. Trade with this region played an important role in the

development of Europe after the sixteenth century. In the late twentieth century, economic growth was twice or three times faster than that of the west. However, this started from a relatively low level and it is unlikely that it can be sustained. There were also setbacks at the beginning and especially at the end of the 1990s. A number of south-east Asian nations are preparing to join the ranks of the world's richest. Others have significant internal problems, including some still repressive regimes, but movement over the last few decades has tended to be substantial and positive.

India has a long history of civilisation. Its people have been as inventive and entrepreneurial as any other, despite the rigid constraints of the caste system. However, the Mogul emperors destroyed much of India's prosperity by deliberately suppressing original thought and arbitrarily confiscating the wealth of their subjects. The British raj also suppressed indigenous industry and prevented modernisation until independence in 1947. Today most Indians are still very poor and scale is low. Significant progress is being made, albeit erratically, in the direction of economic development, but the political system appears to be moving away from stability.

The Islamic civilisation of the middle east has in the past proved highly innovative and vigorous. The west owes much to the Islamic world, which among other things preserved many works of classical civilisation during the European dark ages. In the middle ages, Islamic peoples conquered large parts of Europe. Only by defeating them in a number of critical battles, did Europe avoid being overrun completely. The tables were subsequently turned and during the nineteenth and early twentieth centuries it was the Europeans who subjugated a number of countries in the middle east. Being relatively impoverished and disadvantaged, with a more glorious past, some Islamic peoples tend to be a focus for considerable discontentment with the present world order. Western hegemonic interests have also been a source of friction as efforts to secure the oil supply have conflicted with the aspirations of local populations.¹⁷⁰⁷

The third world has an ever-changing membership, and is a somewhat imprecise concept, like the west. The term originally meant countries that were not aligned with either the United States or Soviet Union,¹⁷⁰⁸ but it has come to denote nations which stand out for their chronic poverty and turmoil. Almost invariably they are former European colonies. They were established overnight about forty or fifty years ago, within arbitrary borders and with manufactured institutions not rooted in local tradition. Not surprisingly, their subsequent experiences have been far from happy, involving corruption, conflict and famine. The many attempts to improve their lot

have had little or no effect. Although these countries may be doing poorly in relative terms, most have grown wealthier in absolute terms and life expectancies have increased. Through international trade, they receive medicines and machinery in return for ores or agricultural products that would otherwise have remained on the ground or in the trees.

Africa hosts many third world nations. There can be little optimism here for the near future. One or two African countries are even going backward

in absolute terms. Yet the Africans came out of the colonial experience rather better than the natives of America or Australia did.¹⁷⁰⁹ Ethiopia was already a member of the League of Nations when it was colonised by Italy in 1936. Africa is no more inherently inferior than the west is inherently superior. One visitor at the end of the nineteenth century described Africans as a great world race with an immense amount of history *before* them.¹⁷¹⁰

Chapter 22 - Going to the dogs

A sorry situation

Britain's roads are in a sorry state. Local authorities, who are supposed to resurface them every one or two decades, can actually afford to do so less than once a century. Visible defects have nearly doubled in the last ten years, as have claims for damage to vehicles. A journalist who reported these facts noted that the last time Britain's roads fell into decay was during the post-Roman dark age, when commerce and civilisation disappeared.¹⁷¹¹

People are always finding things that remind them of the declining civilisations of the past. Some perceive the return of barbarism in rising crime rates, or in the growing ability of huge corporations to flout the jurisdiction of individual governments. Some see decadence in the erosion of ethical and aesthetic standards. Some note the reversal of civilising trends, such as the abolition of certain restrictions on child labour.¹⁷¹² Some point to changes in the relative prosperity of nations, such as the United States' declining share of world manufacturing output.

The idea that symptoms of decline have become unmistakable goes back a considerable time. Robert Bork, an American law professor, regards the 1960s as a turning point, which introduced new attitudes of disrespect for authority and disdain for excellence.¹⁷¹³ T S Eliot, was already declaring in 1948 that without doubt this is a period of decline, visible in every aspect of life.¹⁷¹⁴ Oswald Spengler was writing about the decline of the west at the beginning of the twentieth century.

Not all regard current developments as regressive. The futurist Alvin Toffler views them in a positive light as showing the way to a new era, which will be characterised by such themes as decentralisation, variety and interdependence.¹⁷¹⁵ On the other hand, some commentators have suggested that global civilisation is not just heading for a temporary retrenchment but may be about to destroy itself completely. It is worrying that searches for extraterrestrial intelligence have not turned up anything. Considering how much progress humans have made in the last ten thousand years, an intelligent race just a million years older ought to be leaving unmistakable signs of its activity in the galaxy. The absence of such signs is somewhat like Sherlock Holmes's dog that did not bark in the night. Either humans have produced one of the very first technological civilisations in the universe – highly unlikely – or there are fundamental limits to technological progress. At best, this may mean permanent stagnation not too far in the future. At worst, it may mean that technological civilisations invariably destroy themselves before they progress much beyond the level humans have already reached.

Either of these scenarios is perhaps possible – permanent bliss or total annihilation. However, it is much more likely that the future will be broadly the same as the past, with many struggles and reversals of fortune against a background of overall progress.

There are intriguing parallels between contemporary societies and historical ones. Africa, for instance, appears to be at the stage of barbarian warlordism characterised by sixth century Britain. Arabia resembles Italy in the early renaissance, a time of machismo, mannered opulence and returning confidence. Japan, with its unequalled vitality in industry and commerce, would be at the stage of England in the industrial revolution. Its politicians even inherit parliamentary seats like the old English rotten boroughs.¹⁷¹⁶

For Euro-American civilisation, the most familiar reference point is the fate of the western Roman empire. In Spengler's view, the west was entering the age of caesarism, with an emphasis on commerce and empire. This would imply that it still has some four or five centuries ahead of it. Other historians agree. Carroll Quigley identified seven stages of civilisation, believing that the west still had a number of stages to go. He predicted system collapse around AD 2500.¹⁷¹⁷ Alfredo Valladão has argued that the United States most resembles Rome at the time of its victory over Carthage in the first century BC. It retains sufficient reserves of military, economic and cultural power to see it through another five hundred years.¹⁷¹⁸

James Davidson and William Rees-Mogg identify an overall pattern in western history, in which the points of inflection occur every 500 years. Firstly, 500 years of expansion to the birth of Christ, then 500 years of decline to the fall of Rome, then 500 years of barbarism, then 500 years of revitalisation during the middle ages (AD 1000-1500), then, from 1500, the modern era of western triumph. This implies a thousand year up cycle followed by a thousand year down cycle. On this basis, the 500 years from 2000 will be the first stage of decline, with the final collapse and dark age happening after that.¹⁷¹⁹

However, Samuel Huntington has argued lately that western civilisation seems already to show the symptoms of terminal decay identified by Quigley. Another writer identifies the American intervention in the second world war with Augustus's restoration of order around the beginning of the Christian era, the period from 1947 with the end of the third century, and the twenty first century with the dark age of AD 400-650. This begins to cast doubt on the whole scheme as it implies the phases do not have even approximately fixed durations. A writer during the 1970s compared Britain to late Rome, citing as evidence price controls and the union closed shop.¹⁷²⁰ Given the abolition of these institutions

during the 1980s, the cycle would seem to be moving in reverse. The danger is that Rome becomes just a touchstone, a rich pattern in which commentators see whatever they want to see.

The present book has rejected an analysis based on manifest and regular historical patterns. When history repeats itself, it always does so in a different way. It certainly does not follow a smooth, regular up and down motion. It is a ferment, with fluctuations on all time-scales. In order to analyse what lies ahead, contemporary processes must be interpreted in terms of underlying principles and not directly compared with the course taken by any previous society.

Are things really worse?

Though many people are prepared to believe in decline, the question is, are things really any worse today? Intellectuals have been predicting the west's collapse for over a hundred and fifty years, a period during which its power, prosperity and cultural influence have gone from strength to strength.¹⁷²¹ Declinism could be just a form of nostalgia. Even hardships are remembered fondly with the passage of time. In the 1970s, President Carter complained of declining confidence in the American state,¹⁷²² yet the decline does not seem so obvious when set against the Prohibition era. Recently, Robert Bork has complained of high crime and low punishment as the worst in America's history,¹⁷²³ yet law and order seem pretty robust compared to the conditions of the wild west.

In virtually every era it is possible to find people complaining of deteriorating morals and economic difficulties. Sometimes the Cassandras have been proved correct, but that does not mean today's Cassandras must be correct. No doubt the world has serious problems but it may be premature to say that disaster lies ahead. People can learn and adapt. They can tackle problems in order to avert disaster. The trends that seem so deplorable today may soon be changing for the better. Crime has declined since Bork first issued his lament. In the 1960s, Dennis Gabor, a Nobel-prize-winning physicist, echoed the concerns of his day when he articulated the 'trilemma' facing the human species – overpopulation, excess leisure, and the nuclear bomb.¹⁷²⁴ None of these seem so worrisome today, and they have been replaced with new concerns such as global warming and ozone depletion.

At the end of the nineteenth century, Europeans might have been justifiably concerned with the sustainability of their civilisation. New mechanical, electrical and electronic technologies were changing patterns of living on a large scale. Traditional elites were faced with demands to enfranchise working men and women. Popular revolt had threatened almost every country. The new world was a growing commercial and political rival. Furthermore, the next century did indeed prove dark and destructive. It saw the depression

era, the October revolution, the two most destructive wars of all time, and the invention of the nuclear bomb. Democracy faltered and totalitarianism spread. Yet Europe came through all this intact, still a major force in the world, and a relative haven of peace, culture and economic security.¹⁷²⁵

As late as 1957, the future of the west and its way of life looked quite bleak. Half the world had fallen under the control of communism. Russia was turning in 7 percent growth rates, double what the west could offer. In October of that year, the Russians inaugurated the space age with the launch of Sputnik. The American response in December rose less than a metre from the launch pad before falling back and earning the sobriquet 'Phutnik' from the world's media.¹⁷²⁶ Yet in the end it was the whole communist challenge to the west which turned out to be the damp squib, falling back on to the launching pad in ignominy.

Viewed overall, the story of the world over the past fifty or a hundred years could be regarded as a happy one. Francis Fukuyama charts the steady rise in the number of countries that can be classed as liberal democracies – the trend that he identified as signalling the end of history.¹⁷²⁷ The mid-1970s brought the end of dictatorships in southern Europe, while the 1989 liberation of eastern Europe was accompanied by parallel movements in Latin America, South Africa and the Philippines. Economic growth since the end of the second world war has been proceeding at two or three times the rate of the original industrial revolution. Lifestyles and life expectancy have improved for almost all the world's peoples, even in the poorest countries.¹⁷²⁸ Fukuyama even suggests that divorce, crime and similar contemporary problems are merely an adjustment to the dis cohesive effects of growing scale. They may eventually be resolved by cultural adaptations, just as similar problems were resolved in the nineteenth century.¹⁷²⁹

One author has described gloomy assessments of the future as myths for the rich, which give them the satisfaction of believing that this is as good as it will ever get.¹⁷³⁰ Some critics point out that the doomsayers have a myopic view of history. They put the worst possible spin on often rather flawed statistics while steadfastly ignoring the very tangible improvements in people's real living conditions.

Britain is a good example. The story of its decline is a familiar one, told in many books and articles. In 1890, Britain led the world in terms of GNP per person. By 1990, it had slipped to number 15, almost 10 percent of the way down the table. Some measures even put Britain at number 20 in terms of living standards. At one time, Britain was called the workshop of the world. Now it imports more manufactured goods than it exports.¹⁷³¹ Britain's class-based culture, it is said, is hostile to

business, while trade unions have harmed productivity and imposed a stranglehold on enterprise. The country has also failed to invest in human capital and fundamental research. Britain has twenty times as many accountants as Japan, but only one eighth the number of engineers.¹⁷³²

The Thatcher government of the 1980s advertised itself as setting out to change this miserable situation – and as succeeding in doing so. However, the decade began and ended with a severe recession, so that, despite a boom in the meantime, Britain's performance over the ten years 1981-91 was no better than for 1971-81. Britain continued to lose comparative advantage right through the decade and, in a recent poll, fewer than 10 percent of people thought that the 1980s had seen anything like an economic miracle. By the end of the 1990s, the country was in boom again, yet Britain's standard of living still remains below those of its major European partners. Youth unemployment is a severe problem, while welfare dependency seems to ratchet up, as does crime.

As already mentioned, this story is familiar and often repeated. Yet some analysts have taken issue with each one of these points and in general with the whole declinist interpretation of Britain's recent history. One historian states that this interpretation is based on biased comparisons with mythical countries.¹⁷³³ The truth is that Britain's economy and standard of living have been growing almost continuously and at an accelerating rate. The country may have fallen back in relative terms, but in absolute terms people have found life getting better and ever more quickly.¹⁷³⁴ Relative decline is inevitable as other countries catch up, and need not be interpreted in a negative sense. In any case, statistics of GNP growth are not necessarily a good measure of subjective well-being. They measure, say, sales of computers but not the dramatic improvements in computer speed and flexibility that are important to people's quality of life.

Britain is still a very important country. Some of its manufacturing businesses are among the largest in the world. London continues to be one of the world's three great financial centres. In 1990, Heathrow was the planet's busiest airport, showing that Britain occupies a central place astride the routes of tourists and businesspeople.¹⁷³⁵ Britain still maintains military bases around the world. It was an important junior partner in the Gulf war. It heads the Commonwealth. It is a permanent member of the UN Security Council. It is also a nuclear power.¹⁷³⁶ By any standards, Britain is a force to be reckoned with.

The much-lamented decline of manufacturing industry is really an irrelevance.¹⁷³⁷ Britain's trade deficit in manufactures is offset by a huge surplus in services and invisible exports from a strong portfolio of overseas investments. It is only to the benefit of British consumers that the country can

exchange with those places where goods are made more cheaply.

The supposed explanations of British underperformance also wither when exposed to critical examination. British science has been strong throughout the twentieth century¹⁷³⁸ and, in any case, the equation between investment in science, R&D and economic growth is based on dubious reasoning and is not consistent with the facts.¹⁷³⁹ Britain does not have an anti-business culture but, by world standards, has always presented a very favourable climate for commercial activity. Nor have Britain's unions been particularly detrimental. Even during the 1970s, the nadir of British industrial relations, strike activity was scarcely more than in Japan.¹⁷⁴⁰ Furthermore, the resulting improvements in pay and conditions may have increased productivity and helped the economy. The schizophrenia in this whole area is shown by the existence of concerns about excessive union wage demands as causing economic decline in conjunction with concerns about low wage levels as a symptom of that decline.

Overall, the evidence for Britain's decline seems at best equivocal, perhaps even non-existent. A similar demolition job could no doubt be performed for other negative interpretations of the experiences of both developed and undeveloped countries.

However, this discussion has been framed in terms of surface phenomena and short term trends. In such terms, an incipient dark age would not be expected to be apparent. This is because, in decadent societies, things can seem to be getting better on every front as the moment of collapse approaches. It is precisely because the fundamental problems are not obvious that they pose such a threat. The reasoning of this book is not based on a few seasons of adverse economic statistics or crime figures but on the deep logic underlying contemporary social forms. The arguments are not to do with the fact that some indicator is rising or falling, but with the presence of fundamental contradictions affecting contemporary institutions. These are contradictions that cannot be resolved within existing national and international frameworks. They cannot continue indefinitely yet they have no consistent solution within existing constraints. People can see broadly where they would like to be, but they cannot get there from here.

The sleep of nations

People need to sleep and to dream. It is how their minds reconcile each day's experiences into some sort of order. Dark ages are like the sleep of nations, which become exhausted by their ascendancy and must reconcile their experiences through a period of confusion and obscurity. They were compared earlier with a forest fire. Just as

forest fires refresh the forest, clearing out debris and allowing new life to break through, so dark ages renew the historical process, clearing away outmoded institutions and giving the opportunity for other cultures and fresh ideas to make headway.

Many of today's problems may be resolved one way or another. Yet it is impossible to challenge the deep logic whereby dark ages are an inherent part of the historical process. Any particular forest fire can be prevented, but forest fires as such can never be entirely eliminated. In the long run, it is inevitable that a *severe, global* dark age will occur. History is in ferment and the longer it is observed, the more extreme the excursions that will take place.

It is true that people can identify problems and resolve them. However, it is also true that they fall for the same mistakes. In east Asia, this is known as 'typhoon mentality'.¹⁷⁴¹ People blithely re-build their villages after a typhoon has passed, when blue skies have returned, apparently indifferent to the possibility of typhoons in future. Yet what else can they do? In the face of the inevitable dark age, people similarly carry on in their short-sighted way. They cannot optimise for the long term, because the future is too complex and too uncertain. They adapt to the here and now, but in that way they store up long term contradictions and trouble for the future.

Caring for the premature babies born to teenage mothers in American inner cities probably costs more than would the education and job opportunities that might stop them falling pregnant in the first place.¹⁷⁴² People know this. They can see that the present situation is crazy. Yet what can they do about it? It is easy to say that job opportunities are desirable but almost impossible to conjure them into existence. If governments had any idea how this could be achieved, they would have done so long ago. However, they do not, and so society goes on responding to the immediate problem of sickly babies. Yet this short term response is not a long term stable solution and the inherent contradiction only seems to grow.

It is inconceivable that the population of the United States, less than 5 percent of the world total, can continue to consume a third of the planet's resources.¹⁷⁴³ Yet to redirect wealth in favour of other regions will mean somehow breaking them out of a vicious circle of poverty and disadvantage. This means a major restructuring of world political, economic and social relations. Such restructuring has never been achieved smoothly and peacefully.¹⁷⁴⁴ The winners will be compelled to force the issue. The losers will resist them at every turn.

The economist Herman Kahn, writing in the mid-1970s, took an optimistic view of historical change. He suggested that the present is a half-way stage en route to the situation in which every

country will be wealthy and successful. If Kahn were right, there would be no forest fire. The contradictions that have materialised over the last 200 years will dematerialise again over the next 200 years as the poorer countries catch up.¹⁷⁴⁵ However, the poorer countries are not catching up. They are slipping further behind.¹⁷⁴⁶ The rich world is increasingly indifferent to the plight of its southern neighbours. It will not and, with the best will in the world, cannot resolve these problems. Injustice meets inertia. The result is impasse. This injustice, and the sense of injustice, is like brushwood accumulating in the forest's understory, ready to fuel a conflagration when some spark sets it alight.

One should not underestimate the susceptibility of even seemingly secure and stable societies to an abrupt system collapse. The veneer of civilisation is very thin, as many have observed.¹⁷⁴⁷ The speed with which sophisticated places like Beirut and Bosnia-Herzegovina were transformed from holiday destination to bloody war zone should make that clear. People's commitment to the structures and practices of civilised society is not as great as one might assume.

Even in the richest nations, decades of economic growth have not been translated into subjective well-being.¹⁷⁴⁸ On the contrary, suicide rates seem to have increased as standards of living have improved. In the American south, the suicide rate is actually lower among blacks than among whites, even though the latter enjoy superior status and material comfort.¹⁷⁴⁹ A lower incidence of suicide does not imply the intrinsic desirability of an inferior way of life. Suicide was also virtually non-existent in the Nazi concentration camps and no-one would suggest that this signifies the satisfaction and contentment of the inmates. When life itself is a struggle, people are inclined to hold on to it. However, the high incidence of suicide in wealthy societies shows that living in them has costs as well as benefits. The benefits may not have to decline very far for the whole thing to fall apart under the weight of the costs. Furthermore, the costs and benefits are not shared out equally among the members of a society. The participation of a large number is only assured because of the promise and possibility that life will be better in the future. Stagnation, let alone actual regression, can threaten the social fabric.

An important indicator of the coming dark age is the fact that today's complex societies are failing to deliver benefits, or the promise of future benefits. Although the western countries have grown several times wealthier over the last fifty years, they are still profoundly troubled. Dissatisfaction has, if anything, grown. Despite their great successes, there are many fronts on which these societies are simply not working. One can certainly argue that things have been as bad or

worse in the past. People once stole pocket watches,¹⁷⁵⁰ where they now steal car radios. In the eighteenth century, smuggling was rampant in Britain, while the political process was corrupt and elections sometimes degenerated into mob violence.¹⁷⁵¹ Today's black economy or government sleaze might therefore seem relatively mild. The difference, however, is that conditions were then improving, but now they are getting worse.¹⁷⁵²

Some people, or some compartments of life, are falling through the cracks. According to the United Nations, Britain had the highest increase in poverty of any country during the 1980s.¹⁷⁵³ The United States has nearly 1 percent of its male population in jail, which is the highest proportion in the world.¹⁷⁵⁴ Yet commentators still complain that the chances of being caught for some crimes are vanishingly low. The US may be powerful and wealthy despite this high burden of criminality, but something, somewhere is deeply wrong. Crucially, problems like youth unemployment and drug-related crime are not legacies of the past that people have simply not yet got round to solving. They are new problems emerging from the conditions of the present day.

The same predicament affects the world as a whole. After the first world war, European powers agreed in the League of Nations that they were holding African colonies 'in trust' until they could 'stand on their own feet in the arduous conditions of the modern world'.¹⁷⁵⁵ Some of these diplomats may have believed it. Yet the west has profoundly failed in its self-imposed mission of helping backward regions to develop. Though humanity has never been more capable, the proportion of its members living in misery has not declined in the slightest over the last hundred years. It may even have grown. It is becoming clear that this is no trivial difficulty or temporary crisis. Those who expect the problems to be solved painlessly are increasingly rare.¹⁷⁵⁶

Contradictions

The most ironic contradictions are those in which, by making some things better, people make other things worse. Resolving one set of problems only allows another set to develop. One example of this is provided by the welfare systems of the developed world. By mitigating the effects of social dysfunction, these systems have encouraged more of it. In the poorest African countries, there is no unemployment benefit and no unemployment. If people genuinely cannot earn their keep, they will die.¹⁷⁵⁷ By alleviating the condition of unemployment, western countries make unemployment possible. They do not want the unemployed to starve on the streets. Yet perpetuating unemployment is not a wholly satisfactory outcome either. This is a contradiction.

A related contradiction is that tolerant western societies grant dignity and independence to those who reject their mainstream values. People no longer have to fit in to get on. It has become increasingly possible to live in society without being of it, i.e. to abuse its hospitality systematically. In this way, developed societies help nurture anti-social behaviour that threatens to undermine them.

The elaborate economies of the contemporary world bring enormous benefit but they also encompass the possibility of catastrophe. The United States injects huge amounts of economic organisation into the world, through companies like Nike and Microsoft. Yet it also lies at the heart of a very sticky financial tangle that severely threatens the stability of the global economy. It has loaned large sums of money to countries that are unlikely to pay it back. At the same time, it has acquired a huge public and international debt of its own. Hence, the US is now one of the world's biggest debtors while having gaping holes in its own loan portfolio.¹⁷⁵⁸ (Japan is in much the same situation.)

The United States has become a kind of hair trigger for global economic meltdown. Everything will be fine so long as confidence is maintained. Yet if that confidence falters, nemesis will be swift to arrive. Of course, runs on currency, including the dollar, happen all the time. However, the situation is evolving towards ever greater criticality. Indebtedness increases inexorably. Past crises have been dealt with by more loans. The US is increasingly exposed to the world, and the world is increasingly exposed to the US.

A second major type of contradiction involves fundamental clashes of interest between different societies or different groups within society. For instance, there is a contradiction concerning the existence of the Republic of China, i.e. Taiwan, across the water from the People's Republic of China (PRC). The Kuomintang, China's first republican government, set up the Taiwanese Republic of China after Mao's communists expelled them from the mainland. They considered themselves to be the legitimate government of China, and until the 1970s were recognised as such by the western world. The PRC meanwhile considers that it has sovereignty over Taiwan, which is not an independent country but merely temporarily in the hands of a rebel government. These incompatible viewpoints have produced a half-century stand-off. In recent years, relations between Taiwan and mainland China have improved enormously. If people were sensible, one might think, the Taiwanese would bow to the inevitable and accept absorption into the PRC – or perhaps the PRC would bow to the inevitable and accept Taiwan's independence. This rather illustrates the problem.

Similar contradictions stem from the growing prosperity of east Asian nations, especially Japan and China. Japan could be just a decade away from being the world's largest economy. It is also acquiring superpower capabilities, with a nuclear industry and its own space programme.¹⁷⁵⁹ The country has had a difficult time of late, having experienced a severe recession. However, this is by no means a sign that the Japanese challenge can be written off. On the contrary it tends to fit the pattern of a country that is on its way up in the world. The period of a few decades before it reaches the top is typically a rather bumpy ride. It should be recalled that the United States experienced the Wall Street crash in 1929, and during the depression era suffered more than any other country.

This picture is complicated by the fact that China's trajectory puts it on a collision course with both the west and Japan. Although its recent remarkable growth must inevitably slow down and experience setbacks, China's medium-term potential is staggering. Japanese commentators have predicted that China will overtake their country by the middle of the twenty first century. With a distant rumble, China is coming from a long way away and western people, with their static view of the world, do not know what is going to hit them.

It would be pleasant to think that three superpowers, like China, Japan and the United States, could co-exist peacefully in the world. However, the lessons of political integration indicate otherwise. If there is one, overarching political authority, the result is peace and order. If there is a multiplicity of competing authorities, the result is disorder and conflict. One speaks of the *pax Romana*, *pax Britannica* or *pax Americana* – when Rome, Britain or America dominated the world. No one ever speaks of the *pax anarchica*, when there was no such dominant power.

It is far from clear that the United States is ready to cede the number one slot to either Japan or China. Such a shift of hegemony would be more far-reaching than those of the last few centuries, which have all occurred within the western bloc. Japan still has uneasy relations with the west, to which it remains an outsider. China is even more mistrusted, for China's priorities and world-view are certainly not the western priorities and world-view. China happily provides nuclear weapons technology to what the west considers to be rogue countries – i.e. ones whose values and aspirations so offend the west that it is resolved to keep them in their place. Along with India, it is a major producer and exporter of CFCs, which are supposedly banned by the international community. The Chinese authorities also find it difficult to take seriously the problem of software piracy. In this respect, China resembles the west in early modern

times, when international industrial espionage was a commonplace. In the Elizabethan era, the British government condoned, even encouraged, real piracy against Spanish ships.

It will be a severe shock for the United States and its allies to find themselves in an Asian-dominated world. Such a transition will scarcely occur without a severe struggle and confrontation. Yet it might be even worse if China's or Japan's meteoric rise were to terminate short of the summit. Frustrated ambition is a major stimulus of wars and revolutions. Western countries should derive no satisfaction from east Asia's economic woes. If these countries are thwarted in the career that they envisage for themselves, the threat to world peace would have to be severe.

Dangers arise especially when there are contradictions between the view that countries have of themselves and the view that others have of them. Russia's self-image is still that of a superpower, but to the west it looks more like another problem country, backward, corrupt and out of control. Russia still expects to dominate its former empire and it expects the west to approve. Yet those countries and the rest of the world see little reason to defer to Russia any more. Such misunderstandings are the precursors to conflict. The catalogue of coups, rebellions and ethnic conflicts in the post-soviet space is already long and unsavoury.¹⁷⁶⁰ No one should assume that these will be cleared up soon, or that they are already as serious as things are going to get.

A third form of contradiction involves the formation of vicious circles that it will take some considerable shock to disrupt. For instance, the history of black Americans is not a happy one. Yet despite being high on the agenda of reform, and despite the existence of successful black role models, the problem seems to be winding itself into an ever tighter cycle of deprivation and alienation. In some areas, life expectancy for black men has fallen behind that of Bangladesh. One in four black men between the ages of 20 and 29 is now either in prison, on probation or on parole. This is greater than the proportion attending college.¹⁷⁶¹ The children of these convicts seem to stand an even smaller chance in the struggle for respectability and acceptance.

Russia again represents another example. Since the demise of communism, its people have shown surprising entrepreneurial flair. Yet as a complex society, it is teetering on the brink. Its currency is weak. Workers go unpaid. The state has huge debts but finds it very difficult to raise taxes. The mafia is growing rich, while ordinary people struggle to feed and clothe their families. It is becoming increasingly difficult to think of these problems as mere teething troubles. Instead of things getting better more slowly than one might have hoped, they are actually getting worse. The

government that should be tackling these hard problems is plagued by corruption. Ordinary Russians are giving up faith in their leaders. They have less and less to lose and are ready to embrace extreme solutions. Many Russians believe or half-believe conspiracy theories that the west is deliberately undermining the country and may attack within five years.¹⁷⁶²

Here then is a vicious circle. An impotent government fails to deliver stability. It therefore loses the moral and economic support of its citizenry. Yet that simultaneously makes the government more impotent and stability harder to achieve. It knocks the government backward while making the target harder to reach. The circle tightens. The election of the capable and sober Vladimir Putin seemingly put a check to this and was a surprisingly optimistic development. Perhaps in a few years the circle will unwind entirely, leading to the restoration of political order and economic prosperity. Yet that would seem to be against the odds. This desperate situation is unfolding in the country with the world's second largest nuclear arsenal, and the western countries have increasingly little to offer other than hopeful rhetoric.

Such a vicious circle has also ensnared certain third world countries that began poor and, in relative terms at least, are getting poorer. It used to be argued, by social anthropologists and other third world apologists, that the seeming backwardness of such countries was simply a matter of a different lifestyle and different priorities. Supposedly, their cultures maximised inter-personal experience and spiritual well-being, as opposed to western cultures, which maximised material prosperity but engendered social alienation. As these countries have slowly self-destructed, and as western capitalism has come back into fashion, growing numbers of people have recognised that this is so much patronising twaddle. Economic behaviour and aspiration in the third world are no different from those anywhere else.¹⁷⁶³ The present abject poverty is not a stable or acceptable situation. These countries constitute a reservoir of resentment, anger and frustration. The more that hope is snuffed out for them, and the more they are marginalised, the more dangerous they become. The contradiction lies in the fact that, with the present world order, it is very difficult to see how hope can be restored.

Some less developed countries, such as India or Thailand, have huge problems but also present a number of bright spots. It is possible to believe that they may eventually resolve their difficulties. After all, an audit of Britain in the middle of the industrial revolution would have revealed a similarly sorry story of poverty, pollution and corruption as the underside of military and commercial glory. However, when one turns to

sub-Saharan Africa, it is a different matter. A few decades ago many of the countries of this region were better off than places like South Korea. Yet now the continent looks increasingly like a lost cause. If a dark age is ahead, the lights here have already gone out. One journalist has questioned whether many African countries even satisfy the basic criteria to be recognised as a state.¹⁷⁶⁴

This desperate situation shows little sign of abating. Much of sub-Saharan Africa continues to go backwards on every front. Health care is deteriorating. In fifteen countries, comprising half the regional population, life expectancy has been going down. Food production per head has decreased by a fifth over the last twenty years – a natural consequence of the fighting.¹⁷⁶⁵ This is the only part of the world where literacy has not been increasing. If Africa cannot save itself, it is not going to be saved from outside. For decades, African governments have been subordinating themselves to the latter-day colonialism of the IMF and the World Bank. One can argue over the reasons, but the bare fact is that those institutions have resoundingly failed in their mission. In recent years, the western world looks to be walking away from the mess. With the end of the cold war, the continent has lost much strategic significance. Aid missions are being closed down.¹⁷⁶⁶ Money and interest have dried up.

It is a question of ensembles. Critical features of Africa's situation are simply not compatible with the high-integration, high-organisation arrangements achieved by western societies. Education, transport, and commercial networks are all lacking. Rapid de-colonisation left Africa in an artificial condition. Its subsequent history has been that of relapsing into a more natural state. The fact that it moved in the direction of lower integration, organisation and cohesion suggests that the global situation was against it. Africa's circumstances are unlikely to improve without corresponding changes in the world outside. The contradiction is that a major injustice is being inflicted on a sizeable section of the world's population and yet nothing apparently can be done to correct it. This is the kind of impasse that it takes a dark age to resolve.

Tide of history

Many people are well aware of all these contradictions. They know that tolerance, which is good, brings anti-social behaviour, which is bad. They know that welfare provision, which is good, brings welfare dependency, which is bad. They seek the holy grail, which is the middle way, but they do not seem able to find it. They deplore the poverty of sub-Saharan Africa. Yet they cannot resolve it because it is intricately bound up with many other features of the international scene on which their own livelihoods depend.

The problems lie beyond today's coping mechanisms. They cannot be solved by changes in

marginal tax rates, employment training schemes, or the other measures available to governments. When the latter have committed themselves to cutting taxes, despoiling welfare systems and improving health service provision, it is only to find that taxes, welfare spending and negative perceptions of the health service go right on growing. The expansion of the welfare state in developed countries has deep roots. It goes back centuries and has persisted through governments and regimes of every hue. It is an international phenomenon, like the renaissance or reformation, a grand theme in human affairs, which individual countries are quite unable to change or deflect.

Governments are impotent against the underlying tide of history. The evolving ensemble has an autonomous logic of its own, one that defies intervention. When the Thatcher government tried to control the economy by controlling the supply of money, it failed. Banks found ways around the restrictions.¹⁷⁶⁷ As an institution, money is bigger even than the government.¹⁷⁶⁸ Similarly, when Mikhail Gorbachev introduced the restructuring and openness that eventually precipitated the break up of the Soviet Union, he was really only swimming with the tide of liberalisation that had been running across the world for some time. Gorbachev never intended things to turn out the way they did, but these events had a momentum of their own.¹⁷⁶⁹ If rulers ever seem to be in charge, it is largely because they are creatures of the moment like everyone else, and their beliefs and aspirations tend to reflect what is happening anyway.

Today's contradictions in the world situation indicate which way the tide of history is running. They show how one ensemble must turn into another. Along the way, no doubt, all sorts of twists and turns will take place. Any single contradiction might well be resolved, and individually they can move in an optimistic direction. Young American blacks, for example, seem to be rejecting the dissolute drug culture of their fathers and older brothers. The crime rate is falling and the black population has higher aspirations along with the

confidence to fulfil them. Over the last decade, America as a whole has recovered much of its economic and geopolitical strength. Yet this is what is expected of the ferment, with its reversals of reversals. Other ascendant societies have experienced similar resurgences, only for them to hasten towards the end.¹⁷⁷⁰

The existence of contradictions makes it clear what the final outcome must be. One can state with confidence that, say, the European Union will break up, or that peace will not be achieved in Northern Ireland. This is irrespective of the many initiatives that come and go. One can also state that a dark age is coming, whatever the temporary booms and peace treaties that fleetingly gainsay such a conclusion.

If one were talking about one or two contradictions, one might perhaps be able to laugh them off. In seeing no resolution, one might be accused of a failure of vision. However, the world faces numerous contradictions. There are contradictions within contradictions. They affect rich countries, poor countries, and countries in between. They threaten political integration, economic organisation and social cohesion. They interlock in manifold ways. When the contradictions facing a civilisation are so many, so diverse, and so universal, a dark age is indicated. This is not a matter of rational choice. The dark age comes inexorably. Yet while it is the consequence of all that is wrong with the world, it is also the remedy. When everything has finally been lost, all obstacles will also disappear.

* * *

The contradictions affecting contemporary institutions are threatening to political integration, economic organisation and social cohesion. They also apply both internally, within countries, and to the international system as a whole. The next three chapters will describe the problems contributing to *internal* disintegration, disorganisation and discohesion. The three chapters after that will describe the problems contributing to *international* disintegration, disorganisation and discohesion.

Chapter 23 - Internal disintegration

Increasing state control

Over the last several centuries, the state's impact on ordinary people has ratcheted perennially upwards. Besides its traditional interests in war and taxation, the state now intervenes in family life, in education, in health services, in housing and in welfare support. It demands that children receive schooling up to a certain age, and it may remove children that are judged as being improperly raised. In contacting the state at every turn of their lives, people come under its surveillance and are susceptible to its control. Increasing numbers of activities are subject to official disapproval and constraint, including hunting, shooting, smoking, and driving. These interventions may well be benign in intent, but they curtail individual liberty. The state, it seems, has become more coercive.

Growing coercion is reflected in the increased size and enhanced powers of the police force. In the last two decades, British police have acquired substantial new rights and weapons. They are also more tightly controlled from the centre.¹⁷⁷¹ These trends are echoed throughout the developed world. Between 1985 and 1995, spending on the police increased significantly in every major European country, and the United States remains ahead of them all. Prison populations have grown markedly.¹⁷⁷² In Britain, whose detention rate is one of the highest in Europe, there are nearly three times as many prisoners per head of population as there were just after the second world war. Sentences have got longer and custody has become a more likely option.¹⁷⁷³

A more coercive and controlling state ought to imply a higher level of integration. It would suggest that movement is *away* from the dark age condition not towards it. However, these various developments are not having the desired effect. Governments do not seem to be imposing their authority more effectively or achieving a greater degree of civil order. On the contrary, crime has increased and clear-up rates have tended to fall.¹⁷⁷⁴ The Police Federation, representing officers up to inspector level, has spoken of 'anarchy' on Britain's streets at night¹⁷⁷⁵ and of plunging morale within the service.¹⁷⁷⁶ One senior police officer has said that where she used to patrol alone on foot at night she would no longer send even a male officer on his own. Both men and women constables are more likely to be attacked than in the past.¹⁷⁷⁷ Populations are becoming harder to control. The state's powers may be growing but they are not growing fast enough.

The United States, the world's most powerful country, is having great difficulty in maintaining internal integration. In the early 1990s, the murder rate in some American cities was double the figure in the most lawless parts of the old wild west. Underprivileged males in Washington DC, the very

centre of American political authority, stood a 5-10 percent chance of being murdered by the age of 35.¹⁷⁷⁸ In Britain, there are some forty unofficial no-go areas.¹⁷⁷⁹ A journalist trying to visit Manchester's Moss Side could only get a taxi driver to take him there when it was agreed they would not stop. Even then, they just visited the outskirts. As the taxi sped through, a thrown bottle smashed on the road behind.¹⁷⁸⁰ A television crew recently visiting part of Liverpool found it expedient to seek the protection not of the police but of a local gang-leader.

The situation needs to be seen in perspective. Non-state societies, such as the foragers of the Kalahari, or tribes in New Guinea, have homicide rates between three and fifty times greater than that of the United States.¹⁷⁸¹ However, they also have no political authority at all and are highly disintegrated. The point is that developed societies appear to be returning to such a condition. After centuries during which integration has increased, the trend is now in reverse.

This could all be just a short term setback in an overall positive movement. Crime rates have undoubtedly risen over the last fifty years, but they might not seem so out of the ordinary compared to those of a century or two ago. Victorian Britain had its footpads and pickpockets. Furthermore, crime has actually been falling again recently. The reversal is particularly dramatic in the United States. The murder rate in large cities is less than half of its 1991 peak, while rape, robbery and assault have also declined sharply. Former ganglands are now clean and prosperous-looking.¹⁷⁸²

The improvements in law and order can be explained partly in terms of demographic conditions and the economic boom of the 1990s. In Britain at least, the downturn is not expected to last. In the United States, a significant factor appears to be a new approach to policing involving a strong presence on the streets and a determination not to turn a blind eye even to the slightest misbehaviour. The success of this 'zero tolerance' initiative illustrates the resilience of human societies, and cautions against expectations of a monotonic decline. Nevertheless, public and political backing for this approach is disappearing as liberal and minority leaders persistently attack the police for racism, violence and abuse of civil rights.¹⁷⁸³ It seems that the underlying theme remains that of disintegration and the prevailing anti-authoritarian logic is reasserting itself.

Crime statistics are notoriously ambiguous. Yet the long term trend is clear. In Victorian times, commentators were noting the seeming decline of delinquency. Since 1900, the perception has been unequivocally of a rise. Not only are there more crimes but they are more serious. Before the first

world war, people were being imprisoned for things like using obscene language and riding a bicycle without lights. Now these are considered trivial offences.¹⁷⁸⁴

The growing disorder can be related to a number of strong tides in human affairs that show no obvious prospect of being reversed. It is far more likely that the recent improvements will prove to be a blip in the statistics than that the century-long decline will prove to be such a blip. Most crimes are committed by young men. Since the populations of developed countries have been getting older over the last hundred years, one would expect crime to have tended to fall. The fact that it increased points to some fundamental problems.

Disintegration is not a local difficulty affecting a few advanced but somewhat decadent nations. There is a rising swell of disorder throughout the world. In many African countries, government control in any meaningful form has already disappeared within the last fifteen or twenty years. Russia, with its uneasy borders, extremist political groups, and the plague of a severe crime wave, is going the same way. Governments everywhere are experiencing powerful disintegrative forces. If anything, the developed nations are lagging behind this world-wide trend.

Attenuation of intent

Political integration implies the imposition of a single will or intent. However, the sheer complexity of today's societies means that the impact of any individual will is severely attenuated. During the 1980s, many European countries, from the Iberian peninsula to Scandinavia, began devolving power to new regional assemblies.¹⁷⁸⁵ Britain followed suit in the 1990s, granting parliaments to Wales and Scotland. There are also calls for regional assemblies in the west midlands and the north-east.¹⁷⁸⁶ This increasingly elaborate state apparatus decreases the effective authority of those nominally in command.

When someone commented to Herbert Asquith that it must be nice to have so much power as prime minister, he replied 'Power? You think you're going to get it, but you never do'.¹⁷⁸⁷ The memoirs of several politicians reveal their frustration at entering office with high hopes of making an impact and leaving it with so little achieved.¹⁷⁸⁸ One insider has written about the feeling of impotence even in the prime minister's office. Directives may be issued but, as they propagate down through the hierarchy, they are modified by vested interests at each level. By the time that they reach the people who are supposed to do something about them, much of their original force has been dissipated.

Government ministers are in a surprisingly weak position. They are always being called on to attend meetings and receive visits. Much of their

time is taken up with reacting to stories breaking in the media. They are largely overloaded with information and unable to take charge of what is going on around them. Former foreign secretary Douglas Hurd has described how ministers must work late into the evening and over the weekend, dealing with boxes of official papers.¹⁷⁸⁹ Work is actually *given to* the minister, and his or her agenda is set by the permanent officials. Not surprisingly, one study found that as many as one in six MPs exhibit quite poor psychological health, and 80 percent are pessimistic about the amount of control they have over their own lives, let alone the lives of those they are supposed to govern.

Cabinet meetings, which are supposed to be the supreme locus of executive power, serve largely as a rubber stamp for decisions taken elsewhere. The issues involved are generally too complex to be discussed by such busy people at more than a superficial level. Governments that are members of the European Union experience this to an exaggerated degree. Each country's ministers are supposed to take decisions in the context of multilateral meetings, but they have no real hope of keeping up with the complex issues involved. The true decision-making authority lies within the bureaucracy that advises them.¹⁷⁹⁰

Ministers tend to have much less experience of working within the system than their officials do, and they are inherently insecure in their jobs. This places them at a major disadvantage in trying to impose their own vision on their departments. A veteran of the Kennedy administration described how, with a dozen others, he was sent to take control of a department of 75,000 employees – and never succeeded. He observed that the department had 'a heart and lungs of its own'.¹⁷⁹¹ Richard Nixon once recalled his efforts to abolish a branch of the government, the Tea Tasting Board, which consumed hundreds of thousands of dollars every year but had nothing to do. Despite an ongoing effort throughout his administration, Nixon never succeeded in this simple initiative against all the vested interests that were at stake.¹⁷⁹²

There simply cannot be a supreme intent promulgated from the top down through the government apparatus. Instead, policy is largely generated within the system as a whole. Politicians may seem to be responsible for ideas that determine the direction of events, but in reality these ideas have usually been passed to them by their advisers and officials, and they are only the mouthpiece for them. Policies can therefore remain remarkably consistent despite sometimes radical changes of government. Only the presentation varies. When Labour came to power in 1997, it announced a new 'ethical' foreign policy, but in practice very little seemed to change. The Thatcherite and Reaganite economic policies, which are often thought of as highly distinctive,

were already taking shape under the previous administrations, even though those were of an opposite political hue.¹⁷⁹³

This does not mean that there is a cell of civil servants somewhere that is masterminding events. The point is that contemporary political institutions are so labyrinthine and unwieldy that no single person's vision can govern. The state has simply exceeded its own ability to manage the initiatives that it spawns. Power has become fragmented and devolved to numerous branches, departments and sub-committees. Decisions emerge from this mass of officialdom rather than being imposed upon it.

As well as being unable to administer properly, governments are also losing control over the law. For one thing, it has become too bulky for them to manage effectively. In Europe, there is a growing tendency for new law to be implemented as regulations, drafted by the civil service, rather than as legislation subject to the full scrutiny of parliament.¹⁷⁹⁴ Even when parliament enacts clear legislation, there is no guarantee that the courts will interpret it in the intended manner. The law is increasingly turned back against the government that made it. In 1988, the British government outlawed quota hopping, by which Spanish trawlers registered their boats in Britain in order to buy up British catch quotas. Yet, by 1990, it had been overruled by the European Court of Justice, and five years later Britain's own courts decided that the government must pay millions of pounds of compensation to the Spanish fishermen.¹⁷⁹⁵ Britain was also forced to admit homosexuals to the armed forces after its own law was countermanded by European judges. Evidently, the government is not the master of its own destiny. Indeed, the European Convention on Human Rights now enshrines a set of rights that explicitly transcends the sovereignty of parliament.¹⁷⁹⁶

Democratisation of force

A political integrator requires a monopoly of force. The greater the imbalance between the coercive capacity of the political authority and that of everyone else, the higher the level of political integration and the more that peace and order will reign. For most of the last thousand years, this imbalance has been growing, as increasingly costly and sophisticated weapons have advantaged the state. However, the trend is now being reversed. The balance is being tipped back towards the individual malcontents or pretenders who wish to challenge the prevailing political authority.

A study for the United States Congress has revealed a tremendous escalation of terrorist activity since the end of the 1960s. There was a dip in the early 1980s, as the security forces gained experience, but the upward trend resumed after 1985.¹⁷⁹⁷ The terrorism expert Bruce Hoffman estimates that the number of active terrorist groups has increased five-fold over the last thirty years.¹⁷⁹⁸

The actual number of attacks may have diminished but the death toll is rising.¹⁷⁹⁹ The most powerful countries are among the prime targets. Europe is second only to Latin America in terms of the level of terrorist violence, while the United States is rapidly losing its traditional relative freedom from terrorism. Even Japan has recently experienced terrorist threats, including sabotage to its bullet trains.

Having said this, terrorism remains a minor problem and does not compare to the guerrilla warfare endemic in many poorer countries.¹⁸⁰⁰ Most terrorist groups are small and they continually appear and disappear. Nevertheless, terrorism has been shown to be effective. After the City of London was bombed in 1992-3, the British government became noticeably more co-operative in its negotiations with the Republic of Ireland about the future of Ulster.¹⁸⁰¹ Similarly, the discontents of Kosovo Albanians were ignored in the west until the Kosovo Liberation Army began its operations.¹⁸⁰² Terrorism works and is likely to gain not lose popularity.

One factor eroding the state's monopoly of force has been simple technological progress. Mobile telephones and an improved road network, for instance, have helped drug dealers to open up new markets in rural areas.¹⁸⁰³ The spread of technology is making possible cheap but deadly weapons, such as devastating car bombs and nerve gas. Japan's Aum Shinrikyo cult injured 5500 people and killed 11 when it released sarin on the Tokyo underground. (The toll could have been far worse, had a purer solution and a more efficient dispersal mechanism been used.)¹⁸⁰⁴ In the United States, white supremacists have been caught attempting to develop biological weapons with organisms obtained from mail order science supplies companies.

The complex infrastructures of contemporary societies are inherently vulnerable to these kinds of attack. With international jet travel and high explosives, it has become much easier to create terror and cause havoc on a wide scale.¹⁸⁰⁵ Semtex is odourless and safe to carry around. Yet a few ounces strategically placed can bring down an airliner.¹⁸⁰⁶ Self-service superstores have made possible extortion campaigns of the razor-blade-in-baby-food variety. Computer networks can be easily disrupted, as has been demonstrated on the internet and with more secure systems. The US government has recently established a billion-dollar initiative to deal with cyber-crime and cyber-terrorism. In 1997, a hacker managed to endanger astronauts on the space shuttle. Attacks can be very harmful without being particularly sophisticated. In one instance, a farmer burying a cow accidentally damaged a cable and put out of action four of America's thirty main air traffic control centres.¹⁸⁰⁷

Some technologies have worked to the advantage of the political authority. For example, video cameras have been very successful at reducing street crime in city centres and in securing admissions of guilt from those who are caught red-handed.¹⁸⁰⁸ These are bright spots in an otherwise gloomy picture. Their overall impact on crime statistics seems limited. They are also being turned back against the forces of law and order. Video evidence is used against the police in about a thousand cases a year, primarily comprising complaints about the use of excessive force.¹⁸⁰⁹ Similarly, the usefulness of tear gases for riot control is now being eroded. Demonstrators in America have begun wearing gas masks.

A particularly corrosive influence on the monopoly of force is simply the free flow of information. Newspapers and other media are only too willing to criticise the government and stir up popular feeling, if they have the chance. They can then set the political agenda to a considerable degree. The internet is proving especially difficult to control. Some people use it for trading home-grown cannabis.¹⁸¹⁰ When a list of MI6 personnel was published on the internet in 1999, the British government could do little but ask the relevant service provider to remove it, and the list soon appeared elsewhere.¹⁸¹¹ The world's autocratic regimes are very careful to control the press and to insulate their populations from satellite TV or the internet. However, they may be fighting a losing battle. In China, people are working round internet restrictions and are putting up satellite dishes in defiance of regulations.¹⁸¹²

In the past, only the state had sufficient resources to assemble a clear picture of society's overall situation, and it was then a relatively simple matter to keep that information private. In the Falklands war, just twenty years ago, the Ministry of Defence held on to television film for over five weeks before approving it for release.¹⁸¹³ The remote location helped. This would be much more difficult today, when international news corporations have extensive intelligence-gathering networks, along with capabilities in communications and analysis that rival those of any government. In the 1991 Gulf war, President Bush supposedly preferred CNN as his primary source of information because it worked up to 12 hours faster than the CIA. Direct reporting in the Gulf was still heavily controlled by the military,¹⁸¹⁴ but the media had far more options than in the past.

New information technologies like the fax, photocopier and video machine were credited with precipitating the collapse of communism in eastern Europe. They helped to counteract government propaganda by spreading dissenters' views and publicising calls for reform. The state could no longer divide and rule. During Russia's abortive 1991 coup, Boris Yeltsin kept in touch with St

Petersburg by fax. This link helped strengthen his own resolve and undermined that of the plotters.¹⁸¹⁵

The fax and photocopier are as nothing compared to the increasing use of electronic data, which can be copied and transmitted over arbitrary distances almost instantaneously. The internet has put huge amounts of information right at people's fingertips, including such stuff as bomb-making instructions and advice on the relative merits of sarin versus cyanide for attacking large cities.¹⁸¹⁶ Just a few years ago, the criminals, sociopaths and revolutionaries that have an interest in this material would have found it very difficult to get hold of and would have been quite isolated. Now they can come across it within minutes of looking and they find themselves readily getting in touch with those of a like mind.¹⁸¹⁷

It is the cheapness and availability of contemporary information technologies that so helps the small person at the expense of the former political integrator. The Renamo guerrilla army in Mozambique, for example, used hand-held computers to plan and conduct its operations,¹⁸¹⁸ while Chechen rebels had mobile phones that were superior to the radios of the Russian army. Journalists visiting the headquarters of Osama bin Laden, wanted for terrorism by the US, found it stuffed full of computers and communications equipment. Indeed, with their cumbersome procurement cycles, conventional armies are at risk of failing to keep up with insurgents who can arm themselves quickly and well through the open market. The challenge that this presents to political integration is phenomenal. Governments find themselves increasingly evenly matched in their tasks of surveillance and coercion.

It is not just technology per se that has eroded the monopoly of force. Social institutions, stimulated by the flow of information, have changed in such a way as to limit the government's right to impose its will arbitrarily. One of the crucial themes of recent centuries has been the growth of representative government or democracy. This forces political authorities to consider the needs and aspirations of ordinary people in setting priorities and making decisions. It has become widely understood that governments are merely the servants of those they govern and not in charge at all.¹⁸¹⁹ The electorate's real participation in power may be very tenuous, but the need to cultivate electoral support can still make a big difference to government behaviour. Democratic India proved more assiduous at dealing with famines than did non-democratic China.¹⁸²⁰

Democracy is not some luxurious add-on or cultural peculiarity of a handful of western states. Democracy has been achieved because people value freedom and are prepared to fight for it. They wish to make those in authority answerable to the entire community. These ideas have taken root

around the world, even in the remaining authoritarian regimes. China began allowing villages to elect their own councils over ten years ago.¹⁸²¹ The Arab monarchies are experiencing a growing crisis of popular confidence.¹⁸²² Democratic ideas pervade western societies. Corporate hierarchies have been flattened,¹⁸²³ and in organisations like the police and the military, new recruits are less deferential towards senior officers.

Excessive integration can stifle entrepreneurship, and autocrats, who do not need to entertain discussion of their activities, are at risk of flawed decision-making. Democracy brings benefits that can outweigh its pathologies. Nevertheless, the universal franchise is a relatively recent experience even for contemporary developed countries. While the benefits do not seem to be getting any more beneficial, the pathologies seem to be getting more pathological. For instance, political parties everywhere are converging on the same policy agendas. There are positive ways to interpret this, but the underlying fact is that the parties are allowing their philosophies to be dictated by the most popular view. The competition for votes is the primary logic underlying government decision-making.

No matter how much the conditions of life improve, public policy seems to be perennially failing as people demand, and politicians promise, the impossible.¹⁸²⁴ In a 1997 survey, three quarters of Americans, the most privileged people in the world, stated that they mistrusted their government and were pessimistic about the direction in which it was going.¹⁸²⁵ The controversies of the 2000 election did little to challenge this cynicism.

The experience of representative government corrodes the habit of submission to authority that is needed for political integration. The police, for instance, are increasingly likely to find themselves in court, questioned over their methods and disciplined for exceeding their powers. In Britain, suing the police is a growth industry, currently worth around £60 million per year.¹⁸²⁶ Corporal punishment was banned from state schools in 1986 and made illegal everywhere in 1999.¹⁸²⁷ It has become inconceivable for a police officer or a teacher to cuff an unruly child around the ear, though that was commonplace less than a century ago. Teachers have lost credibility as authority figures and are themselves likely to be assaulted by both pupils and parents.

In 1998, it was announced that a police officer was to take up residence in an Oxfordshire school near a troubled housing estate. It was emphasised that the constable would not be patrolling the playground but would instead be helping the children to understand the role of the police in contemporary society, in a bid to win their confidence and respect.¹⁸²⁸ Another police officer

assigned to a troubled school prided himself on being on first name terms with the youngsters, while the uniform of the Royal Ulster Constabulary was redesigned to include a baseball cap, on the grounds that this would be 'more appealing to young Roman Catholics'.¹⁸²⁹ The aim in all these cases was to promote law and order in a cuddly, non-threatening way. This goes against the whole logic of political integration. Order cannot be imposed in a non-threatening way. It would be far more effective if constables *were* to patrol the playground, looking intimidating and backed up by real powers to punish wrong-doers.

The following exchange took place recently between a 13 year old boy appearing in court and a police officer:¹⁸³⁰

Boy: (During a recess, lounging back with feet up on the dock.) What are you looking at?

Police officer: Nothing.

Boy: Then don't stare at me. (Swears.)

One may well believe that it is wrong for teachers and constables to use physical violence against children. No doubt, police behaviour in the past has been arbitrary and excessive, and deserves to be exposed to the scrutiny of law. Nevertheless, an authority whose powers are curbed and criticised and that is afraid of upsetting anyone cannot be a very good political integrator. Everyday experience and five thousand years of history show that credible sanctions are more effective at controlling people's behaviour than appeals to their better nature.

It is not surprising that school indiscipline has become an epidemic throughout the developed world. In American schools, there has been a major growth in violent crime, of which multiple shootings are only the most dramatic illustration.¹⁸³¹ In Japan, worried parents have taken to bugging their children's lunch boxes in response to the growing problem there of playground violence and extortion.¹⁸³² This has been blamed on imitation of television violence. However, the fundamental reason is that children are increasingly out of control in a society where teachers hardly dare even to speak sharply to them, for fear of being accused of some form of mental abuse.

These developments should not be attributed to a few misguided educationalists or liberal chief constables. They represent the whole drift of attitudes in the developed world. Juries have been increasingly willing to acquit people in minor cases of cannabis consumption, even when instructed by the judge that the admitted facts make a guilty verdict obligatory.¹⁸³³ Indeed, it is often the judges themselves who interpret the law in ways that pervert its spirit in order to right what they see as social injustices. One may applaud this situation on

a personal level. Yet the more that the law becomes negotiable, the more its very logic is undermined.

Discrepant scale

The improvements in information technology that undermine the state's monopoly of force can be interpreted as increases in scale. They are part of a broader syndrome, in which information, people and capital are flowing with great facility not just within societies but also across international boundaries. Such globalisation means that governments find themselves enmeshed in a larger context that strongly affects what happens within their borders but nevertheless transcends their authority.

It has become a commonplace to note that trans-national corporations (TNCs), having operations in many countries, corrode the sovereignty of individual states. The financial power of some of these corporations rivals that of many governments.¹⁸³⁴ Nestlé, for instance, with its headquarters in Switzerland, has a turnover that exceeds the Swiss government's budget.¹⁸³⁵ The United Nations has estimated that there are some forty thousand TNCs operating today and they are responsible for one third of global output.¹⁸³⁶

Their international stance places TNCs beyond the regulatory power of individual governments. For example, they can resist the normal wealth-extracting action of a political integrator through the mechanism of transfer pricing. One division of a TNC sells goods and services to another division at a price chosen so as to minimise profits in countries where taxes are high and maximise them where taxes are low. In Germany, the total tax take from businesses has been halved over the last fifteen years as a result of such clever accountancy.¹⁸³⁷ In the United States, the government has published figures to suggest that it loses tens of billions of dollars a year on account of transfer pricing.¹⁸³⁸ Hundreds of TNCs have been opening up offices in Dublin to take advantage of Ireland's low company taxation, though their operations there may be very small.

There are good economic arguments to suggest that companies should not actually have to pay tax on profits, since the money is taxed again when it is re-interpreted as shareholder earnings, and this is a kind of fiscal double jeopardy. Nevertheless, the point is that governments are in a relatively weak position to direct the activity of TNCs operating on their territory. They may desire the jobs brought by TNCs so much that they even take on the role of supplicant, offering tax breaks, research grants and waivers of legislation. Governments adapt themselves to the requirements of the TNCs, rather than laying down the law to them as a true political integrator would.

If this is a problem for the developed countries, it is even more of a problem for the less developed ones. TNCs can virtually dictate government policy

to many weak states. In some African countries, there are enclaves where large mineral corporations determine and enforce their own law.

TNCs are not the only entities that transcend national political authorities. There are other players on the global stage, such as banks, media, crime rings and religious extremists. These also prove to be slippery customers, taking advantage of their international presence to defy individual governments. As one Interpol officer has noted, what is good for free trade is also good for crime. Globalisation has seen the illegitimate economy grow faster than the legitimate one. There are thriving operations smuggling everything from drugs, arms and ivory to human beings. The profits are phenomenal.

International non-governmental organisations (NGOs), such as Greenpeace and Amnesty International, can also be real irritants for both more developed and less developed countries. These have set themselves up as critics of nation states and exert constraints on their behaviour. There were only a couple of hundred international NGOs at the beginning of the twentieth century. There are nearly twenty thousand today. Like TNCs, they fall outside anyone's jurisdiction. Dr Boutros-Ghali, as UN Secretary-General, observed that national sovereignty is being eroded too by the proliferation of international inter-governmental organisations such as the European Union, NATO and IMF. The number of such institutions has grown from 100 to nearly 5000 over the last fifty years.

Private individuals can fund protest movements abroad. The Countryside Alliance, campaigning on behalf of Britain's rural communities has received hundreds of thousands of pounds from one of China's richest businessmen.¹⁸³⁹ The so-called Ruckus Society, which is backed by wealthy liberals, runs a school in Florida, where it teaches protest and demonstration techniques to anarchists from all over the world.¹⁸⁴⁰

The problems that globalisation poses to the nation state can be interpreted as a mismatch between scale and political integration. Greater ease of movement means higher scale, which creates a logic in favour of higher political integration. However, nation states remain largely ossified with a set of institutions optimised for a time when scale was rather lower.¹⁸⁴¹ They are still expecting to impose their will on their own small domains, when their countries have become so permeable as to make their efforts largely futile. They are, in effect, like robber barons still trying to dominate a handful of villages on horseback, when the peasants have recently acquired motor cars and far-flung business interests that carry them well beyond the barons' reach.

While increased scale has allowed the TNCs to take economic activity beyond the jurisdiction of any political authority, the international institutions that have been established to control this activity are not supported by political integration at that level and are quite ineffectual. The United Nations has a committee on TNCs with a budget of just a few million dollars.¹⁸⁴² This is hardly enough even to cajole players in the multi-trillion dollar global economy, let alone to control them.

The world's money supply is now outside the control of any government or other body. The United States finds that its economic fortunes are significantly influenced by the Eurodollar market, over which neither the US government nor any other has jurisdiction. Eurodollars arose in the 1950s, when some European banks agreed to hold dollar-denominated accounts for the Chinese government. China was reluctant to invest its dollar earnings with US banks for fear that these assets might be frozen in the event of a political showdown. Hence, the existence of Eurodollars directly denies the US such power over its own currency. Similar extra-territorial banking now affects all the major currencies.

Financial traders have access to huge and growing funds of investment capital that overwhelm the resources of individual governments.¹⁸⁴³ This became clear when Britain and later France were forced out of the European Exchange Rate Mechanism. The vast sums poured in by the central banks were swallowed up by the markets without trace.¹⁸⁴⁴ They did nothing to stem the flood that had been unleashed by currency speculators. The politicians were shown to be unable to determine their own economic institutions.

The existence of an economy not subject to political authority is all very well for the time being. The various players have a mutual interest in keeping the system going. However, in escaping from political authority, global trade is in an unstable situation. Massive fraud could go unchecked. This network of economic relationships is not reinforced by a political network. Once it begins to unravel, there is nothing to prevent a total meltdown. Furthermore, fraud is no academic threat. Organised crime is heavily involved in the Eurodollar market and in offshore finance.¹⁸⁴⁵ The most important tax havens are situated along the main routes of the international drugs trade.¹⁸⁴⁶

To be fair, governments are still far from being completely impotent. The same developments that have promoted globalisation of the economy have also helped extend governments' powers in some areas. For example, criminals can be pursued more easily across frontiers and governments can co-operate in gathering information about individuals and companies. Nevertheless, the threat to national sovereignty is growing more not less serious.

Companies are becoming more international and less parochial. They are becoming more adept at shifting assets around the world to minimise their tax liabilities, while governments are trying harder to attract investment to their own shores. Many of the world's poorer nations and weaker governments have already been seriously destabilised through globalisation.

The mismatch between the vastly increased scale of contemporary societies and the political institutions they embody has led some commentators to suggest that nation states are simply an anachronism, due to give way gradually to inter-governmental organisations like the European Union and United Nations. These will then restore the balance in the international system. However, this supposition is quite unrealistic. If President Nixon was unable to abolish the Tea Tasting Board, it is hardly likely that it will be possible to abolish the entire government of each EU member state and replace it with a new hierarchy descending from Brussels. That is not a destination that can be reached from where the world is today.

Those who believe, in an echo of Marx, that the nation state will simply wither away because it is inappropriate to the circumstances of the contemporary world have not learnt anything from history. Institutions take on a life of their own, and generally they persist well past the point at which their original purpose has been superseded. If anything, the number of nation states in the world has actually been increasing, as states like Yugoslavia and the Soviet Union have broken up.¹⁸⁴⁷ The mismatch between scale and integration is a contradiction, but it is very likely the kind of contradiction that it takes a dark age to resolve.

Symptoms of disintegration

The various mechanisms that reduce the integration of contemporary societies are operating on reality rather than on perceptions. Governments in the developed countries still seem strong. It is just that this is based on illusion. The real problem is not now, but later, when perceptions revert to reality and there is an abrupt and absolute loss of integration.

All the same, the growing fact of disintegration is revealing itself through a number of symptoms that foreshadow a catastrophe. One of the most straightforward of these symptoms is the break up of large polities into many smaller ones (see Figure 13-4). For most of the last thousand years, increasing integration resulted in the assembly of ever larger national units. During the last half century, the process has switched direction. Instead of creating larger nations by uniting smaller ones, the tendency is now to create smaller nations by dividing up larger ones.

According to United Nations figures, more than sixty states are faced with serious and active

separatist movements.¹⁸⁴⁸ That is about a third of the world total. The *desire* for separatism is a consequence of dicohesion, but the growing likelihood that separatism will succeed is an illustration of disintegration. Half of the world's states were only created within the last fifty years, often being thrown together during the rushed end of colonialism. It is perhaps not surprising that many of them are trying to renegotiate their borders. However, the worrying fact is that a good few of the world's more developed countries and apparently most stable, long-established nations also face separatist demands. Disintegration is not a problem confined to Africa. Europe is disintegrating as well.

France has separatists in Brittany, Alsace, Normandy, Corsica and Languedoc. Spain has given regional autonomy and separate provincial government to Catalonia, Andalusia, and the Basque region, though that has still not been enough to satisfy the militants. Britain has given regional assemblies to Scotland and Wales, a move that was rejected by the relevant populations in 1979 but endorsed by them in 1997. Italy faces separatist movements in Sicily, Lombardy and the south Tyrol. Yugoslavia has publicly broken into separate nations, while Serbia got into trouble with NATO for trying to crush the aspirations of Albanian separatists in Kosovo. Belgium is experiencing growing separatist sentiment between the Flemish and the Walloons. Denmark was forced to give home rule to Greenland in 1979.¹⁸⁴⁹ The Soviet Union has not only split up into its constituent states, but many of those states face internal independence struggles. Armed separatists with varying degrees of resolve are especially active in Russia's Caucasian territories, including Chechnya, Dagestan, Ingushetia and Karacheyevo-Cherkessiya.¹⁸⁵⁰ In Germany, Bavaria has seen the expression of some separatist sentiment. Canada continues to struggle with Quebec nationalism, while some other provinces, such as British Columbia, have also made gestures in this direction. Cyprus has been divided into two hostile states since the 1970s. Other nations challenged by independence movements include Turkey, Iraq, Pakistan, India, Sri Lanka, Indonesia, Vietnam, Laos, Cambodia, Thailand, and practically everywhere in Africa.¹⁸⁵¹ Even the peaceful Caribbean islands of St Kitts and Neavis have talked about ending their federation.¹⁸⁵²

A clear consequence of disintegration is for the political authority to lose control over its subjects. By this criterion, some African countries are practically in a dark age already. Somalia, for instance, gained independence in 1960 but since then its governmental institutions have degenerated entirely. It no longer has a central government and is given over to warring factions under the command of former politicians.¹⁸⁵³ About ten

African states are in such an advanced state of disintegration.¹⁸⁵⁴ South Africa has so far avoided the catastrophe that some expected when non-whites were enfranchised in 1994. Nevertheless, the country is slipping out of control. Thugs have recently been setting up roadblocks to steal cars and murder the occupants.¹⁸⁵⁵ Hundreds of police officers are now killed every year,¹⁸⁵⁶ and the South African police turn a blind eye when vigilantes deliver savage public beatings to suspected criminals.¹⁸⁵⁷ The chances of a return to peace and order in this part of the world are looking bleak.¹⁸⁵⁸ Outside Africa, in countries such as Colombia, Sri Lanka, India and the Philippines, there are swathes of territory that have fallen out of government control and under rebel rule. In the Caribbean, law and order have been disappearing rapidly over the last decade. Violence has become a way of life, while the police and judiciary are corrupt and ineffectual.¹⁸⁵⁹ In Indonesia, armed robbers have taken to hijacking lorries and seizing their loads of rice and sugar.¹⁸⁶⁰

All developed countries have been experiencing growing disorder over the last fifty years. In Britain, stolen lorries have become a common sight, abandoned in lay-bys with their doors ripped off and the contents removed. Farmers complain of a crime wave that is forcing them to lock up all their machinery every night, though this was unnecessary only a decade ago. Everything from combine harvesters downwards can be stolen and sold only days later in Africa, eastern Europe, or the middle east.¹⁸⁶¹ Over half of farms have been burgled, and they are also plagued by arson and illegal tipping.¹⁸⁶²

The overall growth of crime is clearly linked to the declining effectiveness of mechanisms of coercion. It is no coincidence that VAT fraud has risen as the ratio of VAT inspectors to companies has fallen, or that evasion of import duty has risen in conjunction with staff cuts among customs officers.¹⁸⁶³ In the United States, the likelihood and severity of punishment have drastically declined.¹⁸⁶⁴ A book called *Crime Pays!* has shown that the rewards of crime outstrip the costs of punishment.¹⁸⁶⁵

In Britain, the black economy is booming, according to a report for the European Commission, and is estimated to be worth £100 billion per year.¹⁸⁶⁶ It affects everything from rural communities to sport,¹⁸⁶⁷ to the international money market.¹⁸⁶⁸ This can be regarded as economic activity that defies political control. In weaker states like Russia and Colombia, or even Hong Kong, legal and illegal business activity blend seamlessly into one another. In China, sporadic crackdowns on corruption have proven ineffective. Even the army derives significant revenue from smuggling and other marginal

ventures.¹⁸⁶⁹ There is also collusion between the overstretched police and organised gangs.¹⁸⁷⁰

Two thirds of Russian businesses have underworld connections. It is harder for them to be honest than to be corrupt. Organised art thefts are spiriting away Russia's heritage at an alarming rate. Manuscripts worth £200 million were recently stolen from a St Petersburg library, apparently for an Israeli collector though he was never tracked down. Chechen gangs are particularly out of control. Drugs, protection rackets and stolen German cars are their bread and butter. They have also succeeded in stealing \$200 million from the Russian state via a bogus bank transaction.¹⁸⁷¹ In 1999 it was estimated that one in five candidates for election to the Russian parliament had a criminal background,¹⁸⁷² while the regional governments are already dominated by criminal interests. Organised crime is also influential in regional governments in Mexico, Colombia, and Italy.¹⁸⁷³ In Northern Ireland, the IRA has a criminal empire that brings in about £9 million annually. In 1995, it teamed up with Dublin gangsters to carry out Ireland's biggest ever armed robbery, netting £3 million.

The growing patent failure of political authorities to impose order does not just encourage the criminals. It also jeopardises the continued support of more honest citizens. In some cases, people have taken action against criminals on their own behalf only to end up being punished and indeed punished more severely than the criminals themselves. These range from a man who punched a washing-line thief stealing his wife's clothing and got two months in jail,¹⁸⁷⁴ to a farmer who got life for shooting a burglar who smashed his way into his home in the middle of the night. Such cases have caused outrage.

It seems unfair that the original victim should be made the criminal for avenging a wrong, but this makes perfect sense in terms of the principles of integration. Political authorities demand a monopoly of force and they come down disproportionately hard on those who take the law into their own hands. Nevertheless, insisting on a monopoly of force is all very well so long as the police and courts are effective at protecting people. If, though, the police prove unable to catch thieves, and if the courts prove unwilling to deter them, then people will start taking the law into their own hands. Furthermore, if it then becomes apparent that the political authority is (a) determined to inhibit their home-grown justice but (b) unable to deliver justice itself, the public's patience will begin to wear thin.

Frustration with existing political institutions is one of the factors behind the growing popularity of politicians who present themselves as outsiders while embracing authoritarian and nationalistic platforms. Austria's Jörg Haider is probably the

most virulent and successful politician of this genre. His Freedom Party has counterparts in France's National Front, Italy's Northern League and the New Zealand First party. There are also similar movements in Sweden, Switzerland, Belgium, Australia, and of course Russia. In the United States, Pat Buchanan, who made progress in the 1996 Republican primaries, has a platform that has been compared to early European fascism. Islamic fundamentalism to some extent fits into this mould as well.

An obvious consequence of the growing failure of political authorities to guarantee order is the fact that private security firms have been experiencing a boom in every developed country, while neighbourhood watch schemes have also proliferated.¹⁸⁷⁵ The logical end-point of this, which is the dark age condition, would be a reversion to private armies and self-defence by local communities.

The market for private detectives and security guards is thriving particularly well in Russia, where bullet-proof Ladas recently went on sale.¹⁸⁷⁶ Russian security guards do not just protect but, if required, will also intimidate and coerce a business's rivals or suppliers.¹⁸⁷⁷ In the United States, people now spend twice as much on private guards as the government spends on police, and this continues to be a fast growing industry.¹⁸⁷⁸ The private firms have a considerable advantage over the state's own apparatus, for their staff are able to spend most of their time actually guarding. By contrast, the average American police officer spends rather less than a tenth of the time on patrol and the rest on various kinds of form-filling.

A similarly significant trend involves the growing phenomenon of so-called gated communities. These are enclaves of rich or middle-class people's houses, surrounded by perimeter fences, patrolled by guards, and with only one or two controlled entrances/exits. Some of these communities are protected by a 24 hour armed response.¹⁸⁷⁹ They are predominantly a feature of countries like South Africa and Brazil, which are disintegrating fastest. However, they are also to be found in France, Italy, Spain, Portugal, India and Thailand. They are even springing up in the United States.¹⁸⁸⁰ A properly integrated state has no need to defend internal boundaries. The erection of town walls has always been a sure sign of severe decline.

Besides providing internal order, a political integrator should also protect against external threats. Military weakness is therefore another sign of disintegration. Russia's forces are in desperate straits thanks to the government's impoverishment. More than once, the military has deployed soldiers against local utility companies after being threatened with disconnection over unpaid bills. In one case, the commander of a nuclear ballistic missile base occupied four electricity substations.

Russia is due to cut its oversized forces by a third over the next few years.¹⁸⁸¹

Western militaries are in trouble for reasons that include unreliable equipment and a lack of mental preparedness. The conflicts of recent times have scarcely tested land forces. Their weaknesses have not been exposed. Insiders have expressed considerable doubt over what might have happened had, say, the 1999 Kosovo intervention required a ground war. The British army's standard rifle was always malfunctioning and has since had to undergo a substantial refurbishment.¹⁸⁸²

Morale within Britain's military is heading towards rock bottom.¹⁸⁸³ There is a feeling of growing inadequacy, as manpower and equipment are cut back. The army is used increasingly for boring, thankless policing operations where families cannot go.¹⁸⁸⁴ The best officers are inclined to leave. Senior planners acknowledge that theirs is now a 'small army'. According to one in-house journal, the understaffed defence medical services are in crisis, while the rate at which reservists volunteer for full-time service has fallen drastically. The Chief of the Air Staff has complained of resources so low that aircrew are likely to quit in frustration.¹⁸⁸⁵ Yet Britain's defence spending is the highest in Europe. Other European forces are less substantial still.

To be fair, the British parliament has never been keen on paying to maintain a large standing military. The present cuts are only to be expected in the absence of a specific threat. When new conflict breaks out, or seems about to break out, one might expect that the military will get all the resources it needs.

However, it is not only a matter of small peace-time defence budgets. The army is finding it difficult to recruit people into the fighting arms, whether or not it has the money to pay them.¹⁸⁸⁶ There are concerns that changing social attitudes are causing the military to lose sight of its fundamental purpose. It has become just another employer, its structures and practices increasingly dictated by the desire for equal rights rather than considerations of fighting effectiveness. Against its better judgement, it has been compelled to allow in open homosexuals and to deploy women ever closer to the front line, on board ship and as fighter pilots. The Equal Opportunities Commission has advised the army to introduce 'gender fair' physical fitness requirements, while these requirements have already been relaxed to take account of the fact that young people are not as fit as previous generations.¹⁸⁸⁷

It may be that objections to women in the military are akin to arguments against their membership of golf clubs, i.e. indefensible special pleading. After all, female guerrillas are common

in places like Colombia and Sierra Leone. (Similarly, the Spartan army encouraged homosexuality, and was greatly feared.)¹⁸⁸⁸ However, the Israelis, Germans and Soviets have all experimented with placing women in combat but later barred them as they found that their presence reduced overall resolve. Britain's forces cannot even refuse to take on pregnant women any more. This is fair for the women involved. Yet it will not help Britain in future conflicts, if a portion of the country's tanks and aircraft are non-operational due to crew pregnancy. This is more than just a debating point. In the Gulf war, pregnancies due to sex in the field were the primary reason for a non-deployability rate of women many times that of men when the troops were eventually called to battle.¹⁸⁸⁹

The equal opportunities approach to the military treats it largely as a kind of adventure training. In fact, it is there to protect the country from all manner of aggressive and aggrieved people, who generally have far fewer qualms and scruples than their rich, western counterparts. As the journalist Alan Judd notes, people do not really believe that there will ever be another real enemy and that is partly why, one day, there will be.¹⁸⁹⁰ The issue with both women and overt homosexuals in the military is not whether they are good soldiers, for they are typically said to be excellent soldiers.¹⁸⁹¹ The issue is that their presence creates the potential for sexual tension, harassment and complaint, which are harmful to cohesion even though not their own fault. The seriousness of that will become apparent when the real test comes.

To some extent, it scarcely matters what most western countries do with their defence forces, for they are protected by the still huge United States military. However, even in the US, defence budgets are beginning to become a target for cut-backs, while the US forces are streets ahead in terms of hobbling themselves with an equal rights agenda. After the Tailhook scandal, involving harassment of female officers at a convention, three hundred naval pilots were dismissed, leaving a desperate shortage. The military is also being ordered to clear unexploded ordnance from its practice ranges on environmental grounds. This is likely to be costly and difficult and could cost hundreds of millions of dollars.¹⁸⁹² As robust military attitudes are subordinated to all the concerns and sensitivities of the day, recruitment, retention and combat readiness are plummeting. There is a growing perception that America's military threat to potential aggressors is increasingly hollow. When it comes to the test, its real ability to protect itself may prove to be less than is currently thought.

Chapter 24 - Internal disorganisation

Detecting the warning signs

The topic of this chapter, i.e. internal or domestic threats to economic organisation, might seem somewhat surprising. After all, most countries, and especially the rich ones, are apparently characterised by perennial economic *growth*. Even the periodic downturns of recent history have only been transient checks to the continuing upward trend in economic product. New technologies, such as the recent fusion of computers and communications, are sparking off a whole range of novel business opportunities, including an explosion of retail activity via the internet. Many observers take this to presage renewed economic expansion and further great gains in prosperity.

However, statistics are not the same as social reality. In late 1998, a new way of calculating GNP made the British economy seem to be doing far better than was previously thought, but this clearly made no actual difference to people's lives. GNP is not a straightforward measure of human welfare. It can be increased by things that do not make people better off, such as court cases, and it does not necessarily reflect nuisances like pollution and congestion.

The real trend of the last few decades has been for lifestyles to become poorer world-wide. In China, South Korea and some other parts of east Asia, citizens may generally be better off. However, in places like Latin America, the middle east, and the former Soviet Union, people mostly live worse than they did in the 1970s.¹⁸⁹³ Despite the spread and technical improvement of consumer products, the subjective experience of life has degenerated. Life is harder and not so secure, services are less reliable, the built environment is decaying. In Africa, per person food production is stagnant or declining. The proportion of Africans who are illiterate and unskilled is higher than it was forty years ago.¹⁸⁹⁴

In the rich countries, beneath the ferment of boom and bust, the same pattern prevails. Society in general can no longer afford lifestyles as comfortable as those people enjoyed two or three decades ago. European social programmes are being cut back. There is less generosity in things like sick pay and child benefit, while public amenities are being closed down or having their budgets reduced. Student grants have been getting smaller for over fifteen years and university health centres report a growing problem of malnutrition.¹⁸⁹⁵ The symptoms of a society past its opulent prime are ubiquitous. The country relies heavily on sewers that were put down in Victorian times. Almost no effort is being made to replace them, though nearly half leak or have serious structural defects.¹⁸⁹⁶

There is a kind of penny-pinching, which is dressed up as thrift and economic good sense. School meals were established as an act of charity in Victorian times, but by the 1980s became a common target for councils looking for savings. The quantity and quality of meals declined and meat portions were reduced.¹⁸⁹⁷ A society that is having to serve its children less meat is moving backwards in terms of economic as well as nutritional health. The pay of public officials, ranging from the Archbishop of Canterbury and prime minister to ordinary civil servants, has virtually halved relative to average earnings over the last sixty years.¹⁸⁹⁸ European civil servants have recently gone on strike to protest against threatened cuts in their pay and privileges.¹⁸⁹⁹ One may not have much sympathy for the Eurocrats, but this is not the point. The luxurious lifestyle of its officials is a symbol of a society's prosperity. When they are increasingly down at heel, the society as a whole is heading for penury.

In Britain and the United States, the proportion of the population officially living in poverty has increased significantly since 1970.¹⁹⁰⁰ In Britain, a third of all children grow up in poverty, which is not far ahead of some developing countries.¹⁹⁰¹ In the US, average weekly earnings have been falling in real terms since the 1970s.¹⁹⁰² According to United Nations figures, there were 70 countries – more than a third of the world total – in which average incomes in 1995 were less than in 1980; and in 43 of these countries, average incomes were less than they were in 1970.

Admittedly, such statistics should not be taken at face value. Poverty is measured relative to average standards of living and does not necessarily mean people are worse off in an absolute sense.¹⁹⁰³ Comparisons of 'real' incomes may be spurious in the light of technological improvements. However, it is the perception of poverty that is relevant to a society's viability. Relative disadvantage is more important than absolute disadvantage when it comes to the fears and frustrations that make people withdraw their commitment to the system. The danger lies in the fact that lifestyles everywhere seem to be under threat, and that the gap between people's aspirations and their actual experience is getting larger. Mothers must now go out to work to sustain the household, when barely a generation ago a single wage-earner was enough for a decent income.¹⁹⁰⁴

Aggregate economic indicators tell an optimistic story, but they can conceal the pockets of backwardness and disaffection that exist even in the richest societies. In some United States cities in the late twentieth century, infant mortality was worse than in Bangkok or Bogota.¹⁹⁰⁵ The American economist Charles Murray observed that

material living standards improved significantly among Britain's poor during the 1990s, but at the same time this underclass became increasingly marginalised, aimless and prone to violence.¹⁹⁰⁶

Some thinkers about the industrial future have spoken of the arrival of a 20:80 society. That is to say, 20 percent of the population – the clever ones that get a good education and understand the way the world works – will suffice to keep the economy going. The other 80 percent – the losers – will be increasingly redundant in an automated and computerised world, and will be kept amused on a diet of TV pabulum.¹⁹⁰⁷ This complacent vision, however, is unsustainable. The elite cannot simply exclude 80 percent of people from society and retreat into a life of luxury and intellectual stimulation. Soon enough those 80 percent will be appearing in mobs outside their gated communities, like the Gauls descending on ancient Rome, ready to torch what they cannot carry away.

Poor and rich countries are characterised by a sense of impoverishment. On paper, they may be getting wealthier, but this is not felt in most people's everyday lives. Instead, people perceive themselves to be slipping back relative to the benchmark of a normally decent lifestyle. The state also looks less well off, unable to guarantee the benefits that it did in the past. The overall level of economic organisation is increasing, but it is not being turned into subjective human welfare.

Vulnerability to economic collapse

The very size and connectedness of contemporary economies creates the potential for economic catastrophe. People's lifestyles depend on long chains of exchanges that are outside their control. This system's unfathomable complexity allows hidden contradictions to develop. The trade in financial instruments now typically exceeds the trade in actual goods by a factor of ten or more.¹⁹⁰⁸ This means that claims to goods and services far exceed the goods and services that are actually available. So long as people are happy to keep their claims and postpone consumption that is not a problem. However, it is like a game of musical chairs. When confidence disappears, many people will find their claims are worth nothing.

This proliferation of money claims, way beyond what could ever be redeemed, has been made possible by the growth of debt. Lenders have been willing to accept money claims for goods and services that have not yet been produced. Borrowers have consumed goods and services for which they have not yet produced the return flow. The loaned money has then woven its way throughout the economy so that many people's sense of well-being now depends on the belief that the original debt will be repaid. However, some debts must eventually default, and this will produce a chain reaction of disappearing worth. Of course, banks are always writing off bad debts. They make

provision for them, absorbing the shock and stopping the chain reaction. Nevertheless, the more debt there is in the system, the more difficult this becomes. When the chain reaction cannot be controlled, there is an abrupt adjustment of disappearing economic relationships, which clears out the backlog of debt. This is what lies behind every stockmarket crash and economic recession.

As economies have grown larger, their potential to conceal these contradictions has increased. Debt has grown on the personal, national and international level. Over the past 25 years, national debts have risen faster than productive output across the whole of Europe. The gap between fantasy (money) and reality (productive activity) gets larger decade by decade. The global crash of 1987 was certainly not the last one in history. On the contrary, the potential is developing for crashes that will make October 1987 look like a stroll in the park.

The financial markets are getting not just bigger, but also more complicated and unstable. Banks can be wiped out by the misjudgements of a single trader. There is a growing fear that the last resort assistance which has held the bridge in the past may fail in tomorrow's financial breakdowns. The Japanese finance ministry has admitted that a series of bank failures in 1997 came perilously close to undermining the whole logic of the country's economy.¹⁹⁰⁹ Even a small adjustment can propagate through the system to produce large effects. When the United States raised interest rates in 1995, it precipitated a sequence of events that led to the collapse of the Mexican peso. That in turn, it is widely acknowledged, brought the world as near as it has ever been to complete economic meltdown.¹⁹¹⁰

Some of the greatest economic contradictions and instabilities are associated with pension funds, which represent large pools of footloose money. Their whole aim is essentially to accumulate debtors for thirty or forty years in order that the subscribers can call in these debts to fund their retirement. If the debts turn bad, there will be nothing to pay subscribers' pensions. Such worries seemed far away in the past, when the funds were growing dramatically. A lot of money was flowing in from new subscribers and relatively little was flowing out to pensioners. Even if the funds did not invest as wisely as they might have, they could meet their obligations out of new pension contributions. Unfortunately, that situation is changing, as the subscribers who were taken on over the last few decades are beginning to retire. It is not helped by the fact that pension funds invested significantly in the Asian stockmarkets that crashed in 1998.¹⁹¹¹

Having said this, private pensions are rare in much of Europe, and most people are relying on state pensions paid directly out of the government's

income. Yet these are threatened by the changing balance between pensioners and taxpayers, as populations in the industrial world grow older. Pensions will undoubtedly have to be reduced in generosity, and they will certainly be less in future than governments and pensions funds have led people to expect. One estimate suggests that they will fall from about one third of average male earnings today to less than one tenth by 2050. Some commentators foresee huge problems, even if pensions fall to the level of bare subsistence. It has been suggested that the cost of retirement could eventually bankrupt the continent.¹⁹¹² In effect, the whole pensions situation is a time bomb under the world economy, with something like a fifty year fuse. When it goes off, it will not be just the pensioners that suffer. They are consumers of goods and services, and their poverty will impoverish everyone.

The drags on the economy

Louis XIV housed the entire government of France in one wing of Versailles. Now the French civil service has hundreds of thousands of employees spread throughout the country. Over the last two hundred years, the British Treasury has grown by a factor of more than fifty, even though the population has grown only by a factor of four.¹⁹¹³ What is true of Britain and France is true of every industrialised country. The state machine has been getting steadily larger. In typical developed countries, a quarter to a third of all employees are now in jobs that depend ultimately on the government.¹⁹¹⁴ This compares with about one in twenty a century ago.¹⁹¹⁵ To service this vast apparatus, average tax burdens have trebled over the last century and now stand at about 30-40 percent.¹⁹¹⁶

Lately, governments have expressed a desire to reverse the expansion of the bureaucratic apparatus. A major theme of the last twenty years has been the privatisation of state-run enterprises, supposedly to increase efficiency and reduce prices. In practice, though, many of the newly privatised industries have been placed under the scrutiny of official regulators, who have proved to be expensive and inefficient. Far from eliminating bureaucracy, the regulators have multiplied it, with whole new sets of rules and a proliferation of statistics. They are freed from the discipline of actually running the business while having the right to interfere in every detail of it. This is not at all a return to previous conditions, when entrepreneurs forged their own destiny.

The Reagan-Thatcher era was particularly associated with a commitment to reducing the size of the state. However, all the supposed cutbacks turned out to be mirages. The tide of bureaucratisation and regulation swept on anyway, running over and around whatever obstacles were put in its path. Despite the abolition of Britain's

seven largest councils, the local government labour force grew relentlessly throughout the 1980s.¹⁹¹⁷ Quangos, i.e. government-funded bodies outside the civil service, were cut by 10 percent at the start of Mrs Thatcher's premiership, but had nearly trebled in number by the time she left office. They now dispose of more than a tenth of the government budget and, unlike local councillors, they are not accountable in law for their spending decisions.¹⁹¹⁸ That is hardly conducive to controlling waste.

The civil service has nominally been reduced in size, but the number of government-dependent jobs has continued to grow. In Britain, large parts of the government have been separated off as self-administering agencies, such as the Passport Office and Companies House. They do not look much different, however, and a considerable amount of time is spent on liaison with their former parent departments in Whitehall.¹⁹¹⁹ There has also been increasing use of management consultants, who do not appear on the civil service payroll but are nonetheless supported by taxes. Similarly, there has been contracting out of services previously performed by government employees, from cleaning to computer maintenance. In the United States, a government study concluded that this had led to billions of dollars of waste, and it cited widespread mismanagement, corruption and fraud.¹⁹²⁰

There have been real cuts in capital spending, such as on building roads, which have been more than offset by increased spending on things like welfare or health. In other words, investing for the future has been cut back while short term consumption has grown. Overall, in the whole of the developed world, the government's share in the economy is now the highest it has ever been. It defies all efforts at control because it is intimately related to the unfolding and unstoppable logic of contemporary institutions. In 1998, some parts of Britain were affected by severe flooding, in which two people died. Six months later a report came out criticising the Environment Agency for not doing enough either to warn people or to deal with the aftermath. Therefore, the call went out for more officials, more forms and regulations and inevitably more money, to generate the required warnings and supervise flood clear-up operations. Such calls are increasingly difficult for governments to ignore.

The fact that today's high-scale, high-taxation societies are among the most pleasant to live in, historically and in the world, suggests that their tax burdens are not yet at the point where the costs exceed the benefits. However, the expense is only part of the problem. The government apparatus can also directly hamper economic activity. The bureaucrats are busy drafting legislation, processing compensation claims, implementing

European Commission regulations, and so on. Complying with all this paperwork imposes a cost on industry and individuals over and above the taxes that they pay. The European Commission has estimated that its regulations impose a cost of at least £150 billion on Europe's businesses. In a 1995 survey, only 5 percent of British companies reported that the single market had helped them increase their business, but 60 percent said that it had increased administrative burdens.¹⁹²¹

The journalist Christopher Booker has compiled story after story of businesses being obstructed and sometimes closed down entirely because of what he describes as the bizarre legalistic framework of today's health and safety obsession. Officials, often with scant understanding of the industries they are regulating, enforce inflexible rules against largely imaginary threats. In one case, an inspector applied a regulation designed for large ships to insist, against the captain's protests, that a fishing boat's fire extinguishers be moved into the engine room. A fire later broke out while the boat was at sea, the crew could not reach the extinguishers, and the result was a rescue operation costing tens of thousands of pounds.¹⁹²²

Inspection agencies have been made self-financing with the right to charge industry for various kinds of licence at rates they determine. The government takes some of the profits. This is simply tax farming, which the Mogul empire among others has successfully demonstrated to be anathema for economic growth. The Medicines Control Agency caused a scandal when it tried to treat herbal remedies as medicines and threatened to close down Britain's entire health shop business.¹⁹²³

When the European Commission recently moved to ban soft PVC toys, a letter writer to *The Times* satirically asked how he could safely dispose of his fifty year old bath-time duck.¹⁹²⁴ The activities of Edwin Chadwick, the great Victorian public health reformer, were similarly derided in *The Times*, with one commentator saying that he did not wish to be lectured by Chadwick.¹⁹²⁵ Yet Chadwick's innovations saved countless deaths from typhoid and other diseases. Will today's health and safety obsessions be similarly revealed as wise in the long run? It seems unlikely. They have moved far into a region of diminishing returns, imposing costs out of all proportion to the potential benefits. Every barber shop, for instance, must now have its appliances regularly tested for electrical safety, but there is hardly a problem with electrocution in barber shops as there was with infectious disease in Chadwick's London.

Bureaucratic solutions to economic problems are characteristically misconceived and inefficient. Government interventions in agriculture, which are intended to promote fair prices for farmers, make food unnecessarily expensive and lead to massive

waste. The European Union and the United States have both subsidised their tobacco farmers while simultaneously funding anti-smoking campaigns.¹⁹²⁶ Similarly, planning regulations are made ever more stringent, as though agricultural land is too precious to be squandered, yet the government also gives large grants to farmers to leave land idle, because there is too much of it. As another example, when governments tackle unemployment, they do so by targeting the unemployed with training schemes. Yet these have invariably proved a costly failure. They approach the problem from the wrong end, for employment is created by employers, not by employees.

Governments have become increasingly committed to discouraging what is regarded as excessive economic growth. As one United States central banker has put it, the aim seems to be to take away the punchbowl just as the party gets going. This generally implies a large failure of imagination. For example, when people were being made unemployed in their tens of thousands from Britain's steel and coal industries during the 1980s, this was commended as shaking out the overcapacity of decades.¹⁹²⁷ Yet this is an absurdity. The third world potentially had a use for all the coal and steel that Britain stopped producing. The real problem was not overcapacity. It was a lack of entrepreneurship in the world economy.

Governments dislike economic booms because they fear the bust that experience tells them will eventually follow. Hence, they regularly announce their intention of eliminating the boom-bust pattern. They never succeed. In the late 1920s, economists spoke of a new era of permanent steady growth – shortly before the biggest slump of the century. By the late 1960s, economists were again suggesting that the business cycle had been made obsolete, but 1973 and 1979 both brought major recessions.¹⁹²⁸ The same boast has been heard many times, and with the same eventual result. This central theme in governments' attempt to manage the economy has been an out and out failure.

It is questionable whether the aim of steady growth is even sensible or achievable. As J M Keynes said, surely the government should aim to eliminate slumps, not eliminate booms and keep the country in a permanent state of semi-slump. When the government announces that it intends to damp down consumer activity, it sounds very surgical and impersonal. However, what it means is an attempt to make people feel sufficiently poor and insecure that they will be afraid to make purchases or take on commitments that they otherwise would have. It is seldom clear, though, what all the suffering is supposed to achieve – except some future paradise that somehow never seems to arrive.

The business cycle is simply an inevitable characteristic of a vigorous economy. Random fluctuations are inherent to complex, dynamic systems. The alternative idea that the economy is a machine, obeying well-defined laws, and susceptible to intelligent control is a fantasy. Yet neither governments nor economists seem to learn much from their repeated failure. As the chief economist of the World Bank said, when he was challenged about the Bank's prescriptions for third world growth, which were not working, 'Well the theory is right!'¹⁹²⁹ The truth is that the theory is not right. Indeed, there is scarcely any theory at all. Most economic planning is based on compromises and ad hoc reasoning. The government's budget statement is not a scientific document but a product of lengthy negotiations, social engineering (e.g. to discourage smoking or driving) and much guesswork. Yet for all that, it is not necessarily any worse than the purest economic theory. Throughout the mid-1990s, for instance, the Bank of England regularly called on the chancellor of the exchequer to adjust interest rates, with dire predictions of what would happen if he did not. In the event, the chancellor resisted these demands, and none of the Bank's warnings were fulfilled.

The government cannot steer the economy like a helmsman steers a ship, conjuring wealth into existence and creating jobs by manipulation of macroeconomic variables. Economic organisation and employment are created by entrepreneurship. As such, they depend on complex issues of human motivation, and these cannot be turned up and down like a volume control. Economic fair weather may convey the illusion that the government is doing something right. In reality, it is always tinkering with a system that nobody understands.

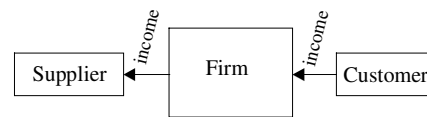
Entrepreneurial failure

In 1914, Henry Ford doubled his workers' wages, so that in 3 months they would earn enough to buy a Model T. He was castigated for committing an economic crime. Yet the Ford Motor Company went on to become one of the twentieth century's greatest success stories. Ford recognised that his workers were also potential purchasers of his product. In effect, he recognised the principle that loops of organisation must be closed and hence that suppliers are also customers N times removed. A company that impoverishes its suppliers (workers are suppliers of labour) is ultimately impoverishing its customers and therefore itself.

Ford's insight is not always shared by those who are running large firms today. When the Labour government recently introduced a minimum wage, many industrialists warned that it would create up to a million unemployed. In fact, unemployment fell. The expansion of the stockmarket has led to a situation where the owners of public companies (the shareholders) have a distant and possibly transient association with it.

Managers feel the pressure to maximise short term value, which includes holding pay settlements down. Otherwise they fear that they will be accused like Ford of committing an economic crime, that share prices will fall, and that they will be considered to have failed.

Narrow view



Broad view

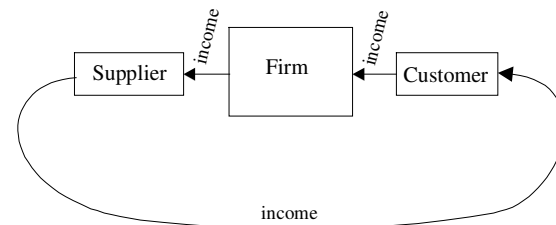


Figure 24-1: Organisation forms closed loops and a firm's suppliers are connected to its customers. *Impoverishing one's suppliers eventually impoverishes oneself.*

Such attitudes are increasing the income gap between rich and poor. This is after some 200 years during which it had been shrinking. For instance, in 1990, the chief executive of United Airlines earned over a thousand times more than the starting pay of a flight attendant, a year in which profits were down 71 percent. Nevertheless, his salary was increased even though flight attendants had not had a rise for five years.¹⁹³⁰ Overall, in the United States, the gap between the bottom 20 percent and the top 20 percent is the highest since records began.¹⁹³¹ There is increasing polarisation, with more wealthy people, more poor people, and fewer in between. Even within the top 20 percent, it is the wealthiest individuals that have seen the greatest gains. During 1999, Britain's thousand richest people saw the biggest ever rise in their fortunes, which grew four times faster than average earnings. The north-south gap is widening, with London emerging as Europe's most affluent area.¹⁹³² Meanwhile, the top marginal rates of tax have been cut, and there has been a move in favour of indirect taxation, which falls more heavily on the poor.¹⁹³³ Clearly, all this explains how GNP can rise and yet people in general feel worse off.

All countries are seeing this rise in income inequality, which is absolutely characteristic of the time before a catastrophic loss of organisation. It is no coincidence that the trend is furthest advanced in the most economically chaotic parts of the world. In Brazil, for instance, income inequality is three times higher than in the United States, and, in newly de-communised Russia, the heads of

companies are raking in huge salaries even when their workers are not being paid at all.¹⁹³⁴

As well as impoverishing their workers, companies have also been laying them off. Downsizing is seen as a successful strategy because it releases cash and creates immediate windfalls. Of course, it is good to improve efficiency, but true entrepreneurship is also about innovating, expanding and investing for the future. Real entrepreneurs do not just free labour from old tasks, they also create new work for that labour to perform. Hence, the downsizing mentality can harm the economy as a whole. Suppose, for example, that a bus company makes the bus conductor redundant and has the driver collect the fares. The bus then holds up traffic for longer, and the former conductor may end up joining the long term unemployed. This means that the bus company has increased its profits by reducing staff, but it has imposed additional costs on everybody else.¹⁹³⁵

Throughout the world, unemployment is higher than it has ever been.¹⁹³⁶ It may fall during booms, but the underlying trend is upwards. In fact, much unemployment is now hidden and not counted in the statistics. Many people over fifty have left the work force for good, to be replaced with younger workers. More than half of them are on some kind of long term sickness benefit. The government is supposed to be acting against this,¹⁹³⁷ but has itself been responsible for a culture of youth in the civil service. The wealthier European countries are sustaining as normal unemployment levels that were typical of the 1930s depression. Having said this, the European workforce has grown slightly as a whole, largely due to the growing participation of women. To some extent, therefore, the problem is a failure of entrepreneurship to keep up with the swelling labour supply, and not just a positive decline.

While rising income inequality and unemployment can be thought of as indicating failures of entrepreneurship, it is wrong to imply that the blame falls entirely on a handful of bosses. Entrepreneurial failure is endemic to contemporary societies and something that everyone is responsible for. The affluent society and its welfare safety net have made people less enthusiastic about hard work. Olga Korbut, the former Olympic champion, who now teaches gymnastics in America, comments on the lack of application among American girls, in stark contrast to their Russian counterparts, who dedicate long hours to the pursuit of perfection.¹⁹³⁸ For the Russian girls, excellence in gymnastics is a passport to a better life, but for the American girls, with their rich parents, life already offers all that they could want.

In Germany, the dirty, boring and menial jobs have been increasingly given over to guest-workers from Turkey and north Africa, despite rising

unemployment. Germany's idle may complain of guest-workers taking their jobs, but they do not really want the jobs that the guest-workers have got. In 1998, the German government insisted that asparagus farmers should take on a certain proportion of unemployed Germans to help with the harvest alongside the usual Poles. However, many of the Germans turned up after just one day with doctor's sick notes discharging them from work. They complained about the hours and the travel and grumbled that they could earn almost as much money on the dole. It was a disaster. Some farmers had to plough over whole fields of unpicked asparagus.¹⁹³⁹

In poor countries, people must scratch a living through often degrading and back-breaking work if they want to survive at all. In rich countries, a general amelioration of living conditions has raised the definition of what is too degrading or too back-breaking. When an international survey in the mid-1990s asked people how important work was in their lives, Nigerians and Indians came out top. Of the nations sampled, these were the two with the lowest GNP per person. Britain came eleventh from bottom in thinking work important, and Germany was third from bottom.¹⁹⁴⁰ A British medical conference in 1989 was told that 60 percent of absences from work are now due to stress-related illness.¹⁹⁴¹ Clearly, if one is struggling to feed one's children by picking over a rubbish dump in New Delhi, one cannot take time off for stress. It is naturally different, however, when one is covered by six months' full pay. This is not to say that the stress is not genuine. The point is simply that people are no longer forced to overcome such difficulties and press on with economic activity. Even in Japan, the image of the highly driven salaryman is becoming a thing of the past.¹⁹⁴²

Another part of the problem is that people have become responsible for themselves. Some of them are not up to this responsibility. They have difficulty organising their own affairs and make poor decisions. Those who are not particularly able or self-motivated can lose their place in today's competitive, confusing world. It is all very well to say that the unemployed should find some gainful occupation, or that they should spend their time and money wisely. However, many of them, to varying degrees, are incompetent to do so. It depends on the more enterprising members of society to find ways to occupy these people, and to supply some discipline in their lives. This is what has not been happening. Even the trade unions that used to speak up for such people have been driven back.

The government has stepped into this vacuum, supplying jobs, discipline and welfare. However, its interventions have serious pathologies, for the approach is more distant, more impersonal and

more easily abused. It is not a question of going back to some golden age, for there never was one. Stockmarkets have been a boon to capitalism. It is desirable that people are free to choose their own careers. Trade unionism was not an unqualified force for good in economic life. The situation is really one of emerging contradictions. Progress in one area has had negative impacts elsewhere.

Innovation failure

Entrepreneurship requires innovation. The entrepreneurial failure that lies behind unemployment is also therefore innovation failure. It is often argued that the opposite applies, i.e. that new technologies, which reduce the need for manual work, have created unemployment and driven down the earning power of unskilled people. However, this is not borne out by the facts of history. In terms of flexible problem-solving behaviour and ability to operate in a wide variety of environments, there is no technology that can yet compare with ordinary human beings, even the least competent of them.

The basic problem is that contemporary societies are failing to make the kinds of fundamental innovation that could generate dramatic new possibilities for occupying people. This is manifest in the way that work has been shifting from the secondary (manufacturing) to tertiary (services) sector.¹⁹⁴³ The kind of innovation that leads to a new service industry tends to be more superficial than the kind of innovation that leads to a new manufacturing industry. All sorts of services, for example, have been introduced based on the telephone – such as weather information and sex chat lines – and these are all innovations, creating employment, but none has anything like the potential of the original product.

The great wave of invention peaked around the end of the nineteenth century. During the twentieth century, even the most important inventions tended to be improvements on existing techniques. The diesel locomotive replaced steam, the jet engine replaced the propeller, and the CD replaced vinyl. These were by no means insignificant, but they were not in the same class as the invention of a completely new possibility, like flying or audio recording. To be fair, the computer has been a fundamental innovation, and its consequences are still reverberating through the world. Nevertheless, such innovations have become fewer and further between.

One area of innovation failure is the exploitation of space. At the height of the moon race in the 1960s, NASA signed up to a very ambitious manned space programme. By 1980, this would have seen more than 200 people in space, and, by 1989, a semi-permanent Mars base and a permanent colony on the moon. This magnificent programme, however, was destined to crumble like a sandcastle at high tide. Immediately after the first

moon landing, in July 1969, the programme began to be cut back. Eventually, only the space shuttle remained from the original vision, and that was in a much de-scoped version that first flew some six years behind schedule. Humanity's use of space today is very limited in comparison to what was envisaged thirty or forty years ago.¹⁹⁴⁴ It is nearly three decades since humans were last on the moon. There is little sign that they will be returning there soon.

For the most part, space exploration has been an academic pursuit. Experiments have been performed on the development of quails' eggs or on how flames develop in microgravity. No doubt, these are important in their own way, but they stand in relation to the long term potential of space in much the same way that the ancient Alexandrian experiments with steam power stood in relation to the industrial revolution.

The problem is not so much government cut-backs. It is that entrepreneurs have failed, for whatever reason, to embrace the possibilities. Of course, satellite television and telecommunications have been successful – although even this is partly due to international organisations like Intelsat and Inmarsat. More thoroughgoing exploitation of space by private initiatives is running into institutional barriers. Sheer cost is one. Governments' security fears are another. Beyond this is the international protest that might be expected if private companies tried to build nuclear power stations in earth orbit or conduct strip mining on the moon. NASA's Cassini spacecraft, due to explore Saturn, was opposed by demonstrators both at its 1997 launch and 1999 earth flyby, on account of its on-board nuclear power plant.¹⁹⁴⁵

Many potential innovations are failing because of active opposition. Genetic engineering, which was regarded with great enthusiasm some 25 years ago, is increasingly becoming a pariah activity. There is growing resistance, not just from fringe groups, but from mainstream consumer groups and even governments.¹⁹⁴⁶ Genetically modified crops, which are just at the beginning of the technical possibilities, are regarded with increasing fear. This fear may be irrational but it is no less real, and, rather than being contained and allayed, it is actually growing and spreading from Europe to the United States. In Britain, concern has been expressed by the Prince of Wales, the British Medical Association and the Women's Institute, while the actor Paul Newman's daughter is now highlighting the issue in America.¹⁹⁴⁷ A number of major companies, including Unilever and Cadbury, have announced their rejection of GM ingredients, while the Royal College of Architecture has withdrawn from planned trials.¹⁹⁴⁸

There is now a whole industry devoted to investigating the possible harmful effects of foods

and drugs. The requirements on new pharmaceuticals have become so stringent that even aspirin would not be accepted today.¹⁹⁴⁹ This huge aversion to risk places a major obstacle in the way of innovation. Ironically, people may be being exposed to greater risks when drugs with many potential benefits are rejected just because of the remote possibility of certain side effects.

It once seemed that a world-wide switch to nuclear power was inevitable. Yet many western countries, including the United States, are now abandoning their nuclear programmes.¹⁹⁵⁰ Britain has only one nuclear power station under construction. Some countries, like Japan, Germany and France, are still highly dependent on nuclear power, but even there, reactor replacement, let alone expansion, is becoming increasingly difficult. Japan was once one of the most pro-nuclear countries but attitudes are changing, not least because of the accident at the Tokaimura plant in 1999, which killed one worker and exposed dozens of others to radiation.¹⁹⁵¹ The west is even discouraging other countries from developing nuclear technologies. Austrian protesters have campaigned against the Czech Republic's Temelin reactor, while the German Green Party has opposed the sale of a reprocessing plant to Russia that would have helped convert nuclear weapons to civil uses.¹⁹⁵²

The problem for nuclear energy is the widespread perception that it is not a safe or desirable means of power production. Even CERN, which investigates nuclear particles, has re-named itself the European Organisation for Particle Physics because of the growing negative connotations of the word 'nuclear'.¹⁹⁵³ The planning inquiry for Britain's last reactor dragged on for years, and was frequently disrupted by protesters. The nuclear authority had to defend itself against all kinds of concerns. Yet the reality is that nuclear fission is a very safe form of power production, as many unbiased reports have concluded.¹⁹⁵⁴ This assertion is based not on theoretical arguments but on fifty years of experience, Chernobyl and other accidents notwithstanding.

It may be argued that a large expansion of nuclear power is not really needed, since the industrial countries currently meet their power needs quite satisfactorily as it is. However, this is to take a static view of the world. Vast amounts of cheap power, not to mention more exotic nuclear technologies, would facilitate such things as the development of space exploration, which now seem so prohibitively expensive. Nuclear power has also helped France and Japan to achieve the largest reductions in carbon dioxide emissions of all countries.¹⁹⁵⁵

The broader environmentalist movement tries to put a brake on all economic development.

Despite the obvious benefits that it has brought, environmentalists remain implacably despairing of contemporary technological civilisation. Much of their agenda is based on irrational fears and unreserved stigmatisation of certain bugbears. Asbestos, for example, was once a darling of industry, incorporated in everything from surgical dressings to toothpaste.¹⁹⁵⁶ The inventor of DDT received the Nobel Prize in 1948.¹⁹⁵⁷ Yet these days one might as well admit to strangling puppies with one's bare hands as speak up for the possible advantages of asbestos or DDT. The environmentalists have succeeded in giving these words blood-curdling associations in popular consciousness. This is more about taboos than rational evaluation of risks and benefits.

The taboos are based on simplistic reasoning. At best, they compress important complexities. At worst, they are plain wrong. Environmentally inspired decisions have sometimes been quite disastrous. For example, the fuss over DDT – a powerful insecticide – resulted in its being banned even in countries where it was being successfully used to achieve a rapid reduction of malaria and big increases in agricultural productivity.¹⁹⁵⁸ In Sri Lanka, where malaria had been almost eliminated with DDT, there were a million new cases within four years of the ban. The ban was rescinded in 1969, but not before great misery had been caused for very many people.¹⁹⁵⁹ Genetic modification would eliminate or drastically reduce the need for chemical insecticides at all yet is even more feared. Similarly, the campaign against lead in petrol derived its force from a single American study that has now been discredited. Unleaded petrol emits far more noxious substances into the atmosphere, increases carbon dioxide emissions and uses up the world's oil reserves faster than leaded petrol. The oil industry was well aware of all this from the outset but was in no hurry to debunk the virtuous image that it gained from supporting the switch.¹⁹⁶⁰ The fact that these issues have received almost no publicity from the environmentalist movement shows that a concern for human health was only an excuse for the original criticism. The real complaint was against motorised civilisation itself.

In 1975, a Brazilian regional governor stated that the goal of conserving half a dozen Indian tribes was holding back the development of Brazil and its riches of gold, diamonds and uranium.¹⁹⁶¹ Such remarks would seem appalling to any environmentalist and indeed to many ordinary people as well. Yet if the thinking that the governor opposed had prevailed in the past, the human race would still consist of a few million hunter-gatherers thinly scattered across the globe.

Sixty years ago, in some parts of the British midlands, curtains and furniture covers had to be washed once a week as grime settled out of the air.¹⁹⁶² That is now a thing of the past.

Nevertheless, it is in the richer countries, and after great improvements in the quality of the environment, that the environmentalist movement has become most prominent. This is because environmentalism is not about the environment. It is about a general dissatisfaction with highly economically organised, industrial society. Friends of the Earth has said that it opposes nuclear power, even if it is cheap and safe, because it does not believe that a high-energy economy is the direction in which the human race should be going.

Recently the environmentalist movement has become less prominent. The membership of Greenpeace has been falling, and its activities have received less press coverage.¹⁹⁶³ However, this does not mean that environmentalism is on the wane. Rather it reflects the fact that the ideas have become mainstream. This anti-growth, anti-industry attitude has been taken up by society as a whole. The British government, for example, has created a Sustainable Development Commission, which is chaired by the former head of Friends of the Earth. It apparently believes that the human race needs a British quango to guide its development and progress.

Education

Education is associated with economic organisation. A breakdown in the transmission of learning is one of the most characteristic features of a dark age. It is therefore a sign of the growing potential for disorganisation that the education systems of developed countries are markedly deteriorating.

In America, there is relatively hard evidence for this in the form of declining scores on the standardised Scholastic Aptitude Test.¹⁹⁶⁴ In Britain, by contrast, the evidence suggests that standards have risen phenomenally. For example, the proportion of A-level passes has been climbing steeply since 1982, after thirty years during which it had remained steady. The number of entries to A-level has risen, from 100,000 in 1950 to 750,000 today.¹⁹⁶⁵ This should indicate a vastly better educated population.

Certain checks suggest that something is wrong with this rosy picture. For example, universities increasingly put on remedial classes for their new undergraduates. Texts once studied at O level are now studied at A level, and fewer texts are studied overall. Some examiners have spoken openly about the falling quality of the papers they mark. In 1997, an examiner with fifteen years experience said that the A-level scripts were the worst he had yet seen. Spelling, grammar and knowledge of the subject were all abysmal.¹⁹⁶⁶ In 1999, one examiner spoke of her depression after marking overseas A-level scripts, because they reminded her of what standards in Britain used to be like.¹⁹⁶⁷ Another reported low standards among the examiners themselves, describing how one of

her colleagues mocked one obviously able candidate for using 'made-up' words like 'hyperbole'.¹⁹⁶⁸

While a third of English A-level grades are now A or B,¹⁹⁶⁹ various studies show illiteracy to be increasing, not just among disadvantaged groups, but also among middle class children and even undergraduates.¹⁹⁷⁰ The ubiquity of television and computer games seems to be having an effect. In America, some colleges are now recording text books on audio tape, for the benefit of students who will not and possibly cannot read. A government-commissioned study of English exam scripts between 1980 and 1995 found clear evidence for deterioration. The earlier papers displayed a more adventurous vocabulary, more consistent sentence structure, and more accurate spelling and punctuation. There were three times as many spelling mistakes in 1995 as in 1980.¹⁹⁷¹

It is incontestable that the quality of teachers is declining. Teaching has become financially unrewarding, physically hazardous, and generally frustrating.¹⁹⁷² Even countries that have traditionally valued teachers, like France and Germany, are cutting back on their pay and conditions. Throughout the developed world, schools are inadequately maintained, accentuating the aura of a third-class profession, fallen on hard times. Many of them date from the 1960s and are shabby, soulless, depressing places. In the autumn of 1998, French pupils were rioting in the streets to protest against the poor conditions in their schools.

The teaching profession has borne the brunt of excessive regulation and political interference. Successive revolutions in teaching methods have produced a steady retrograde motion, with the result that British and American pupils lag behind on almost every international measure of educational achievement. The teachers on whom these ill-conceived schemes are imposed mostly deplore the principles involved, but they nevertheless bear the blame for their failure, both from perplexed parents and in media commentary.

At the same time, virtually all the sanctions teachers used to keep order in the classroom have been removed, and they are increasingly at risk from accusations of physical or mental abuse. A teacher called a 'black maggot' by one of his 13 year old pupils found himself suspended for refusing to teach the boy. He said that staff at his school were regularly shoved and threatened by children.¹⁹⁷³ A primary school head received a suspended prison sentence for allegedly slapping a boy who kicked, pushed and verbally abused her.¹⁹⁷⁴ The case was thrown out on appeal but the message remained – teachers are punch bags and cannot fight back. In a survey, two thirds of heads said that they had been subject to verbal or physical assaults from parents.¹⁹⁷⁵ Ashworth hospital, for the criminally insane, has been training teachers

how to deal with violent pupils who are increasingly likely to kick and bite.¹⁹⁷⁶ Even in Japan, whose education system was once envied, there is a growing problem of *gakkyu hokai* (disintegrating classrooms). In 1999 a pair of fifteen year olds put five of their teachers in hospital, two with broken cheekbones.

Those who can get out of this situation largely do so. A 1998 report showed that teacher training now attracts the least qualified graduates of any course. Despite a new six thousand pound allowance, take up remains low.¹⁹⁷⁷ To become a mathematics teacher it is only necessary to have a GCSE C grade in the subject.¹⁹⁷⁸ Yet with these, the lowest qualified teachers for decades, great improvements in A-level results have been achieved. Clearly, this is not credible. Standards have fallen without a shadow of a doubt. It is no coincidence that pass rates have been rising most in subjects like religious studies, art, and design, where assessment is largely subjective, and not in subjects like physics, where the criteria of success or failure are more objective. Indeed, there has been a great movement into these more subjective subjects, so that entries for physics and chemistry have fallen even when the overall number of entries has increased. This trend continues at university level, where courses in surfing, bagpiping and media studies are booming, while the proportion of science students is falling. In some universities, science and engineering courses are so hard to fill that even those with rock bottom A-levels can get in.

An insight into the lowering of examination criteria was provided by a 1998 row involving academics at Heriot-Watt University. They erupted in protest when university administrators tried to boost the pass rate by encouraging more generous marking. It was revealed that students were getting degrees with scores as low as 13 percent on their final exams. One of the teaching staff's key complaints was that the relaxation of standards which had already occurred was causing huge discipline problems. Perceiving the general reluctance to fail them, some students were refusing to take seriously their lecturers' demands for essays and assignments.¹⁹⁷⁹

The number of first class degrees awarded has risen by 50 percent in the last ten years,¹⁹⁸⁰ suggesting the same inflation as at GCSE and A level. Indeed, the inflation extends to the professors themselves. Whereas 6 percent of history departments got the highest ranking for quality of research in 1992, 25 percent did so in 1996. This implies that academia has been gaining dramatically in excellence, even though funding has nearly halved over the last twenty years. The reality, according to Professor David Cannadine of London University, is that British universities have become second rate. Even Oxford University is no

longer world class and does not have a single Nobel prize winner on its staff.

Having become free and universal, education is no longer regarded as a privilege but as a right. This is a classic illustration of economic decadence. In less privileged parts of the world, education is still valued and standards remain strong. Some black families are sending their children to be educated in the Caribbean because of their dissatisfaction with the British system.¹⁹⁸¹ In Lebanon, parents send their children to schools run by Hezbollah, the Islamic militant organisation, even though they may not share Hezbollah's particular beliefs. The schools are recognised to be of high quality and teach English at an early age.¹⁹⁸²

Much of the agenda for British education over the last fifty years has been less about transmitting society's knowledge to the next generation and more about issues of social equality. Grammar schools are being closed down for ideological reasons, even though they provide an excellent education to children of every background. Mixed-ability teaching has been embraced despite the evidence that all pupils do worse under this system. Some parents are even demanding that their severely physically disabled or retarded and emotionally disturbed youngsters should be educated in normal classrooms. This shows little heed to the disruption caused to other pupils and is again in spite of evidence that such children fare better in specialist schools.

Ironically, the efforts to eliminate privilege have had the opposite effect. With no more grammar schools, those who can afford a private education pull well ahead of the able but underprivileged youngsters left behind in the deteriorating state system. The proportion of state-school pupils entering the more prestigious universities has been declining since the 1960s, despite the latter's efforts to attract them.¹⁹⁸³ Less affluent students are also dropping out of university at a great rate, with as many as a third failing to complete their degrees in some institutions.¹⁹⁸⁴

Intellectual fashions are downgrading the concept of objective knowledge anyway. One prominent philosopher has repeatedly attacked the idea of science as a force for progress. Post-modernism asserts that no knowledge is privileged as more true than any other knowledge and hence that studying trivial pop culture is the same as studying Milton or Chaucer. Things like rationality, truth and objectivity are not even recognised as ideals. All this provides a justification for remaining sanguine about declining standards.

Nevertheless, for those who understand the logic of dark ages, the implications are clear when the light of learning is seen to flicker. The youngsters who should be the innovators and entrepreneurs of the future are being less well

prepared than their parents were for the task. The Egyptians and others lost their own writing. It is as well to reflect on that when one considers the contemporary evidence for declining literacy and

the problems of filling courses in science and engineering, which pass on some of this civilisation's most characteristic knowledge.

Chapter 25 - Internal dis cohesion

No common values

This chapter describes the breakdown of social relationships. It is about the disappearance of shared values and of the sense that people are participating in a common project. As an example of this process, Francis Fukuyama cites the scouting movement. Originally set up to encourage Christian and manly virtues, the scouts have been forced to accommodate girls, gays and Jews, via a series of court actions. While more equitable, says Fukuyama, this also means that scouting has lost the very features that made it a strong moral community.¹⁹⁸⁵ It is a microcosm of what is happening in society as a whole. Moral absolutism is viewed as sinister and repugnant. Diversity is positively celebrated. The wishes of the individual are paramount, not those of the group. Loyalty is corroded and selfish impulses triumph.

A society's values are expressed through its art, and nowadays art is more concerned with confronting orthodox values than with promoting them. In 1996, Durham cathedral displayed a piece of video-art, which showed a nude man slowly ascending and descending in water. The work is not necessarily unpleasing and some might well find it moving and inspirational. Nevertheless, many people could consider it offensive, and the cathedral screened off the video on police advice.¹⁹⁸⁶ Clearly, an artwork that has to be screened off cannot be fully effective in affirming the church's message.

Celebrated secular works have recently included rooms full of junk, actual human body parts, a chair to which the artist glued a ball of her pubic hair, a man's photographs of himself in a train lavatory, a fly named Henry displayed in a miniature wire cage, and an old telephone. This is not the work of perverts and eccentrics. It is mainstream Turner Prize-winning stuff. Not so long ago, such offerings would have generated acres of negative press coverage. Nowadays, they are reported with nothing worse than wry amusement and often with straightforward approval. Apparently there are no longer widely shared values that can be seriously transgressed.

Contemporary art is characterised by cheapness and hastiness. Everything is in the idea and nothing in the execution. It is the art of gimmickry, or of creativity without skill. The artist Ellsworth Kelly has spoken of the 'new freedom' and the fact that there is 'no longer a need to compose'.¹⁹⁸⁷ In other words, such art is easier to dash off. In terms of effort and expertise, there is a genuine gulf between, say, Michelangelo's David and rooms of junk or balls of pubic hair. Modern art celebrates nothing and therefore does not warrant the devotion and commitment that are so strongly exuded by the art of former times.

There has not merely been a change of taste and fashion. Rather, taste and fashion have become increasingly fragmented. Whereas people would formerly all have dressed more or less the same, or worn their hair in a similar way, many different styles may now be seen in any social gathering. There has been an explosion of diversity in things like children's names. Originality and distinctiveness are continually sought after. Once, magazines and television channels were few enough that families everywhere absorbed much the same messages. Now they have multiplied tremendously and cater to every conceivable taste.¹⁹⁸⁸ In every area, the trend is away from bringing people together by reinforcing stereotyped views or common standards and towards compartmentalising them via a proliferation of lifestyle choices.

The very notion of assimilating people to a single dominant culture has been given up even as an ideal. Minority groups are encouraged to preserve or even extend their separate values and identities. In 1998, Britain set up the first Muslim state school, after it was revealed that hundreds of girls were being kept at home by parents who did not wish them to attend the existing local schools.¹⁹⁸⁹ Clearly, these parents were keeping their daughters at home because they did not wish them to absorb British values, attitudes and beliefs. Providing a publicly funded state school gave official sanction to that wish. (There are already many Muslim private schools.) Hence, Britain is now actively raising children who have no commitment to things that the country traditionally considers to be important, and no sense of participation in its society.

Looking after number one

Dis cohesion means that individuals are regarded as valuable and important in their own right. There is a concern with the ordinary person that is now seen everywhere, from academia to the popular media. Historians are increasingly studying the everyday lives of common people.¹⁹⁹⁰ Television documentaries focus on ordinary people doing ordinary jobs. Some American lawyers are even using anti-slavery legislation to secure animals equal status with human beings.¹⁹⁹¹ There is a growing casualness and informality in every walk of life. This is about relaxing community-based standards in the interests of individual well-being. Nurses' uniforms, for instance, have been redesigned, with the emphasis on personal comfort and safety rather than on smartness.¹⁹⁹² Nurses' own needs are now perceived to be more important than the effect of their appearance on the people they are serving.

During the 1980s, individualism was promoted as a political creed, and selfishness and social irresponsibility were almost held up as virtues. The

'survival of the fittest' philosophy was being softened by the 1990s,¹⁹⁹³ but selfishness has persisted in less ideological forms. Advertising campaigns have celebrated 'today's kids who do only what they want to do' and have urged people to 'be yourself'. The message is that putting oneself first is desirable and something to be proud of. Cherie Blair is said to have praised the Finnish prime minister for taking time off for paternity leave. In the past, prime ministers might have been praised for not taking paternity leave, for putting public duty ahead of their personal rights, and for behaving selflessly rather than selfishly. Today it is the other way around. Delivering an address at the site of Christ's sermon on the mount, the pope recently spoke of the new beatitudes: blessed are the proud, the unscrupulous, and those who prosper at any cost.¹⁹⁹⁴

According to the American sociologist Robert Putnam, the amount of effort people invest in helping others has been declining for at least two generations.¹⁹⁹⁵ Some writers disagree with his analysis,¹⁹⁹⁶ and certainly human beings have not changed in themselves. Many people still have selfless impulses. Nevertheless, it is a question of norms and here there is definitely a bias in favour of self-interested behaviour. Voluntary work itself shows this, with a tendency towards more local, specialised concerns. There is a proliferation of groups each with narrower membership.¹⁹⁹⁷ Opinion surveys also show that people are less likely to socialise with their neighbours. They trust other people less and believe that society is becoming more selfish.

Citizenship has been re-interpreted as being about rights rather than duties. President John F Kennedy famously admonished his fellow Americans 'do not ask what your country can do for you; but ask what you can do for your country'. By contrast, Prime Minister John Major introduced a series of Citizens' Charters, which actually told people what they could expect their country to do for them. The National Health Service Patients' Charter, for instance, speaks of the 'right to complain'. More than one patient has taken this right so far as to sue the NHS when a presumed fatal illness turned out not to be so. In general, people are encouraged to feel aggrieved, a sentiment that seems to be behind the growing 'rage' among motorists, among train passengers¹⁹⁹⁸ and elsewhere.

In the rights culture, groups that can claim to be oppressed are increasingly recognised as entitled to special treatment.¹⁹⁹⁹ To be sure, their complaints are not without substance. In the past, these groups usually *have* been 'oppressed', since cohesive, moral societies are inherently oppressive, especially towards minorities and dissenters. Yet the new habit of indulging these groups is not leading to a more equal and harmonious society. In

some cases, it is only promoting a culture of helplessness and dependency, while perpetuating the message that these groups are naturally at odds with the wider community.

Selfishness is also evident in the growth of personal injury litigation. Among the more extreme instances are the boy who successfully sued the landowner for falling from a tree while trespassing, or the drunken man who tripped over a kerb in front of a van and received half a million pounds because the roads authority should have foreseen that pedestrians might not be sober.²⁰⁰⁰ Such lawsuits imply a drastic loss of moral responsibility. Far from accepting suffering for the good of the community, people do not expect to suffer even for what they have largely brought on themselves. More generally, litigiousness reflects a corrosion of the sense that people possess shared goals. They do not trust each other and must resolve all their differences through the courts.²⁰⁰¹

While individuals are caring less for the community, the community is caring less for them. Welfare entitlements are being cut back worldwide. Even the Scandinavian countries have begun to dismantle their extensive social programmes. In many other ways, communities are giving back less to their members. Museums are unlikely to be free these days. They exploit the investment of the original benefactors, but sack their scientists and lay down little new for the future. Even some cathedrals now charge admission. It is not a case of blaming governments or particular institutions. This is all part of the broader logic of dis cohesion. Welfare systems have been cut because selfish people abused them. Public institutions have imposed entrance fees because fewer people donate voluntarily.

Philanthropy, while by no means dead, is certainly in decline. Jeremy Paxman argues that it used to be acceptable to make money so long as the responsibilities that came with it were recognised. Today, however, it is acceptable to make money, pure and simple. Even when corporate donors do contribute to theatres and opera houses, it is to get free advertising in return.²⁰⁰² In Europe, companies used not to draw attention to their profits, lest they become obliged to share them with their employees and with charitable recipients. Now they brazenly advertise the money they have made, without feeling any such compunction.²⁰⁰³

The Factory Acts have been extensively repealed over the last twenty or thirty years with the result that, in many ways, employers are less obliged to treat workers fairly. At the same time employers have been burdened with other obligations, such as to make special provision for disabled workers and grant extended maternity leave. These apparently contradictory trends reflect the same underlying phenomenon. People are no longer bound together in a framework of mutual

and morally constraining duties, but set against each other in a framework of competitive and morally liberating rights.

The individualist philosophy also dictates that the star players, whether in business, football, or the arts, must now receive a larger share of the rewards. There is a winner-take-all mentality, and a disinclination to recognise the role of others in one's success.²⁰⁰⁴ Senior executives enjoy extravagant remuneration, seemingly unconnected to their effectiveness.²⁰⁰⁵ Even trade unions now accept that the best workers should get higher pay. In fact, trade unionism generally has declined,²⁰⁰⁶ which can be understood as another symptom of dis cohesion. It reflects diminished solidarity between working people, who are more likely to seek rewards competitively and individualistically. Certainly it does not mean that the developed countries have become workers' paradises. In an OECD index of employment conditions, Britain and the United States both scored zero.²⁰⁰⁷

Every kind of social pathology – suicide, alcoholism, murder, mental disorder – has been on the rise over the last twenty years. These are manifestations of the alienation, purposelessness, and generally low respect for other human beings that are the by-product of individualism. Even in Japan and Korea, renowned for their community ethos, divorce and youthful rebelliousness are on the increase. Singapore, which boasted of its freedom from western selfishness, faces growing demands for personal freedom and a rising crime rate.²⁰⁰⁸

Some fifteen years ago, a United Nations report observed that laws and taxes are increasingly questioned and evaded around the world, and that this implies a sense of irresponsibility towards fellow citizens. Corruption among public servants is on the increase. This may not be surprising say in Africa, where the average civil servant's salary is so low that the acceptance of bribes is a survival necessity.²⁰⁰⁹ However, the developed countries are moving in the same direction. In Britain, public sector pay and conditions have been steadily eroded, and at the same time, according to a government committee, levels of probity and integrity have declined.²⁰¹⁰

In every walk of life, dishonest and venal behaviour is increasingly familiar. The Law Society is receiving complaints about fraud and malpractice among solicitors faster than it can actually deal with them. It also notes that the wrongdoers are becoming more sophisticated. Among politicians, stories of sexual impropriety and corruption are commonplace. This is despite the arrival of new governments pledging a fresh approach and the setting up of committees to promote higher standards. In America, the CIA and even the then vice-president seem to have profited alongside the mafia in a banking scandal that cost

many ordinary people their savings during the 1980s.²⁰¹¹ In Germany, Helmut Kohl's embroilment in a funding scandal (not for the first time) has revealed that, contrary to assumptions, conduct there is no more upright than anywhere else. Of course, things like bribery and adultery are nothing new, even for people in high places. However, they seem to be more endemic and are losing shock value.

Alienation from fellow citizens is also manifest as a rise in general crime. In some parts of the United States, people are actually paying to have their car radios removed, for fear of being broken into.²⁰¹² This is clearly retrogressive. The gains of the twentieth century are being reversed as the social fabric deteriorates. Thus, one sociologist has attributed the decline of violent crime that took place in the nineteenth century to the way that schools, factories and the church served as agents of conformity and cohesion.²⁰¹³ The problem now is that such institutions have lost their authority. The cohesion that was built up in the nineteenth century is breaking down again at an alarming rate. At the same time, new laws that ban once innocent pleasures like smoking and fox-hunting are encouraging even ordinary people to feel that their interests have diverged from those of society in general.

Breaking the bonds

Dis cohesion is seen in the breaking of ties of love, loyalty, affection and allegiance that have previously brought people together as members of a community. Technologies like recorded music and the home video have replaced more communal activities and so reduced people's opportunities to get to know each other.²⁰¹⁴ Sport has become for consumption rather than participation.²⁰¹⁵ The internet brings people together from all corners of the world but reduces the need for them to interact with their own household.

There has been a general weakening of the bonds between adults and youngsters. Parents spend considerably less time with their children, who are kept occupied by television and computer games.²⁰¹⁶ During leisure time, families disperse to their individual private corners of the house where they engage in some form of solo activity. Even when social events do occur, they are likely to be age-segregated. Young people also continue in education longer and so do not meet adults as they might at work.²⁰¹⁷

Media coverage of child abuse and legislation against parental discipline have helped to propagate the idea that adults are primarily a threat to children. This makes it very difficult for adults to provide a strong moral context. One father, a local councillor, spent the night in a police cell for trying to prevent his fifteen year old daughter from visiting unsuitable friends whom he feared might give her drugs. Social workers allowed her to

spend the night with the people of whom her parents disapproved, after which she returned home.²⁰¹⁸ According to one teachers' union, hundreds of teachers are being accused of abuse every year, and 80 percent of the cases turn out to be without foundation.

The government is trying to take over various aspects of the lost parental role. Britain has plans to teach three and four year olds skills such as decision making, tidying up and talking to other people.²⁰¹⁹ Citizenship classes have been introduced into the school curriculum. These are a symptom of the problem and not a cure. Morality must be lived and cannot be taught with a blackboard in the space of one hour a week. Such classes are unlikely to succeed when the authority of the messengers, i.e. the teachers, is approaching its historical nadir.

Dis cohesion is seen clearly in the disappearance and downgrading of the family, which is the starting point for all social ties. The divorce rate has increased dramatically in every developed country. In Britain and the United States, about half of all marriages are likely to end in divorce.²⁰²⁰ Few people welcome this trend, but it is inextricably bound up with the whole tide of self-realisation and cannot be reversed. Criticism has been levelled at the Child Support Agency concerning its swingeing demands for maintenance payments from absent parents. In effect, the CSA is helping to keep families together by setting up financial disincentives against divorce and re-marriage, yet that is deplored as an infringement of people's right to behave selfishly. Even the chairman of Relate, which is supposed to help couples stay together, has attacked 'nuclear family supremacists' who believe that children should have two parents.²⁰²¹

The rate of illegitimate births has also increased dramatically virtually everywhere. In Britain and the United States, one child in three is now born outside marriage, compared to the long-standing historical figure of about one in twenty.²⁰²² This takes these countries back to the conditions of at least the eighteenth century.²⁰²³ There may soon be more unmarried than married people, a situation that has not been known since records began in 1801.²⁰²⁴

Illegitimacy means that children's relations with their kin, especially paternal kin, are not explicitly recognised, endorsed and legitimised by the wider community. Their place in society is ambiguous and so are their duties and obligations. This is particularly true when illegitimacy implies single parenthood, which by and large means single motherhood. In Africa, now, men are perennially adrift and nearly half of all households contain no male adults.²⁰²⁵ The developed countries are moving in this direction. Although a 1997 report professed to expose the 'myth' of the feckless and

absent father, it only proved that the figures are not as lurid as some commentators might lead one to expect.²⁰²⁶ The nuclear family falls a long way short of the near universality it enjoyed not many decades ago.

The breakdown of the family is related to a whole host of other social defects, such as child poverty, child abuse, and juvenile crime. Sociologists have established at length that children whose fathers are absent do worse academically and have greater social problems than those with two parents.²⁰²⁷ Children from broken homes are more likely to repeat the pattern themselves, creating the snowball effect that is readily apparent in the statistics.

These problems are intimately linked to deep, dis cohesive tides in human affairs, such as the welfare state, individualism, and female employment. They certainly cannot be cleared up just with better sex education. Indeed, teenage pregnancies have actually declined over recent decades.²⁰²⁸ In the 1950s, over 60 percent of brides were pregnant at the altar. However, in those days, marriage was necessary to avoid social stigma, not to mention economic hardship. Now, though, a young woman is more likely to have a job than her male partner is, and in any case she is entitled to housing and benefits in her own right. She has little incentive to share her space with some restless yobbo, who would probably reduce her standard of living rather than contribute to it. In 1998, Britain registered the highest rate of unmarried teenage motherhood *in the world*.²⁰²⁹

The breakdown of the family removes an institution that formerly helped to give the two sexes a stable orientation to each other. Male-female relations have become increasingly strained and difficult. Workplace romance, though common in practice, is now a minefield of potentially inappropriate behaviour. The recent crime of spiking women's drinks with amnesiac drugs in order to rape them, which is on the increase,²⁰³⁰ makes male approaches to women in social settings an arena for misgiving and circumspection. Considerable currency has been given to extreme feminist doctrines, such as that all men are rapists, according to which gender relations can never be anything but poisonous. So great are the anxieties that a twelve year old girl has actually been placed on the sex offenders' register for 'abusing' three boys.²⁰³¹

The average man, who thought that he was behaving responsibly by getting up every morning to go to work and provide an income for his family, now discovers that all along he was repressing his wife's burning desire for self-realisation. As women intrude on their former roles, men have been left looking somewhat superfluous. They feel disadvantaged, and the majority of complaints about sex discrimination are now from men.

Perhaps not surprisingly, the male suicide rate has been rising while the female suicide rate, which was lower anyway, has been falling.²⁰³² Suicide is the classic response to purposelessness and a sense of being unwanted. Ironically, women are not necessarily happy with the situation either. They have tended to take only part time jobs, suggesting that their desire to join the work force is not as strong as ideology would have it.²⁰³³

In effect, contemporary societies are raising generations of young men who have no satisfactory orientation to adult authority, who lack self-control, who are not tied down by the obligation to get married and support a family, and who suffer from ineffable feelings of aimlessness, resentment and rage. This is not a happy situation. A few of them may commit suicide, but most do not; they are still there, embittered and adrift. Their unsatisfactory lives constitute the kind of combustible material on which a dark age feeds.

The growth of meritocracy has helped to rupture social bonds along another dimension, i.e. between less privileged and more privileged people. Increasing social mobility has meant the movement of individuals but not the merging of classes. The talented have been able to progress, but the weak have fallen behind. Competitive individualism has encouraged and justified the notion that the poor are to blame for their failure. Those who achieve wealth and status through their own efforts tend to have fewer feelings of responsibility towards the less fortunate than do those for whom wealth and status are an accident of birth.

The result has been a growing gap between the life experiences of rich and poor, not just in income but also in things like health and life expectancy. The mentally ill are more likely to end up on the streets, as are those who have run away from children's homes or abusive families, and lack the education, self-esteem and social skills to get a job. Today's dis cohesive societies afford less help to those who cannot, for whatever reason, help themselves.

Social bonds are also rupturing along cultural and ethnic lines. Growing separatist sentiments threaten what once seemed to be homogenous populations. The Basque independence movement was only founded in 1894. The Catalan Jocs Florals festivals and the Welsh Eisteddfodau, which have been important in fostering national consciousness, are similarly nineteenth century revivals.²⁰³⁴ Such movements are self-consciously regressive and not lingering hangovers from the past. They represent new resentments and new aspirations. Separatists actively try to spread the use of traditional languages and re-erect barriers that came down long ago. In the nineteenth century, children were punished for speaking Welsh at school.²⁰³⁵ Now it is on their curriculum. Some Cornish separatists are

reviving a language that died out in the eighteenth century;²⁰³⁶ they have reinstated the name Kernow for their county, had Cornish road signs erected, and applied for recognition by the European Union.²⁰³⁷ There is also now talk of formal recognition of the Scots dialect, and the first novel in Scots was recently published.²⁰³⁸ Even the United States is seeing a narrowing of people's geographical loyalties. There has been a boom, for example, in state, regional and local magazines,²⁰³⁹ and one Texas town has declared itself officially Spanish-speaking.

The developed countries are seeing the growth of substantial immigrant communities within their borders, and they now explicitly recognise themselves as multicultural. London is the most diverse capital in the world, with over 300 languages represented among its schoolchildren, only two thirds of whom speak English at home. Immigrants often make disproportionate cultural and economic contributions to a society. Many of the richest people in Australia, for instance, are immigrants, and there are even some illegal immigrants among America's most successful entrepreneurs. Immigration is not a problem in the sense of causing either spiritual or material impoverishment – if anything, immigrants have the reverse effect. However, when immigrants retain a strong separate identity, they exert a highly dis cohesive influence on a society. The sense of community within a nation is disrupted. It is held together less convincingly by mutual loyalties.

Without social relationships, people find it hard to live together. Even England and Scotland are pulling apart, after three hundred years of trying. Despite twenty five years of legislation, racism remains endemic in Britain and may even be increasing.²⁰⁴⁰ The immigrant minorities are not necessarily inclined to repay the official tolerance shown to them with understanding and acceptance of the host culture. On the contrary, as their numbers grow, they are increasingly vocal in their rejection and condemnation of this culture. At each general election since 1987, British Muslims have published a manifesto entitled 'The Muslim Vote', which sets out their demands. Like the Germans in ancient Rome, Muslims in the west have considerable contempt for the decadence that surrounds them. That contempt is increasing and becoming more open as western society appears to be failing under the weight of its problems with drugs, unmarried motherhood and crime.

Multicultural societies are based on a contradiction. It is not a question of one community being right and the other being wrong. Even if it were feasible, it would not be ethical to insist that all Asians in Britain should abandon their traditional beliefs and life-ways in favour of some mainstream British standard. Yet that means a continuing cultural hiatus between the two

communities, and concomitant tensions, as the larger feels uncomfortably threatened, and the smaller feels suffocated and distrusted.

In a country like Britain, where minorities still represent less than 10 percent of the population, multicultural doctrines are more about constructing than reflecting social reality. Explicitly embracing multiculturalism reinforces differences and enmity. It insists on labelling people as part of a group rather than recognising their individual characteristics. All black people, say, are lumped together and cannot be in the same group as white people. This inhibits any sense of shared interest. It also denies the fact that culture is not a biological fact. There is no reason why a black child, say, should not acquire English culture just as a white child does. It does not make any difference how long one's ancestors may or may not have been in the country. If there is any argument, though, the truth is that blacks have been in England for many generations. In the eighteenth century, some 6 or 7 percent of London's population was black – primarily sailors who settled there.²⁰⁴¹ Nevertheless, the racists and the multiculturalists share the same wrongheaded view, i.e. that a black person, no matter what, can never be truly English.

The fate of Yugoslavia illustrates the inherent dangers of multiculturalism. Here each community had its own language and television station, and political arrangements reflected ethnic divisions. Good neighbourliness was encouraged between the communities but not intimacy.²⁰⁴² This worked for a while, but when economic bonds deteriorated, the fundamental dis cohesion was tragically revealed.

In Europe, there is a growing undercurrent of hostility towards minorities. Right wing parties are thriving in Italy, France, Switzerland, Austria and Germany.²⁰⁴³ *Mein Kampf*, which is banned in Germany, is the most popular title for Germans to order over the internet.²⁰⁴⁴ Neo-Nazis are especially assertive in east Germany, where they have tried to bully foreigners into moving away.²⁰⁴⁵ In 1995, anti-semitic attacks were running at a rate higher than in the early 1930s just before Hitler came to power.²⁰⁴⁶ In one survey, a third of German people expressed sympathy with Jörg Haider's Freedom Party,²⁰⁴⁷ whose anti-immigration stance brought down sanctions from the European Union when it recently joined a coalition government in Austria. Yet this is occurring at a time when Germany is officially becoming more tolerant, recognising Islam as a religion and opening citizenship to non-ethnic Germans.

Racial conflict is rising throughout the world. In Slovakia and Romania, communities are increasingly polarised.²⁰⁴⁸ In Russia, there are nationalist tensions between ethnic Russians, Caucasians and central Asians,²⁰⁴⁹ and fascist groups have been gaining ground.²⁰⁵⁰ Animosity is also growing in eastern Siberia between Russians

and Chinese immigrants. Meanwhile, Muslims and Christians are at war in places like Nigeria, Egypt, Indonesia and the Philippines. Several serious Muslim-Hindu riots have taken place in India within the last decade, and secessionists are active in Kashmir, Assam and Nagaland.²⁰⁵¹

The United States has the most explosive mix of ethnicities of all. In the 1920s, the US restricted immigration to western Europe. Around 1965, though, in the wake of the civil rights movement, policy changed sharply.²⁰⁵² Each year, Asian immigrants now outnumber western Europeans by more than five to one. More come from sub-Saharan Africa than from western Europe.²⁰⁵³ Whereas minorities previously aimed to assimilate and were publicly encouraged to do so, the emphasis is increasingly on preserving their ethnic identity.²⁰⁵⁴ Possibly the least assimilated group within the United States is the black population. This is despite the fact that black people are largely Christian and their ancestors have often been in the country longer than those of many white Americans. In this case, there has been a self-reinforcing cycle of disadvantage and economic failure. This results not just from white racism but also from black people's own atomisation and lack of confidence. After all, racism alone cannot be a sufficient explanation of black poverty since much more successful groups, including Jews and Asians, have been equally victims of racism.²⁰⁵⁵ Instead of moving closer, the day when blacks might be assimilated into American society seems to be moving further away.

The permissive society

The sociologist A H Halsey notes that Christian values exerted a strong influence on ordinary family life as recently as the 1950s and that this has now all but completely disappeared.²⁰⁵⁶ People no longer feel bound by traditional religion and its strict moral standards. Nor do they expect to impose such standards on others. In one survey, few Britons under 35 regarded any more than five of the ten commandments as important and two fifths of them said that there is no absolute right and wrong.²⁰⁵⁷ Even when the question was put to Anglican priests, only just over half agreed that the ten commandments are applicable today.²⁰⁵⁸ In Italy, the church has complained about a drastic decline in the number of people taking confession. One priest reported that many of his parishioners simply could not think of anything to confess.²⁰⁵⁹ In fact, television is now a much stronger presence in most people's lives than the church, and it projects a largely neutral perspective on most moral issues.²⁰⁶⁰ The increasingly prevalent internet is even more notorious for its reluctance to censor or condemn.

Geoff Mulgan argues that today's moral standards for politicians and business leaders

would have shocked previous generations not for their laxness but for their toughness.²⁰⁶¹ However, this reflects the fact that people are trying to use the legal system to recreate standards that are no longer enforced through the moral sphere. The courts are a poor substitute for peer pressure as far as reinforcing norms is concerned. Japan Air Lines has found that, as Japanese people travel alone more frequently and are not being watched by others, they are increasingly likely to become drunk and abusive.²⁰⁶² What other people think is the primary influence on moral behaviour. Today's widespread personal reluctance to judge others is intimately associated with declining standards of conduct. So long as people look to the political system to restore moral direction, rather than to themselves, it will never be forthcoming.

Permissive attitudes are deeply embedded in contemporary systems of thought. The academic Allan Bloom has observed that young Americans are intrinsically open and relativist. They are nice, he says, rather than noble.²⁰⁶³ Richard Dawkins, who has a professorship in the public understanding of science, claims that science indicates there is no absolute good or evil.²⁰⁶⁴ Popular writings by Dawkins and others appear to excuse selfish behaviour like adultery as merely the consequence of people's logical and innate urge to propagate their genes.²⁰⁶⁵ Such thinking led Robert Ardrey to christen this the 'age of the alibi'.²⁰⁶⁶ Even the mentally ill are no longer to be stigmatised. Their possibly erratic and disruptive behaviour must be accepted. American companies are now required to make allowances for the needs of schizophrenic employees.²⁰⁶⁷

Some politicians and religious leaders have tried to oppose these trends and reassert the need for a strong moral way. Commenting on a book by the Chief Rabbi in this vein, the journalist Simon Jenkins has expressed repugnance at such calls. He says that the moral law is the law of 'slam, whoosh, chop and snap' and a narrow-minded 'Road to Hell'. He points to the Salem witch trials as an example of what happens when moral absolutism prevails over reason, tolerance and moderation.²⁰⁶⁸

It is correct that morality is the reverse of tolerance and that it involves the unreasoned elimination of deviant attitudes and behaviour. Nor can anyone deny that religious zealotry has indeed been responsible for an unusual amount of slam, whoosh and chop throughout history. However, it is wrong to say that this is the 'Road to Hell', insofar as that means having an overall detrimental effect on individuals or the community at large. Strongly religious groups, such as Mormons, Orthodox Jews, and strict Muslims, may be intolerant, but few of their members are on drugs or in prison.²⁰⁶⁹ They may curtail personal freedoms, but in return their members are assured of respect and of never being likely to starve. Hezbollah is not

known for its liberalism, but it does have a reputation in Lebanon as a champion of the poor.²⁰⁷⁰

For at least some individuals, extensive personal freedom is not wholly welcome. Belief in absolutes may satisfy a genuine psychological need.²⁰⁷¹ In their quest for a sense of conviction and sense of belonging, people can do and think some extraordinary things. Members of Japan's Aum Shinrikyo cult paid large fees to drink their guru's blood, semen and urine,²⁰⁷² or even a bottle of his bathwater,²⁰⁷³ so strong was their desire for enlightenment. In western countries, there seems to be something of a reaction against the more extreme laxity of recent times. American students have turned away from promiscuity. Smoking, drinking and drug-taking have fallen among British teenagers.²⁰⁷⁴ Recently Californians voted overwhelmingly in favour of a proposition that rejected gay marriage.²⁰⁷⁵

Within today's tolerant societies there is a considerable undercurrent of sentiment against permissiveness and in favour of recapturing the sense of certainty that seems to have been lost. Fukuyama suggests that Islam is making itself irrelevant by its apparently illiberal nature and that it has no resonance for young people in Berlin, Tokyo, and Moscow.²⁰⁷⁶ He seems to be mistaking what he would like to believe for what is actually the case. Not only are Muslim communities becoming more devout, but also this resurgent Islam is winning converts from Christianity. Western youths, disenchanted by materialist values, are finding Islam attractive. Approximately five come forward every week to embrace the faith at London's Central Mosque in Regent's Park. Of Britain's estimated ten thousand converts, 70 percent are white and they tend to have good educational backgrounds.²⁰⁷⁷ Among the reasons for their conversion, they cite the confused nature of Christian theology and the fact that Islam does not shift the goal posts regarding sexual and other matters.²⁰⁷⁸ Even many mature and conservative people in western countries find themselves sympathetic to Islam's strong moral tone and are prepared to acknowledge that Islam's condemnation of western decadence has some force. Muggings are nearly a thousand times more common in New York than in Dubai,²⁰⁷⁹ which suggests that the west does not have all the answers.

New Christian movements have also sprung up, demanding real commitment from their adherents. The Alpha movement, which started in London in 1979, has spread very quickly in the last three years to reach some 380,000 people in 55 countries.²⁰⁸⁰ Similarly, the so-called Promise Keepers have gained 720,000 members in the space of just five years, with a message that emphasises men's duty towards their wives and children, along

with female submission to male authority. In Latin America, the Protestant churches have been growing strongly by a process of converting indifferent Roman Catholics into enthusiastic evangelists. Judaism is also experiencing a revival. One London rabbi has been packing young Jews into his synagogue with a dynamic approach that is similar to the Christian Alpha movement.

Despite this upsurge of religious fervour, the tide of dis cohesion is not going to be reversed any time soon. Moral renewal will never be achieved through exhortation, no matter how many books the Chief Rabbi and others choose to produce. Morals are more usually reasserted by burning books than by writing them. Today's liberal attitudes are too entrenched to be wholly reversed. Amitai Etzioni, a prominent communitarian writer and an advocate for duties rather than rights, suggests that he does not wish to curb individual freedoms. Yet this is attempting to have it both ways, for he clearly does wish to curtail all kinds of selfish behaviour. Nevertheless, he is unable to deny the modern individualist creed.²⁰⁸¹

The new sects cannot restore generalised trust and cohesion, as some people hope.²⁰⁸² They conform to the classic dis cohesive syndrome of numerous different movements, dividing people from each other rather than uniting them. Aum Shinrikyo is just one of many new religions in Japan.²⁰⁸³ Even Wiccan (witchcraft) is now officially recognised by the United States army and can appear on a soldier's dog tags. Certainly, the leaders of the traditional faiths are not enthusiastic about this renewed interest in spiritual matters. European bishops have expressed their concern at the proliferation of cults, and the pope has spoken with disquiet about 'dark clouds' hanging over Europe at the beginning of the third millennium.²⁰⁸⁴

To some extent, the major faiths have only themselves to blame for all this. During the second half of the twentieth century, they have hotly promoted the ecumenical movement, even though ecumenism essentially undermines those faiths. A religion that allows the validity of other religions is not only admitting its own arbitrariness but also renouncing its claim on the minds of members and potential members. It destroys its appeal to those who are looking for reference points and certainty.

The traditional churches formerly supplied cohesion to society through their universality. Yet these traditional churches are now in drastic decline throughout the developed world. At Christmas 1999, one could buy Islamicised Christmas cards showing Father Christmas bearing a crescent (the symbol of Islam). Ironically, as Christianity is shrinking in Europe, it is growing in China. There, alongside Falun Gong and other religions, it plays the opposing role of a reaction against the prevailing faith in communism.²⁰⁸⁵

Sixty percent of English people still declare their religion to be Anglican, and it is the country's formally established church, with the queen at its head. However, actual attendance at Anglican services has dwindled to barely 1 million. This is less than the number who attend Roman Catholic services and does not compare favourably with the 2 million Muslims in Britain, or the 400,000 Jews and 300,000 Sikhs.²⁰⁸⁶ While the mosques are always open, with frequent comings and goings, Anglican churches are now locked up and deserted most of the time. Some of these churches, vandalised and poorly maintained, are falling into ruins.

The Church of England has experienced a growing manpower crisis, which was only relieved by the decision to ordinate women.²⁰⁸⁷ In 1998, one vicar installed a licensed bar in his church during a local music festival, in order, so he said, to make people feel more at ease entering a place of which they have little experience.²⁰⁸⁸ This is not a thriving religion that can provide English society with identity and direction. It is increasingly obscure, introverted and irrelevant.

The whole idea that there should be an established church or national religion is under threat. In 1978, the Archbishop of Canterbury was saying that the church should not indoctrinate children with its ideas, but should use persuasion instead. As one commentator wrote at the time, people who really believe in their values do not leave their acceptance to chance, particularly when it comes to children.²⁰⁸⁹ A bishop recently described a conversation with a man who said how frustrated he was when he told his parish priest he no longer believed in Christianity and would no longer be coming to church. The priest simply seemed to accept it as a lifestyle choice, complained the man, when what I really wanted was for him to tell me my soul was in danger of eternal damnation and persuade me of Christianity's non-negotiable truth. The National Association of Head Teachers has campaigned to relax the law requiring daily Christian assemblies in school.²⁰⁹⁰ In a recent festival of religious education, schools were supposed to be 'celebrating the way that young people can feel secure in their own values, attitudes and beliefs while exploring those held by others'. Prince Charles has even said that as king he would wish to be called 'Defender of Faiths' rather than 'Defender of the Faith' (the traditional royal title).²⁰⁹¹

At the same time that people are abandoning the church, the church is abandoning its own doctrine. One prominent bishop, who recently resigned to become a politician, has observed that the Bible is 'the root of homophobia' and is responsible for driving feminists from the church. Rather than concluding that homosexuality and

feminism must therefore be wrong, he denounces the Bible instead and demands that it should be revised.²⁰⁹² There is, to be sure, a long tradition of doubting clerics. In 1947, the Bishop of Birmingham was airing his doubts about the literal truth of Christian doctrine.²⁰⁹³ In the sixteenth century, Giordano Bruno said that god was simply the same as nature, but he was burnt at the stake. Doubt has become more widespread, more extreme and more vocal. It seems to have reached its limit in the views of the Anglican Bishop of Newark, who rejects belief in God and says that traditional Christianity is bankrupt. He dismisses the virgin birth and other miracles, condemns the crucifixion as barbaric, and declares the resurrection to be impossible.²⁰⁹⁴ In other words, he rejects everything that distinguishes Christianity from general humanism.

The pope has himself recently reached out to feminists, with a reference to 'God the Mother' during an address in St Peter's Square.²⁰⁹⁵ A new Roman Catholic catechism notes that masturbation is not always a sin,²⁰⁹⁶ while the Anglican bishop of London finds that extra marital sex need not be immoral. Meanwhile, Methodists now allow ministers to drink moderately,²⁰⁹⁷ and Reform Judaism has pioneered the recognition of same-sex unions.

One cleric has written that the church is 'culturally light years behind the rest of society'. He calls for a pick-and-mix theology such that people should be able to 'believe in Christ as a good man and combine that with an interest in reincarnation and a bit of eastern religion'. Yet there is no logic binding together pick-and-mix believers. Having a distinctive core of beliefs is precisely what gives a religion its power to create a community. It is essential to the religion's logic, which is of course why the church has long had mechanisms for ensuring doctrinal purity, such as the creed, the catechism and the inquisition. In fact, there have recently been suggestions that the Church of England might revive heresy trials in an effort to restore proper doctrine.²⁰⁹⁸ This, however, seems to be the inevitable rearguard action, which is as doomed as were the ancient Roman calls to restore the sacred groves and return to pagan virtues.

As the church becomes increasingly bland and nullifidian, its already vestigial contribution to British social cohesion will dwindle to vanishing point. Adapting and becoming 'relevant' has not helped church attendances – quite the reverse. It is no coincidence that distinctly non-pick-and-mix Islam is the world's fastest growing religion, while the Church of England is getting close to being defunct. Nor is it a coincidence that the would-be feminist-friendly Church of England is in decline, while the male-authority-promoting Promise Keepers are growing at a phenomenal rate and,

among British converts to Islam, women outnumber men by four to one.

De-legitimation

Social relationships are the source of legitimacy. Western society and culture are quickly losing legitimacy as cohesion disappears. Opinion-formers no longer share or endorse western society's traditional goals and practices. They are more likely to denounce them as corrupt and oppressive. In the United States, an official report has stated that a 'systematic bias towards western culture' is responsible for the 'miseducation' of youth.²⁰⁹⁹ This is a direct attack on the idea that America should propagate its values and traditions to the next generation. Both Yale and Stanford universities have had to shut down courses on western civilisation after being overwhelmed by massive protests. The notion of 'western civilisation' may not be intellectually defensible.²¹⁰⁰ However, these protests cited not scholarly arguments but the west's racism, sexism and imperialism. The opposition was cultural rather than academic.

Western societies are far from having an unblemished record in their dealings with other groups or with their own populations. Their treatment of America's aborigines, for example, must be recognised by any unbiased observer as a hideous genocide. Yet in respect of cruelty and aggression, the pedigree of western civilisation is hardly different from that of practically every other civilisation that has ever existed. Contemporary western societies actually compare extremely favourably with many non-western countries and regimes, such as those in Africa for example.

Nevertheless, this is not a rational argument about rights and wrongs. It is simply that for a growing number of people within developed societies, their history and culture has no legitimacy whatsoever. These people have rejected wholesale its traditional values, finding them utterly without merit. One American professor notices that the entire canon of great literature in English is completely worthless, for it was created 'by high Anglican assholes to underwrite their social class'. To another, the whole of western science and philosophy, with its emphasis on intellectual rigour, is merely a corrupt attempt to preserve the 'cultural and political supremacy of white males'.²¹⁰¹ Newton's *Principia Mathematica* is not a triumphant milestone in humanity's efforts to understand the cosmos; it is actually a 'rape manual'.²¹⁰²

This self-de-legitimation requires the demonising of past heroes, i.e. those who made the west what it is today, and praise for the villains, who opposed everything it has stood for. The biography of any great individual is expected to contain lurid revelations about the unwholesome side of the person in question. Arizona State

University has sacked a lecturer ostensibly for teaching a drama course that included such 'sexist' authors as Shakespeare and Molière. Florence Nightingale has been dropped as a figurehead by one nurses' trade union. Christopher Columbus, who was feted by Americans on the 400th anniversary of his landfall in the Caribbean, was the object of loathing and condemnation on the 500th anniversary, in 1992.²¹⁰³ By contrast, Marx's *Communist Manifesto* was hailed as an 'enduring masterpiece' on its anniversary in 1998, and The New Yorker commended Marx as one of the great thinkers for the twenty first century.²¹⁰⁴

In Britain, traditional institutions are less likely to be seen as a source of pride and more as bastions of shameful elitism. Oxford and Cambridge universities are increasingly keen to keep a low profile, following repeated criticisms of their exclusivity. The Royal Navy has been compelled to abandon fine buildings at Greenwich College and Admiralty Arch, with the latter being turned into a hostel for the homeless.²¹⁰⁵ A senior judge has called for the scrapping of wigs, while the speaker of the House of Commons has decided to forego the role's traditional dress. The royal family still enjoys the adulation of ordinary people, yet everything associated with it is being downgraded and curtailed. The civil list has been cut back and the royal yacht decommissioned. Prince Charles recently used a week long trip to Scotland to emphasise his association with it, recognising that devolution is a threat to royalty's role there.²¹⁰⁶ In 1998, one clergyman suggested publicly the notion of an elected monarchy. This was no maverick vicar but one of the queen's royal chaplains, and he spoke in Westminster Abbey, a church that is directly responsible to the queen and in which great ceremonies of state take place.²¹⁰⁷ In France, by contrast, it is republicanism that is being de-legitimised and it has become chic to be considered a royalist.²¹⁰⁸

The enthusiasm for self-castigation over alleged racism is another manifestation of the west's de-legitimation. In fact, in Britain and the United States, only 9 percent of people said in a survey that they would not like to have neighbours of a different race. In India it was 31 percent, in Nigeria 35 percent, and in South Korea 58 percent. Nevertheless, both Britain and the United States repeatedly tell themselves that they are unusually steeped in racist attitudes. Racism has been found in exam marking, at the Royal College of Nursing, in the Church of England, and, according to the British Medical Association, throughout the NHS. The Fire Service was recently condemned by a Home Office investigation not for being poor at putting out fires but for the hat trick of racism, sexism and homophobia. Interestingly, this investigation discovered what it considered an unwelcome emphasis on 'fitting in',²¹⁰⁹ i.e. a

cohesion-fostering culture such as that of the US Coastguard academy, which is precisely what one would expect among people who risk their lives for a living.

Racism is not just to be found in hostility towards other groups. Positive evaluations of the dominant culture are also increasingly considered a form of racism. A 78 year old war veteran was arrested for putting up posters, on behalf of the UK Independence Party, reading 'Don't forget the 1945 war' and 'Free speech for England'. The police publicised their action as a triumph against racism. The BBC has decided that the word 'British' could be offensive as a description of the generality of people living in the British Isles and should not be used in broadcasts. The Runnymede Trust has gone further and determined that the word 'Britain' is altogether imbued with racist connotations and should be banned outright.

Senator Patrick Moynihan of the United States has spoken of the tendency to accept as normal what was previously immoral behaviour as 'defining deviancy down'. The columnist Charles Krauthammer has noted that there is also a process of 'defining deviancy up', whereby previously acceptable behaviour is now condemned as rape or child abuse. It seems paradoxical that both should be occurring at once. However, they are complementary aspects of the same process of de-legitimising traditional values. As Krauthammer says, it is not enough for the deviant to be normalised; the normal must be found to be deviant.²¹¹⁰

De-legitimation affects prevailing political and economic relationships. On the political side, people have ever less faith in their governments – as United States pollsters have found since they first asked the question in 1958. Continuous revelations of scandal and sleaze are both a cause and a symptom of this. In America, the federal government is frequently reviled as despotic, greedy and irrelevant.²¹¹¹ All authority figures, not just politicians but also judges, teachers and the police, are mistrusted according to opinion surveys. In Britain, various high profile miscarriages of justice have fostered a growing scepticism about the judiciary's capacity to deliver fair play. This perception is intensified by a series of public inquiries in which the police have been variously denounced for corruption, incompetence and racism.

Governments are increasingly censured and circumscribed by international institutions like the European Court of Justice and European Court of Human Rights. These provide citizens with a forum for challenging the legitimacy of government authority. People are withdrawing implicit support for the political process. In England, the turnout for local elections fell from 50 percent in 1987 to 30 percent in 1999.²¹¹² In the United States and Japan,

turnouts are as low or lower. Government mandates are becoming less decisive. In Britain, no government of the last fifty years has had the support of more than half of the voters and the winning party's share of the vote has steadily declined.²¹¹³ People's lack of moral investment in their political institutions should be a worrying sign for governments. As these governments succumb to disintegrative forces, few of their citizens will be very concerned to see them go.

With respect to the economic order, it might at first be thought that legitimacy is increasing. After all, even left-wing governments now believe in entrepreneurship and seek to encourage it. However, despite this expressed enthusiasm, economic activity is increasingly fettered by the culture of rights and self-realisation, not to mention discredited by the environmentalist movement. In the nineteenth century, manufacturing was the symbol of a new era. Heavy industry was romanticised. New inventions were hailed as great boons to humanity. George Stephenson and Isambard Kingdom Brunel were heroes. This is true no longer. Industrialists cannot rely upon public admiration, or even public support for their activities.

The science that underlies technological progress has also come under attack. In the 1950s, popular magazines were still speaking enthusiastically of 'science on the march'.²¹¹⁴ A decade later, this enthusiasm had gone and deep suspicion began to set in. Four fifths of adults now

apparently believe that science causes more problems than it solves.²¹¹⁵ In 1999, the Kansas school board set back the gains of the twentieth century when it voted to erase Darwinian evolution from the curriculum. Other states have gone in the same direction. In Alabama textbooks dealing with the subject must bear a warning sticker.²¹¹⁶ These moves can be understood as an attempt to regain old legitimacies in a society where legitimacy is breaking down. Unfortunately, they only confuse the picture, reinforcing cleavages as much as eliminating them.

Some concerned scientists have held conferences to talk about combating the apparent spread of unreason. Other commentators have said that the concerns are overstated and point out that anti-science movements like creationism are no more popular than they were twenty years ago.²¹¹⁷ Nevertheless, the drastic decline in the number of young people pursuing pure science suggests that it has lost a considerable amount of prestige. Many bookshops now have practically as many volumes on feng shui as they do on the whole of science put together. House-buyers apparently are placing more emphasis on a feng shui assessment than on a traditional building survey.²¹¹⁸ James Randi, a magician who devotes his time to exposing claims of the paranormal, has stated explicitly that the Enlightenment is unravelling and, from a scientific perspective, popular culture is already in a dark age.²¹¹⁹

Chapter 26 - International disintegration

Pax occidentalis

Before the first world war, American traders in Mongolia flew the Union Jack over their caravans. The local bandits had learned that violence against British interests invited deadly retaliation. A few British machine guns could wipe out almost any number of Mongolian horsemen.²¹²⁰ This was the *pax Britannica*. It was the high spot during some five hundred years of western dominance over the world – a broader *pax occidentalis*. The ultimate hegemon has changed – the Habsburgs, Britain, the United States – and the changeovers have been associated with some dramatic convulsions, but western nations have delivered order to the international system for an extended period.

The twentieth century saw a climb down from the peak of world integration. The European empires were dissolved, not voluntarily but out of necessity,²¹²¹ and individual countries broke up at an increasing pace. The number of nation states quadrupled, to reach nearly two hundred. A century ago, the west directly ruled its vassal states in Africa and Asia. The United States, however, does not have a formal empire and does not impose its own laws and taxes throughout the world. It has fought numerous wars, but it has acquired no territory. Instead, the US has had to operate through surrogate armies and covert operations.

The west remains the most powerful bloc, especially after the demise of the Soviet Union, but its authority is steadily less impressive.²¹²² Western countries are losing the resolve to slaughter foreign ne'er-do-wells with near impunity. In Somalia, in 1994, the US Marines were not shooting but laying down sticky foam as they withdrew from the country pursued by a baying mob.²¹²³ Shortly afterwards, the USS *Harlan County* was prevented from docking at Port-au-Prince in Haiti by a crowd of men, women and children armed with baseball bats. The presence of CNN cameras was an inhibiting factor.²¹²⁴ Fear of domestic and international opinion makes it necessary to limit even enemy casualties.

The United States is increasingly less keen to bear the costs of global hegemony. Its military still has by far the largest budget of any country but, since President Nixon's time, the US has renounced the role of policing the world. It can take on any single country or bloc, but it is no longer omnipotent. It is withdrawing from its bases in Europe and the far east. A recurring theme in American policy has been the need for Europe to stand on its own two feet.²¹²⁵ This attitude allowed the Bosnian crisis of the early 1990s to drag on murderously. When the US finally displayed a serious interest, the Dayton agreement soon brought the war to an end. This indicated that the world still has no substitute for the *pax Americana* as a guarantee of order.²¹²⁶ Yet President Clinton

stated that the US will no longer pay to make the world safe for its competitors.

The coherence of the western bloc is itself in question. A series of trade disputes has shown that Europe and Japan are more willing to defy the United States when their interests diverge. Having drastically reduced all military and economic support to its allies, the US is less able to get its own way. NATO is being weakened as the European Union sets up its own Europe-only defence forces. Germany and Japan have announced the intention of extending bilateral co-operation without involving the US.

The 1999 Kosovo intervention and the 1990-1 Gulf war present a contradictory view. In these cases, the west apparently acted in concert, projected force in a very determined manner, proved the superiority of its armed forces, disciplined the miscreant and restored order. Certainly, that was the perception. However, the reality is more complex and not so optimistic. When Iraq threatened Kuwait in the early 1960s, the British deployed an army brigade within a few days and the Iraqis backed down.²¹²⁷ A similar crisis was seen off in the 1930s.²¹²⁸ In 1990, however, Iraq was able to take its threat right into Kuwait City, and nearly a week went by before the United States announced that it would be sending troops to help defend Saudi Arabia. It then took six months and a major campaign to get the aggressor out again. In the 1960s, Britain possibly fabricated the crisis to drive home its importance to the region.²¹²⁹ In the 1990s, the west initially had little appetite for conflict.

Neither Iraq nor Serbia ought to have been a very serious foe for the United States. Saddam Hussein's massed conscript army, clumsily and autocratically led, was a sitting target for the west's professional, flexible and manoeuvrist forces. Serbia was a small nation, economically backward, and exhausted by years of civil war. Yet both countries were obviously unimpressed by the west's threat capability. They ignored the west's initial demands, and then withstood a sustained assault. Each operation absorbed a substantial fraction of NATO's relevant assets, and even then NATO did not secure full compliance with its demands. The two countries emerged largely intact, and with the original leaders still in power. This was in spite of the fact that they were both condemned as new Hitlers.²¹³⁰ The Iraqi regime remained strong enough to crush ensuing popular rebellions and, despite regular allied air raids over the last decade, has continued with its genocidal policies against the Kurds and Marsh Arabs.²¹³¹ This is analogous with leaving Hitler in power to complete his Final Solution. It is a hollow kind of victory, and implies limited control of the situation.

The west relies increasingly on intensive aerial bombing to project its authority. This hurts civilians but, despite all the talk about precision bombing, has repeatedly been shown to have a negligible effect on the enemy's military.²¹³² Small arms continue to be far more effective at killing people than tanks and bomber aircraft.²¹³³ According to the Red Cross, the most destructive weapons are assault rifles, with which the world is awash.²¹³⁴ Bombing may not damage enemy soldiers but it does considerable damage to the west's moral credibility in the eyes of the world – especially since the west seems capable only of picking on weak countries with few friends. The United States promptly bombed Libya after a terrorist attack on a Berlin disco in 1986, but it made no attempt to bomb Syria when later evidence suggested that the latter had actually been responsible.²¹³⁵

The west may have been able to suppress some countries, but in other ways it has appeared peculiarly vulnerable. It has a hard time dealing with today's small, out of control militias that do not abide by any known rules of warfare. In 1980, the 15 month long siege of its Tehran embassy revealed the helplessness of the American superpower when faced with a ruthless foe that did not share its regard for human life.²¹³⁶ Meanwhile, the US lost in Somalia not because it was defeated in a conventional sense but because it was unable to deal with soldiers who fired from within crowds of civilians. It left Lebanon in failure after a suicide bomb attack that killed more American marines than had ever before been lost in a single day.²¹³⁷ Another suicide attack crippled the USS Cole while it was refuelling in Aden in 2000, killing 17 of her crew and injuring 39 others. This was one of the most sophisticated ships in the world, with advanced armour plating, heavy armaments that included cruise missiles, and an elaborate air defence system, yet it was crippled by a simple dinghy full of explosives.

In Kosovo, NATO has proved no more able to control the province's thugs and gangsters than was President Milosevic. Albanian revenge attacks, including killings of elderly women, have taken place under the noses of the peacekeepers.²¹³⁸ According to Amnesty International, violence against Serbs, gypsies, Muslim Slavs, and even moderate Albanians increased dramatically at the end of 1999. In one instance, Albanian extremists crossed into Serbia to murder two policemen.²¹³⁹ This situation is typical of the kind of impasse that brings on a dark age. The west has intervened in Kosovo but in a cack-handed manner. It cannot actually impose peace, and it would have been far better if the locals had been allowed to find their own equilibrium. When the dark age eventually arrives, that is precisely what will happen.

Subordinate regions are increasingly ready to test the western hegemony and expose any weaknesses. East Asia, for example, has been particularly vocal in suggesting that the days of western domination are numbered. Asians have substantial business and property interests within western countries, and own such icons as Laura Ashley and Planet Hollywood.²¹⁴⁰ They endow museums and contribute to American presidential campaigns.²¹⁴¹ This region has come a long way already and its inhabitants do not expect to be in the world's second division forever. Their global presence increasingly rivals that of the west.

Chinese enterprises own mines and oil wells in Africa, Australia and South America, as well as timber plantations in the United States and Canada.²¹⁴² In 1993, China was the biggest market outside Germany for the top of the line Mercedes.²¹⁴³ The return of Hong Kong has particularly boosted China's power and prestige.²¹⁴⁴ Britain behaved in a seemingly craven manner in the negotiations that led to the handover and gave way on numerous issues concerning the rights of Hong Kong's inhabitants.²¹⁴⁵ This might be contrasted with the situation in 1900, when the west savagely put down the Boxer rebellion and showed that it could easily dominate China.²¹⁴⁶ Meanwhile, a Hong Kong-based company has recently been contracted to operate the newly decolonised Panama canal. This vital seaway, which until 1999 was patrolled by American troops, is now under Chinese influence.²¹⁴⁷

Malaysia's premier has urged Japan to stop apologising for the second world war and suggests it should help its Asian partners disengage from dependency on the United States.²¹⁴⁸ Ever since the Meiji restoration, Japan has seen itself as an underdog determined to beat the west at its own game.²¹⁴⁹ A book advocating greater Japanese self-assertion, *The Japan that can say no*, was a huge best-seller there in the early 1990s. It pointed out that Japan underwrites the western hegemony. The smart weapons used in Kosovo and the Gulf were based on a high proportion of Japanese patents, and Japan met a significant fraction of the costs of Desert Storm.

Since the 1970s, Japan has had an increasingly active and independent foreign policy. It allowed a PLO office to open in Tokyo, against American wishes, and built links with Khomeini's Iran.²¹⁵⁰ It earns prestige and influence as a leading donor of overseas aid, of which a very large part now goes outside Asia. Japan sees itself as the champion of the non-western world in meetings of the top industrial nations. It has also quietly floated a claim to become the sixth permanent member of the UN Security Council, and has changed the laws that inhibit it from deploying troops overseas.

Many other countries exhibit a growing confidence and determination to stand up for

themselves. They are not standing still but becoming harder for the west to control. In Somalia, US Rangers conducted six successful snatch raids on General Aidid's councils of war. The seventh raid, however, ended in disaster. Aidid's forces had taken note of the American tactics and worked out a response. They acquired rocket-propelled grenades, which effectively removed the immunity of the helicopters that dropped and picked up the American troops. The ensuing debacle left 18 Americans dead and 84 wounded. President Clinton withdrew his forces six months later.²¹⁵¹

In general, non-western countries are continually learning from western operations. Articles have appeared in third world military journals discussing how to confront an 'extraregional superpower'.²¹⁵² Some Indian analysts have observed that Saddam Hussein might still be in control of Kuwait if he had had nuclear weapons or effective submarine forces – hence the growing demand for diesel submarines among developing nations²¹⁵³ and their interest in nuclear technologies. Armies around the world will similarly be looking at the Kosovo conflict, asking themselves if it represents the future of warfare and if so what they should do about it. The pressure is always on for the west to prove that it is still the strongest. The Milosevic regime in Serbia seemed to be chastened by Iraq's punishment in the Gulf war, but became more assertive again during the muddle over Bosnia.²¹⁵⁴ Western peoples may believe that their dominance is somehow natural, proper and widely accepted. In truth, it is not. When revealed to be based on an illusion, it will easily disappear.

No peacekeeper

International disintegration is seen in the form of a less easy peace throughout the world. In 1996, the United States noticeably failed to provide a calming influence when a series of anti-Japanese demonstrations in Seoul raised tensions within east Asia. Later it declined to intervene in an escalating war of words between China and Taiwan. Similarly, US authority was insufficient to restrain Pakistan from conducting a nuclear test in 1998. The Pakistani government announced that it was no longer heeding American pleas.²¹⁵⁵ While the Soviet Union has collapsed and no longer controls its former sphere of influence, the west has been unable to fill the vacuum. The west has also allowed wars to multiply in parts of the world, such as Africa, where it formerly kept order. The charity Médecins Sans Frontières suggests that the growing fashion for humanitarian aid missions is the west's attempt to cover up its failure at keeping the peace.²¹⁵⁶

The world is losing a peacekeeper because the western hegemon is less likely to intervene, and less likely to be heeded if it does. When Sierra

Leone's Governor was ousted in a 1998 coup, he had to call in mercenaries to restore his authority and maintain the rule of law in what was formerly a British protectorate. Britain later sent a small task force but ostensibly only to offer training to the Sierra Leonean army and not to impose order. Although the British showed themselves to be a superior fighting force in a number of engagements with Sierra Leone's rebels, they lacked the intent to dominate. A British patrol was embarrassingly taken hostage. Their captors used the heavily armed British jeeps in skirmishes against the government forces, and drove them past UN checkpoints with no trouble at all.²¹⁵⁷ The hostages were released after a successful armed assault, but Britain's Chief of the Defence Staff observed that the rebels fought back fiercely and were by no means an easy foe.

A similar attitude prevailed in Rwanda in 1994 as that country murderously tore itself apart. 2500 UN troops were deployed but did nothing directly to stop the killings. When ten Belgian peacekeepers were captured, they meekly gave up their arms and were led away to be shot, apparently believing that their instructions did not allow them to defend themselves.²¹⁵⁸ Britain sent a detachment there, but only for a period of three months and with an exclusively humanitarian mandate.²¹⁵⁹

Private soldiering services are turning out to be a growth industry in an increasingly unstable world. At least ten such companies operate out of London and, in 1998, were active in about thirty countries.²¹⁶⁰ Russian mercenaries have flown MiG jets for both sides in the war between Ethiopia and Eritrea.²¹⁶¹ One mercenary organisation in the United States claims to have more 4-star generals on its books than the Pentagon.²¹⁶² This privatisation of threat power is typical of disintegration. Diamond Works, an American mining company with interests in New Guinea and Sierra Leone, has employed a London mercenary organisation to protect its installations.²¹⁶³ Clearly, it is no longer enough to fly the Union Jack. Even some United Nations missions are now using mercenaries to provide the protection that is not forthcoming from western governments.

It might be expected that the United Nations should substitute for the declining western hegemony. After all, this organisation was set up with the aim of promoting world peace. However, it is not succeeding. Its budget, which is smaller than that of New York City Council, is in a permanently precarious position because many member states, including the US, do not pay their full contributions.²¹⁶⁴ The UN also has all the deficiencies of a bureaucracy that reports to nearly two hundred countries and therefore effectively to nobody.²¹⁶⁵ It has been regularly denounced for inertia and even incompetence.²¹⁶⁶

The fundamental problem is that the United Nations has no independent political authority and no military forces other than those that are loaned to it. Its members are tied together by voluntary social relationships rather than by compulsory political ones. As in a forager camp, they can apply opprobrium but not force, though, as among foragers, opprobrium is quite often enough. Insofar as the UN has been able to discipline some nations, it is because the US has taken control, thus making the UN essentially another arm of US policy.²¹⁶⁷ UN resolutions against Iraq were enforced because this was what the US wanted. Resolutions against Israel, an American protégé, have never been enforced. The forces that freed Kuwait did not constitute a UN militia reporting to the Secretary General but an international coalition under the command of the US. Even the UN's non-military initiatives, such as the Antarctic Treaty, only get agreement when the US takes the driving seat.²¹⁶⁸

The United Nations would have severe difficulty trying to discipline the United States the way that Iraq was disciplined. In 1996, the US was ordered to desist from intervening militarily in Nicaragua's internal affairs, but simply ignored the demand. The affair was dropped after the Americans had installed a more favourable regime in Nicaragua, which stopped complaining about the interventions.²¹⁶⁹ Order is imposed by threat power, i.e. by integration and not by arbitration. The UN is institutionally incapable of keeping the peace and is inevitably parasitic on the US. This is not a transient anomaly that can be corrected in future. An organisation like the UN, based on voluntary association, can never be a source of integration over its members.

The very existence of the UN, meanwhile, illustrates the weakness of the US hegemony. It is a way of leveraging American power. Rather than dominating the world directly, the US seeks to dominate the UN, a somewhat easier task. By setting the UN agenda, the US then ensures that international mechanisms are geared towards its own ends. NATO, the World Bank and the International Monetary Fund function in a similar way. Meanwhile, it has become harder for the west to dominate the UN. The newly independent states of Africa and Asia, which joined during the 1960s and 1970s, form an increasingly non-compliant majority.²¹⁷⁰

The European Union is another international entity, like the UN, that is supposed to keep the peace. Its founders dreamed that it would make war in Europe permanently inconceivable. Initially, this was to be achieved by creating economic interdependence. However, the visionaries behind it knew that real peace comes from integration, and it was always intended that the EU should evolve towards a political union.²¹⁷¹ This is proceeding, for example, with the introduction of a single currency

and progress towards setting up a European military.²¹⁷² Yet the EU is not yet a coercive entity. Its decision-making apparatus is still largely stuck at the level of interstate diplomacy. Member countries routinely ignore EU rulings and court judgements against them.

Despite the efforts being made, it seems that the EU will never achieve proper political integration. European countries will not negotiate away their entire coercive apparatus – police, military, courts – to be placed under central control and possibly used against them. There is too much rivalry and too many vested interests. In 1998, France was accusing the other states of trickery merely over negotiations to amalgamate Europe's defence industries.²¹⁷³ The Czechs and Slovaks, who are now candidates for EU membership, could not bear even to be integrated within Czechoslovakia. Why should they be prepared to give up their autonomy to the EU? The efforts to create a European army are also being undermined by a number of other arrangements, in which different European militaries are co-operating in a variety of combinations.

The European Union is certainly not reversing the general disintegrative tide in world affairs. On the contrary, it is more of a disintegrative process masquerading as an integrative one. This is why secessionist groups like the Scottish National Party favour European union. They recognise that the authority being gained by centralised European institutions is less than the authority being lost by its constituent governments, and hence that power devolves increasingly towards the regions.²¹⁷⁴

Levelling the playing field

The British could easily subdue Mongolian tribesmen because the machine gun was far superior to anything that the Mongolians possessed. Lately, the dominant nations have maintained an edge by means of their tanks, artillery, fighter aircraft, bomber aircraft, and nuclear weapons. These were expensive items and the richest nation could pack the biggest punch. This situation is beginning to change.

In the first place, information technology is making weapons far more capable. In 1991, two smart bombs did more damage to the Iraqi defence ministry than several thousand bombs might have done fifty years earlier.²¹⁷⁵ This has brought great benefit to the western militaries, who have been first to embrace the technologies. However, the trouble is that information technologies are becoming cheap and widely available, effectively democratising the threat power they represent.

The many vulnerabilities of high technology have created cheap ways of waging war on the advanced nations. Young hackers, teenagers, today operate out of their bedrooms in Buenos Aires or Edinburgh to attack the US Pentagon and other military sites.²¹⁷⁶ According to the American

Defence Information Systems Agency, there are hundreds of thousands of attempts to break into military computers every year and only a few are spotted. With the right knowledge, an enemy could inflict an electronic Pearl Harbour for negligible cost and in perfect safety.

China's military has spoken of fighting the west via the internet and with computer viruses. (The west also plans such information warfare.)²¹⁷⁷ During the Kosovo crisis, hackers tried to take down NATO's computer networks, and some of the attacks originated from Chinese internet addresses.²¹⁷⁸ New weapons emitting a strong electromagnetic pulse are capable of physically destroying unprotected electronic equipment. These are highly classified, but seem to be falling into the hands of non-governmental forces.²¹⁷⁹ The west's military is also vulnerable from the flaws inherent in its technologically complex systems. For example, the American and British attempts to computerise their land forces have encountered all the problems associated with large software projects and have so far failed to live up to expectations.²¹⁸⁰ Large weapons procurements are increasingly troubled by design flaws, production delays and massive cost overruns.²¹⁸¹ The reliability of these technologies in a sustained conflict is questionable at best.

Knowledge is power, and satellite dishes and solar panels have given even the most remote areas access to large quantities of up-to-date information. Deep in the Amazon jungle, Indians are recording forest destruction on video camera to provide evidence for the cases that they bring against agribusinesses in the Brazilian courts. It is no longer possible for western powers, or anyone else, to turn up unexpectedly in some part of the world and overwhelm the locals with a massive technological advantage. The locals know what is going on and they understand these technologies themselves. In Somalia, the rebels prevailed by taking advantage of today's global media networks. It was dragging the body of a US marine through the streets in front of the television cameras that really broke the American will to fight.

Information-based, high-technology warfare will present a more level playing field than the US has been able to expect in the past. It will place a premium on human qualities such as leadership and tactical aptitude, rather than on the heavy-handed application of firepower. As was proved in Vietnam, it is much more difficult for a hegemon to achieve dominance in these moral factors of warfare.

Power differentials are not just being eroded between nation states. Private groups are also discovering the growing ease and cheapness of defying hegemony in the international arena. Countries come under attack from terrorists who operate across national borders to oppose the

existing world order. The west is beginning to feel this threat, which is already endemic in other parts of the world. In 1994, the United Nations decided to adopt a Declaration on Measures to Eliminate International Terrorism.²¹⁸²

International organised crime is also increasing in line with international disintegration. A British policeman on holiday in Jamaica came across a motorcycle that had been stolen in north Wales.²¹⁸³ In 1999, an Albanian minister had his official car confiscated on a visit to Greece as a routine check revealed that it had been stolen in Germany. He was on his way to sign an agreement on controlling cross-border crime.²¹⁸⁴ The Colombian drug cartels and the mafias of Italy, Russia, Israel and America are all flourishing. Chinese Triads are infiltrating Japan, alongside Iranians, Israelis and Nigerians.²¹⁸⁵ The Triads thrive wherever there are expatriate Chinese, including Britain.²¹⁸⁶ Smuggling is rampant in the European Union, which has set up a new organisation to deal with it, and involves drugs, arms, illegal immigrants and sex slaves.²¹⁸⁷

The various gangs have links with each other and they hold regular summit meetings that emulate those of the world's recognised governments. They also back the various disaffected people throughout the world who are keen to overthrow the existing order. Many wars and terrorist campaigns, from Peru to Northern Ireland, have become self-perpetuating as they are financed by looting, racketeering and trafficking.²¹⁸⁸ Lebanon's Bek'a valley became a prime hemp-growing area in the 1980s, in the context of that country's civil war.²¹⁸⁹ In Sierra Leone, rebel militias control the main diamond producing areas and plough the profits into buying arms.

Russia's weakness has left its former empire, covering a sixth of the world's land area, virtually ungoverned and unpoliced.²¹⁹⁰ The mafia is helping itself to the country's extensive cold war arsenal, and is well armed as it expands into central and western Europe. The Russian mafia showed its ability to destabilise the international political order when it sold oil and weapons to the Serbs during the Yugoslav war.²¹⁹¹ To the mafia, UN sanctions represent only a business opportunity. Meanwhile, Kosovo, which was already an important leg on the drugs route into Europe, has boomed thanks to the disorder introduced by NATO.²¹⁹² Albanians now control 70 percent of the drugs market in Germany and Switzerland, the countries in which the KLA has its two main headquarters.²¹⁹³ Kosovo has also become a major source of women abducted into the European sex industry.²¹⁹⁴

The volume of the increasingly sophisticated drugs trade grew dramatically during the 1990s.²¹⁹⁵ In the United States, this trade has a turnover equivalent to the combined national income of Colombia, Peru and Bolivia.²¹⁹⁶ Many Caribbean

economies are founded on cocaine.²¹⁹⁷ Drugs are more lucrative than oil. The narcotics barons are the wealthiest people on the planet and their resources far outstrip those of any enforcement agency.²¹⁹⁸ According to an American anti-drugs officer, they have built powerful financial, transportation, intelligence and communications empires that rival those of many small governments.²¹⁹⁹ They are good customers for the Russian mafia's looted arms and their private militias are now active in many North American cities and to a lesser extent in Europe and east Asia.²²⁰⁰

The drugs organisations are world players and they pose a growing challenge to western hegemony. In Colombia and Afghanistan, they are the sole source of political authority over large areas. They forbid the use of drugs among their own populations,²²⁰¹ but gladly exploit western weaknesses. Ironically, the United States has created much of the problem. It tolerated or even actively encouraged drugs trafficking by its clients in Lebanon and Afghanistan,²²⁰² at a time when they were fighting the Russians or other groups hostile to American interests. The fact that this strategy has backfired indicates the limitations of western authority. In the nineteenth century, Britain profited from the opium trade, but then it was in control of it.

The problem of international disintegration is most classically illustrated by the return of piracy to the high seas. It is more difficult to maintain order over the ocean than on land, and therefore the safety of marine traffic is a sensitive indicator of the effectiveness of international political authority. In 1997, there were 229 pirate attacks, involving 51 deaths, more than double the level at the beginning of the 1990s.²²⁰³ The British merchant navy union believes that the number of raids is much higher than this official figure. The pirates seem more sophisticated and are more likely to be well armed.²²⁰⁴ Half of the attacks occur in the area around Indonesia and Malaysia, through which a third of the world's shipping passes every year, and whose many deserted islets offer ideal havens. Other blackspots are the South China sea, the coasts of Brazil, India and Sri Lanka, and the area of the Mediterranean around Albania. In 1998, an oil tanker with a cargo worth almost £1 million, disappeared without trace off the Philippines. Other disappeared ships have often turned up in Chinese ports with all their markings removed. In one case, a Japanese company had to buy back its stolen freighter from a Chinese shipping firm for £100,000.

In the nineteenth century, colonial powers successfully suppressed piracy in the Asian shipping lanes with gunboat patrols.²²⁰⁵ Recently, various nations in the region have decided to join together to combat this renewed problem,²²⁰⁶ but

their ambitions are limited. There have been calls for a UN-led effort to combat piracy on a global scale. However, these are quite unrealistic. The UN cannot keep the peace in Kosovo or Sierra Leone, let alone across the three quarters of the earth's surface that is ocean. If anyone is in a position to enforce international law at sea, it should be the US, the world's superpower, with the world's biggest navy. It seems unable to do so.

Losing the monopoly of force

The west is losing its monopoly of force as the balance of firepower changes. In a study of the second world war, John Ellis notes that the allies won because of a huge material advantage. Between 1942 and 1945, the United States put to sea ten times as many aircraft carriers as the Japanese. It would be folly, he says, to forget this and to entertain the fantasy that victory was the product of an innately superior military ability.²²⁰⁷ The trouble is that, since the 1970s, arms spending has tended to increase faster in the non-western world than in the west. In east Asia, military expenditures have grown by half over the last 10 years, while those of NATO have shrunk. Such militarisation is to be expected. As these nations have become richer they have had more to defend and more to spend on defence. Nevertheless, Japan's military budget, despite being the third largest in the world, still represents a smaller proportion of GNP than in the US or even Germany. If it should abandon the inhibitions that are a legacy of its defeat in 1945 and choose to re-arm properly, Japan has huge war potential.

The west has helped to give away its military advantage by selling arms overseas, especially as domestic markets have weakened. A salesman for one of the government's own agencies has boasted on television about stoking up regional arms races in order to sell British defence technology. This is like trading machine-guns to the Mongolians. It is a short-sighted strategy if the west wishes to retain its pre-eminence.

Having said this, if other countries are going to get arms anyway, it is best to ensure that they are western ones. No military is well advised to pick fights with its weapons suppliers, on whom it relies for spare parts, servicing and training. Defence exports have given western countries a means of applying leverage to their third world customers. However, it also works the other way. Saudi Arabia is a major customer for British arms and the British government has been reluctant to upset it over human rights and other issues.²²⁰⁸ Similarly, in 1989, a Foreign Office minister commented that Britain could not pressurise what it recognised to be the vicious regime in Iraq because the country needed this lucrative export market.²²⁰⁹

The developing world is aware of the dependency created by arms sales and is keen to be free of it. Numerous countries that once relied on

superpower cast-offs, such as Brazil, Poland, Mexico, India and Singapore, now produce quite sophisticated weapons. Some have become exporters, and are even less fussy than the west about whom they supply. Even some third world countries now produce their own tanks, missiles and fighter aircraft.²²¹⁰

By far the greatest threat to the west's monopoly of force is the proliferation of nuclear weapons. Preventing proliferation has been a top western priority ever since the bomb was invented. In 1994, President Clinton declared a national emergency in this area, perceiving that the policy was beginning to fail. The emphasis has switched to counter-proliferation, which involves accepting proliferation as a fact and adopting policies to deal with it.²²¹¹ Non-proliferation was an ultimately doomed policy anyway. No one can hope to hold something back from the rest of the world forever. Producing weapons grade uranium is not easy but some third world countries have managed it.²²¹² In 1998, Pakistan became the world's seventh nuclear power, the first new one for two decades. This was in response to tests by India, which had only conducted one previous test, back in 1974. Fear of diplomatic repercussions had previously inhibited India from further activity. Its change of attitude shows the relative decline of western authority.

Israel is thought to be an unrevealed nuclear power, with enough material for 250 warheads, which would put it ahead of India and Pakistan.²²¹³ South Africa has also worked on a bomb and co-operated with Israel in the 1960s.²²¹⁴ Virtually all the major east Asian countries, including Japan, now have a shadow if not an actual nuclear capability, which is derived from their civilian nuclear power programmes. If it wanted to, Japan could probably produce a weapon within months if not weeks.²²¹⁵ Iran is building nuclear power stations with Russian assistance, and, as one Russian official has drily remarked, that might seem strange for a country with such vast fossil fuel reserves.²²¹⁶ In fact, the Iranians have openly declared their intention to acquire a defensive *and offensive* capability in nuclear, biological and chemical weapons, notionally to counter Israel's suspected bomb.²²¹⁷

Libya is suspected to have some kind of nuclear capability and in 1999 China began to assist it with the development of a medium range missile that would bring southern Europe within range.²²¹⁸ Saddam Hussein ordered his scientists to produce a nuclear bomb that he could explode on the outskirts of Kuwait City before Desert Storm. They came very close and it seems they may have failed only by deliberately disobeying his orders. Since the Gulf war, Iraq has pursued its nuclear ambition. The UN weapons inspectors have been outsmarted and have now been thrown out of the country altogether.²²¹⁹ The inspectors believe that

Iraq is on the brink of success. It only needs the fuel, which it is seeking to purchase from abroad, while the west no longer seems prepared to confront Iraq over this issue.²²²⁰

The UN's condemnation of Pakistan, India and other aspirants to nuclear status has an air of considerable hypocrisy, given that it is controlled by five nuclear powers. Countries acquire nuclear weapons not because they want to get involved in nuclear war but rather the reverse. In 1945, Japan found itself on the receiving end of the first, and so far only, nuclear attack precisely because it was on the wrong side of a nuclear imbalance. India and Pakistan now enjoy a sense of greatness. As other nations observe this, they are tempted to acquire prestige in the same way. A North Korean defector has reported that while conditions there are atrocious, with even food in short supply, people are proud of one thing – the belief that their country has the bomb.²²²¹ When the CIA concluded in 1993 that North Korea probably did have crude nuclear weapons, the US negotiated an agreement to supply the country with oil and build it two light-water nuclear reactors (less suitable for making bombs) in return for de-militarisation of the existing nuclear programme.²²²² The clear message was that, by going nuclear, countries will be taken seriously and receive aid.

Nuclear weapons are just one type of weapon of mass destruction. Chemical and biological weapons are also being developed, despite conventions against them. Japan and other countries produce gases like sarin for experimental purposes. No doubt, it makes sense that they should research how to deal with these potential threats, but it also means that they retain state of the art production knowledge.²²²³ Prior to the Gulf war, Iraq had large amounts of anthrax, botulinum toxin, and a gas that causes gangrene.²²²⁴ During the actual conflict, allied troops were vaccinated and the American military experimented with techniques for destroying the spores.²²²⁵ The fear of biological weapons may have been a factor in the decision not to prosecute the war beyond the liberation of Kuwait since, if pressed, the Iraqi regime might well have gone for the *Götterdämmerung* option.

The more nuclear weapons spread, the more the risk of further proliferation. Non-nuclear countries feel an increased pressure to defend themselves in like manner. This lay behind Pakistan's recent test. Its prime minister said that he was left with no choice after the international community had failed to punish India. Similarly, if it becomes known that North Korea has nuclear weapons, South Korea and Japan would be likely to follow suit. South Korea has said that it will forebear from making a bomb so long as it is covered by the American nuclear umbrella, and yet the US has had to withdraw nuclear weapons from

South Korea in order to get North Korea to agree to an inspection regime.²²²⁶ The entry barrier to the nuclear club is also coming down as warhead and missile technology matures. In 1995, China tested its first ICBM with the ability to reach Europe or California.²²²⁷ Russia and China have been willing to sell their expertise in return for foreign exchange, while India and Pakistan have various links to would-be nuclear powers.

Russia's economic and political troubles may be creating a market in finished nuclear weapons. In 1992, it was rumoured that maverick Russian officials had sold some to Iran, and, in 1993, Iraqi officials were supposedly offering \$2 billion for a warhead. In 1999, the Russian government issued a desperate plea to the US for help in safeguarding its nuclear stockpiles.²²²⁸ Russian army officers are in extremely straitened circumstances these days. In 1996, it was reported that a Russian infantry officer shot himself dead in front of his wife and children, after his failure to be paid for six months and in despair at the threat of eviction from the ridiculously small room they rented. One of his last acts was to steal half a loaf of bread for his daughter who was fainting from extreme hunger.²²²⁹ Suicides among Russian military officers were at a peak in 1996 and have since declined, but they are by no means uncommon.²²³⁰ Many Russian soldiers are forced to moonlight in order to provide for their families. These desperate people, however, are in charge of one of the world's largest caches of nuclear and other deadly weapons. It is hardly surprising that customs officials report a rapidly growing illicit international trade in nuclear materials. Belarussian officials have actually said they do not know what happened to all their tactical nuclear missiles.²²³¹ In one case, the Russian mafia was found to have 30 kilograms of uranium and 10 kilograms of plutonium in a Swiss bank vault.²²³²

In the 1990s, following the collapse of the Soviet Union, the threat of nuclear war seemed to recede immensely. People became more concerned about the ozone layer than about mushroom clouds. Today, however, the threat is coming back with a vengeance. The proliferation of nuclear weapons makes it increasingly likely that they will eventually be used. Although nuclear deterrence seems to have kept the peace for some fifty years, the evidence of history is that deterrence eventually breaks down. The more actors there are in the system, the more likely a breakdown becomes. With a growing number of undeclared and shadow nuclear powers, in addition to the known ones, defence analysts face an almost impossible task in devising appropriate policies and postures. The global nuclear stand-off today is far more ambiguous and volatile than it was in the days of the Cold War.

There is an increased willingness to consider the nuclear option. In 1999 Britain established its first Joint Nuclear Biological and Chemical Regiment.²²³³ Russia has given up its policy of no-first-use, China is rethinking, and the US never had such a policy. China has successfully tested a neutron bomb,²²³⁴ which kills people but leaves buildings intact, while the US is working on low-yield weapons that would be 'effective and credible counters against future third world nuclear threats' and could 'neutralise mobs'.²²³⁵ These weapons will make nuclear war merely extremely unpleasant as opposed to involving wholesale destruction of the planet. They are eminently more usable.

The most worrying possibility is that nuclear weapons will fall into the hands of terrorists and drugs barons. Before settling on nerve gas, the Aum Shinrikyo sect tried to obtain nuclear warheads from the Russian army.²²³⁶ Although the existing nuclear powers will not sell to such groups, some of their customers could be less scrupulous. The trouble is that it is not possible to nuke an individual terrorist and hence the threat of deterrence breaks down.²²³⁷ Chechen rebels showed the way in December 1995 when they planted a radiological bomb in a Moscow park as a demonstration of their capability. This was a nuclear substance wrapped in conventional explosive rather than a nuclear weapon. It would have caused few deaths but considerable chaos and panic if it had gone off.²²³⁸ The Russian mafia has also found a use for radioactive substances. In 1993, one gang planted pellets emitting gamma rays in a rival's office, killing him within months. A number of similar incidents have since been reported.

Wars that are coming soon

The last five thousand years have been ones of tremendous bloodshed and destruction. There is no sign of any let up in the fighting. Westerners may think of the last half of the twentieth century as a peaceful episode. However, there have been about two hundred wars around the world in that time. Some thirty of them are still in progress. Recently, half a million soldiers have been in action on three fronts in the Eritrean war, while six African nations, including Zimbabwe and Angola, have been drawn into the civil war in the Democratic Republic of Congo.²²³⁹ These conflicts are only sparsely reported to the western public but conflict remains an essential component of human existence. War preparedness is actually increasing, and weapons are becoming more lethal. Western defence budgets have grown four fold in real terms since the second world war and twenty five fold since the beginning of the twentieth century. Global military spending is one hundred times larger than the total official aid to all developing countries.²²⁴⁰ Clearly, fighting is still far more important to people than humanitarian ideals.

A growing body of literature suggests that liberal democracies do not fight each other, and, since countries are increasingly turning into liberal democracies, this should imply optimism for the chances of avoiding war in future.²²⁴¹ However, it would be premature to jump to conclusions in this respect. The number of wars in progress fluctuated during the 1990s and was not much less at the end than at the beginning of the decade.²²⁴² Most liberal democracies are relatively recent. NATO's attack on Serbia undermined one comforting theory, which is that when a country gets its first McDonalds restaurant it somehow joins the western ideological fold and makes military conflict unthinkable (Belgrade has several). It is true that most of today's fighting is only in localised civil wars. However, these do not represent a new kind of conflict, as some have argued, but a very old kind. They are taking place along cultural fault-lines where fighting has been intermittent for a thousand years or more. They give no reason to suppose that large inter-state wars are a thing of the past. The arguments against the possibility of major conflict may seem plausible enough, but war is always unexpected.

For decades, western armies trained for world war three against the Soviet Union. They got the Gulf and Bosnia. Today, they are training for another Gulf and more Bosnias. They are likely to get something different again. It could even be world war three after all. The Russian army, despairing, dissatisfied, tempted by the spoils, goaded by some right wing demagogue, might be persuaded to drive its tanks across eastern Europe and on to the north German plain. Its officers may find that to be a better prospect than sitting at home watching their daughters starve to death. This would be the very cold war scenario that now seems consigned to the pile of discarded plans. If it occurs, after all this time, NATO could ironically be looking the other way.

Insofar as the world is peaceful today, this is not an inevitable condition. There are many potential wars that may only be being suppressed by the western hegemony. There is plenty of scope for disintegration and the outbreak of general war. Defence ministries of all shades, from Israel to China, see the security outlook as getting inexorably worse. Their views must be taken seriously. When they say that war is more likely they are not speaking about some academic analysis but about their own plans and attitudes.

As the developing world improves its standard of living or aspires to do so, there are growing pressures on a number of natural resources. These are threatening to evolve into political struggles for control, which are a challenge to the prevailing world order in which a minority of rich countries have monopolised what the planet has to offer. Even access to water is becoming a source of

contention thanks to the growing needs caused by population growth and industrialisation. Dr Boutros-Ghali, former UN Secretary General, has predicted that the wars of the coming decades will be fought over this fundamental resource. There are active water-related disputes in Asia, the middle east and Europe. Dams and industrial pollution are the main sources of conflict. In Assam, 1700 Bengalis were recently slaughtered in a dispute over access to well-watered farmland.²²⁴³

Control of the world's oil supply is another potential topic of contention, which has long been an important issue in western foreign policy.²²⁴⁴ The Gulf war was essentially a struggle over oil. Various territorial disputes are related to the location of potential oil fields. This is a factor in Argentina's enthusiasm for acquiring sovereignty over the Malvinas/Falkland Islands.²²⁴⁵ It also lies behind Russia's eagerness to retain control of Chechnya, which is on the proposed route for a major pipeline from the oil fields of Azerbaijan and Kazakhstan.²²⁴⁶ The United States, Turkey, Israel and China, are all involved in central Asia and its growing oil industry. Meanwhile, China's claims in the South China Sea, where it is said a second Saudi Arabia may lie beneath the waves, have brought it into conflict with Japan, Vietnam and the Philippines. Shots have been fired. An official of Japan's nuclear industry has predicted a world war over energy by 2010 to 2015.²²⁴⁷

Having said this, theoreticians generally reject the idea that competition over natural resources is by itself a significant cause of war. The problem is more when these disputes exacerbate existing conflicts. Yet this is already happening. For instance, water stress in the Jordan valley helps to raise tensions between Israel and its Arab neighbours.

The fundamental causes of conflict remain mismatches between the aspirations and perceptions of different countries. There is plenty of evidence for these in the contemporary world. For example, Japan and China, who are old enemies, are vying for economic dominance behind a weakening US, a situation that has been described as a potential powder keg.²²⁴⁸ Japan has touchy relationships with most of its east Asian partners, because of its imperialist and atrocity-laden past. Korean immigrants are still subject to discrimination in Japan. Meanwhile, containing China is a key foreign policy aim for many countries in east Asia, and China is frustrating Japan's ambition by vetoing its permanent membership of the Security Council.

China is also mixed up in territorial disputes along its entire land border as well as at sea. It has a sense of wounded pride and longs to put the world, as it sees it, back to rights.²²⁴⁹ In the 1990s, China's leaders began talking about the country's 'strategic borders', which seem to lie some way

beyond the real thing. They have persuaded Myanmar to allow a Chinese listening post on the Bay of Bengal.²²⁵⁰ The kind of rapid industrialisation that China is now experiencing has in every previous example, such as Japan, Britain, Russia and the United States, been associated with outward expansion and imperialism.²²⁵¹ There is a strong logic to this. China's claims, for example, to the potential oilfields of the South China Sea are driven by its growing need for oil, which is in turn due to the explosive growth of local industry and the pressures of consumer demand in what is effectively a virgin market for refrigerators, washing machines, air conditioners and cars.

The China-Taiwan confrontation is becoming more not less volatile. Having regained Hong Kong and Macau, China has forcefully restated its aim of reabsorbing Taiwan,²²⁵² but Taiwan, which has grown extremely wealthy and is believed to be close to the nuclear threshold, is making tentative soundings for recognition as an independent country. Taiwan has said it wants 'state-state' relations with China, but China has said that it will 'smash any attempts to break up the country'.²²⁵³ China is essentially biding its time until it believes that the signals from the United States indicate a green light for a Chinese take-over. However, China could easily misread the signals. It has said in any case that if Taiwan were to announce its independence or declare a nuclear capability it would act regardless. In this case, the US would necessarily be drawn in, for Taiwan is an important player in the world economy.

The potential for misjudgement in the east Asian region is high. Not only Japan and China, but also Thailand, Indonesia, the Philippines and all the other countries of the region have tasted some improvements and are ready for more. The hubris, fears and hopes of the emerging powers, combined with existing disputes, will generate a continuing series of potential war triggers so long as the US fails to impose order from on high.

Another population that feels underprivileged and aspires to greater self-assertion is the Muslim world. One way or another, Muslims are currently involved in some of the hottest disputes on the planet. In Kashmir, for example, India and Pakistan are engaged in a continuous low-intensity war, with occasional flare-ups. This conflict is primarily religious and, now that both sides are nuclear-equipped, south Asia faces the possibility of a religious nuclear war – the kind of scenario for which the term Armageddon was invented. Israel, which may also have the bomb, continues to be in dispute with its Arab neighbours. This conflict embodies fundamental contradictions, for Israeli security needs clash head on with Arab demands. Despite intermittent willingness to talk, the potential for war here remains as strong as ever.

Russia, which is increasingly humiliated on every front, is another major source of potential tension. Some 25 million ethnic Russians are subject to persecution in the newly liberated states of the Soviet empire. Russia's former Warsaw Pact allies are abandoning it to apply for membership of NATO. The country looked incompetent before the world over its handling of the Kursk submarine disaster – which it continues to blame on a collision with a western vessel. Russia is in economic and political turmoil, reliant on the west for loans, and plagued by a severe crime wave. Russians feel beleaguered and unappreciated, struggling to retain a sense of dignity.²²⁵⁴ Yet the western powers seem to delight in emphasising Russia's drastic loss of prestige and influence. This has been compared to the high-handed treatment of Germany after the first world war, which led in the end to the rise of Hitler.²²⁵⁵ Victory in Chechnya has recently helped to restore Russian pride and optimism and could make further military adventurism seem attractive.

Europe itself is showing a growing potential for conflict. Mutual understandings that have been established for some fifty years seem to be revealing the shakiness of their foundations. The political settlement that resulted from the second world war is now being questioned by the losers. Italy wants reparation for the Italians who lost property when part of Italy was given to Slovenia, while Germany is reawakening issues that have not been aired since the days of Nazism. It is demanding compensation for the three million Sudeten Germans expelled from what is now the Czech Republic.²²⁵⁶ In 1998, Theo Waigel, the German finance minister declared 'the Czechs must understand that we and the Sudeten Germans will not allow ourselves to be treated in this manner!'. This echoed Hitler's declaration in 1938 that 'with regard to the Sudeten Germans, my patience is now at an end!'.²²⁵⁷

European integration seems to offer Germany the chance to succeed where the Third Reich failed, dominating the continent as a unified political entity. The importance of this process to Germany is suggested by Helmut Kohl's oblique warnings of war if integration does not go ahead. He has implied that his country is bursting for renewed authority and, if this ambition is not tamed through European integration, it could once again threaten the continent's security. The Balkan conflicts have already led Germany to overturn its prohibitions on sending troops abroad.²²⁵⁷ In accordance with their new assertiveness, Germans are now digging up their second world war dead and burying them in proper cemeteries, the latest one being at St Petersburg.²²⁵⁸

At the same time, plans for European integration are creating a backlash of popular resentment and disenchantment. While politicians

and business leaders may be enthusiasts for integration, Europe's ordinary people are not so certain. Sweden and Austria joined the European Union in 1994, but only a year later a majority regretted the decision.²²⁵⁹ Every European country has gripes and feels itself in some way disadvantaged. Politicians encourage this as they blame Brussels for anything that their electorates do not like.²²⁶⁰ Even in Greece, which enjoys a large inflow of subsidies and has a cavalier attitude to European regulations, the average citizen detests the EU. This is because it has helped a few corrupt officials and business leaders but destroyed farming communities and impoverished ordinary people.²²⁶¹

The idea that the process of European integration is leading not to peace and harmony, as dreamed by its founders, but to resentment, conflict and even war is not just a warning from the margins. It is one of the key themes of Bernard Connolly in his book *The rotten heart of Europe*.²²⁶² Connolly was responsible for organising the European Monetary System until he

published this exposé of the duplicitous conspiracy behind monetary union, after which his career came to an abrupt halt. The EU, Connolly points out, is deeply undemocratic. A few insiders are pushing it in a direction that does not have the support of Europe's citizenry. It is heading for disaster.

Overall, a resurgent Germany at the heart of an integrated Europe has to be an ominous prospect. In 1995, the French Foreign Minister defended France's nuclear tests by saying that his country had been invaded three times in the space of a hundred years and was anxious not to repeat the experience.²²⁶³ The invader on each of those three occasions was neither an Islamic army waging jihad, nor a third world rogue state, but France's own neighbour. The kinds of issue that led Germany to invade France three times in a hundred years do not go away lightly. They may be in abeyance for long periods at a time, but as underlying contradictions they are extraordinarily tenacious. In the end, they re-emerge.

Chapter 27 - International disorganisation

The global economy

The present era seems phenomenally favourable to international commerce. People can move around and communicate with enormous ease. Huge trans-national corporations project economic activity right round the world. Over the last fifty years, institutional barriers to trade have been brought down dramatically, firstly via the negotiations of the GATT and since 1995 via the World Trade Organisation (WTO). This is globalisation, which ought to allow huge economies in production and a level of specialisation sufficient to cater even for the most esoteric tastes. Certainly, many commentators have lauded the borderless economy and international division of labour as likely to bring great economic benefits.

On the other hand, some economists have done a detailed demolition of the globalisation thesis.²²⁶⁴ TNCs, supposedly world-level economic actors transcending national affiliations, are really no such thing. They may exploit today's high scale to escape laws and taxes but they do not seem to be creating the world-spanning eddies of organisation that should in principle be possible. Of the top one thousand TNCs, almost all have a clear national identity, with most of their income being generated in the home country. These are just large western businesses that have acquired footholds abroad. They are not even recent phenomena, despite suggestions that TNCs represent a new form of capitalism. The East India companies and the company towns of the plantation era were like contemporary TNCs.²²⁶⁵ In the middle ages, the Medicis and the Fuggers had financial and commercial empires stretching across Europe.²²⁶⁶ It could even be argued that the Phoenicians, with their trading stations throughout the Mediterranean, represented the TNC of the first millennium BC.

In historical perspective the supposed increases in economic interdependence are simply not there. The *Financial Times* states that, if not a myth, globalisation is at least a huge exaggeration.²²⁶⁷ The greatest epoch of world trade growth was between 1850 and 1914.²²⁶⁸ Foreign investment is less than it was in 1900. While precise statistics should be taken with a pinch of salt,²²⁶⁹ the fact is that, a hundred years ago, the world's ports and oceans were already alive with commercial activity. In the 1920s, J M Keynes wrote that Londoners before the first world war could order by telephone 'the various products of the whole earth' and expect to get same-day delivery. They could invest their capital in any quarter of the world and receive a decent return, and they could travel wherever the mood took them.²²⁷⁰

International economic organisation has actually failed to keep pace with the opportunities generated by world population growth and by the

emergence of fantastic scale-expanding inventions. In relative terms, which means taking into account population size and the ratio of external to internal trade, most countries are less interdependent today than they were in the nineteenth century.²²⁷¹

Though world trade volumes continue to grow in absolute terms, the growth rate is decreasing. Instead of becoming more global, world trade actually became more compartmentalised during the 1980s and 1990s.²²⁷² There was a proliferation of regional common markets, in Europe, North America, Latin America, central America, the Arab countries and west Africa. The European Union has seen its trade with America decline over the last thirty years.²²⁷³ East Asia is also preparing to turn in on itself, with the Association of South East Asian Nations (ASEAN) now having resolved to create its own common market in the next decade.

The west certainly looks more prosperous than ever. However, this prosperity is increasingly based on credit. In the United States, imports have persistently grown faster than exports, turning what was once a surplus into a record-breaking deficit.²²⁷⁴ Such chronic deficits have brought great benefits to western consumers, who enjoy access to cheap goods imported from the rest of the world without producing anything themselves. The deficits have been sustainable, in part, because foreign countries are keen to hold western currencies. More than half of all currency reserves and private savings around the world are held in US dollars. From Indian banks to Chinese peasants, everyone believes in the dollar's value and convertibility.²²⁷⁵ They are working hard to supply American needs, while accepting in return just pieces of paper or simply numbers in computer records.

The developed world has also experienced a substantial influx of lending. While the debt rises and falls, the long term trend has been upwards. The US owes more to foreigners than it earns in annual export revenue.²²⁷⁶ Foreigners are not subsidising Americans out of the goodness of their hearts. They are storing up the fruit of their own labour, with the intention one day of redeeming it all in American goods. They have faith that this will be possible.

The west is effectively cashing in on the credibility that it has earned over several centuries of being the most innovative, entrepreneurial, and hence wealthiest region of the planet. It has benefited from the fact that other countries have relatively little and therefore value things relatively highly. Their people can be persuaded to work hard on behalf of western consumers for small reward. However, the problem is that the west has actually lost its former entrepreneurship, which is why it has a trade deficit in the first place. It is scarcely in a position to redeem the huge claims that have

mounted against it. There is a mismatch between perceptions and reality.

Recent crises in Russia and east Asia have revealed deep strains in the system of international finance that keeps this situation afloat. The IMF has had to put up large sums to prevent financial collapse, but in doing so has given the world a glimpse of the bottom of its pockets. In fact, the difficulties in other countries have brought the dollar something of a respite. It has looked a safe haven by comparison. However, east Asia will recover, and the underlying trends are not optimistic. International indebtedness is now routinely higher than it was just before the 1929 crash.²²⁷⁷ The world may have bounced back from the threats of economic meltdown that emerged in Mexico in 1995²²⁷⁸ or in Thailand in 1998 but, as George Soros argues, this has only left the underlying situation increasingly unsound.²²⁷⁹ The seeming success of the bail-outs has created a problem of moral hazard, encouraging economic actors to believe that the central banks can save them from any amount of irresponsible behaviour.²²⁸⁰

Some countries are losing faith in western credit-worthiness. They may become less willing or less able to finance western lifestyles. China has been reducing the proportion of its reserves held in dollars. The fact that it was a major contributor to the international rescue of the Thai economy also indicates its growing economic importance relative to the west.²²⁸¹ The end of the cold war has removed many of the incentives that led Japan and Germany to fund the US deficit. Japan is appearing less innovative than it was²²⁸² and less able to underwrite western consumption. Many potential developments could induce Japan to withdraw lines of credit. A deteriorating security situation in east Asia might require an expanded military. Japan's ageing and less productive population may require more social services. Pressure on oil supplies could make Japan's oil imports more expensive. A major earthquake might demand large funds for reconstruction.²²⁸³

The logic of the global economy looks increasingly untenable. Catastrophe may seem an unlikely prospect when things are going well, but that is because confidence is a necessary part of the system. When confidence disappears, it always come as a shock. The Asian crisis, for example, is now so familiar that people readily believe they saw it coming all along. It is easy to forget how unexpected it actually was.²²⁸⁴

Entrepreneurial failure

The ordinary people who are supposed to be beneficiaries of globalisation do not seem to be embracing it with much enthusiasm. Many critics see it as a boon for business but not for themselves. In 1999, a major rally in Paris denounced the WTO as an American plot designed to rob nations of their

identity and livelihood.²²⁸⁵ The same year, the WTO talks in Seattle collapsed after they were disrupted by days of rioting. In 2000, a French farmer who destroyed a McDonalds restaurant in symbolic defiance of global trade became a hero to many of his compatriots. Anti-globalisation protestors were also in action at the Democrats' convention in the United States, at an IMF conference, and at a Mayday demonstration in London.²²⁸⁶

In the first place, these protestors complain that a seamless economy means the export of jobs to places where labour is cheap.²²⁸⁷ The proportion of European and American consumption met by imports rather than domestic production has doubled in the last fifteen years, while opportunities for manual labour have fallen. Japan's workers are similarly losing out to their Chinese and Korean neighbours.²²⁸⁸ The unskilled masses of the developed world seem to be increasingly unusable, having lost all comparative advantage to the south. Numerous western companies have moved their operations abroad. It is not just low-level factory work that is being affected. India, for example, attracts knowledge work from the west, including software development and accounts management.

The other major complaint about globalisation concerns the supposed harm that unfettered trade can do to developing countries. The tiger economies of east Asia are said to have grown wealthy by keeping out exports and by intervening to support local companies.²²⁸⁹ By contrast, after Mexico opened up its borders to international commerce at the behest of the IMF and the United States, imports grew faster than exports, many businesses had to close due to foreign competition, and unemployment soared.²²⁹⁰ Turkey faced similar difficulties after concluding a customs agreement with the European Union in 1996. The post-communist prostration of Russia has been called a 'salutary lesson to anyone who believes capitalism is a superior system'.²²⁹¹ Since Russia embraced the free market, life expectancy has been falling, let alone GNP. Latin Americans similarly blame 'savage capitalism' for the erosion of their way of life during the later twentieth century.

It is true that there are real problems to do with western unemployment and southern impoverishment as critics of globalisation suggest. However, the specific analysis is incorrect. After all, there is something strange about these complaints. If globalisation means the south taking away jobs from the north, how can it also be destroying southern economies? If capitalism was good for the United States, why is it bad for Russia? The answer is that the opportunity alone does not produce economic organisation. People must take advantage of that opportunity in order to gain any benefit.

The full story behind Mexico's troubles is not just that it opened up to free trade but also that it received huge loans. These loans of foreign capital could only be spent abroad, inevitably leading to a large growth of imports. The idea was that Mexico should spend loaned US dollars on American raw materials, process them in some way, and then sell the finished goods back to US consumers at a profit. In this way, it would be able to repay the original loans, while overall economic organisation would have increased and everyone would be better off. The problem was, however, that Mexicans did not show such imagination. Instead, they used the dollars to import finished goods for retail to their own population. The loans were frittered away on Levis and Big Macs and in the end the country had nothing to show for it.

Similarly, the Soviet Union collapsed in economic chaos, leaving a legacy of hugely inefficient, outdated and bankrupt industries. It is absurd to suggest that Russia's present troubles are the consequence of 'capitalism' while ignoring the influence of the lack of 'capitalism' over the preceding seventy years. Some developing nations have shown that it is perfectly possible to create proper industries and turn international trade to advantage.²²⁹² The success of the tiger economies is a consequence of their energetic business activity and not a triumph for protectionism and state interventionism. One of the most protectionist and interventionist economies in the world is North Korea, yet its economy is in ruins.

The west's relatively high labour costs do not inevitably mean that people will be thrown out of work as their jobs are stolen by low-paid third worlders. An economy is not a zero-sum game.²²⁹³ As developing countries have succeeded in business and become more prosperous their demand for western imports has risen, while their ability to undercut western workers has declined. Europe has actually received significant inward investment from east Asian companies. Being cheap is not everything. When the value of the yen was rising strongly, it made hardly any difference to Japan's imports to the US. Japanese goods were recognised to be superior and American customers largely accepted the higher price. When western businesses complain about the competitive pressures of globalisation it is largely an excuse for their own lack of entrepreneurship. They want to carry on offering the same old stuff, when the harsh reality is that the world has caught up with them and found better ways to spend its money, or perhaps learned to produce the goods in question more cheaply for itself.

Insofar as they have problems, both poor and rich countries are reaping not the consequences of globalisation, but the consequences of a failure of entrepreneurship. A century or two ago, people were taking advantage of improvements in

transport and communications to conjure into existence great eddies of organisation. Today the imagination is failing. The rich countries are treating globalisation simply as an opportunity to get rich quick. When Nike moved its manufacturing operations from the US to Asia, shoe prices did not drop; profit margins rose. Neither in the US nor in Asia did ordinary people benefit. No new economic relationships were created, they were simply moved around. Nike took advantage of the fact that fewer options were available to Asian workers and that they could therefore be persuaded to accept a less favourable deal. As James Goldsmith observed, this is like winning a poker game on the Titanic.²²⁹⁴ When neither its jobless ex-employees in America nor its poor Asian employees can afford its products, Nike will be the one to suffer.

This same failure to grasp opportunities is seen in the fact that economic co-operation zones have not obviously produced great benefits for their member states, despite falling trade barriers. It is difficult to demonstrate, for example, that the countries of the European Union trade more extensively and are more prosperous than would otherwise have been the case. Norway and Switzerland are not in the EU and are two of Europe's richest countries. In 1993, immediately after the introduction of the European Single Market, the EU economy actually shrank and unemployment rose. Growth remained sluggish through to 1996 and has never looked like a dramatic improvement on what went before. The establishment of the North American Free Trade Area (NAFTA) was similarly followed by a recession, though growth later resumed.²²⁹⁵

The inter-governmental institutions that are supposed to be bringing down the barriers and facilitating international trade arguably do just as much to discourage entrepreneurship. For example, the environmentalist agenda of technological stasis has become highly influential at an international level. Environment ministers, who used to have largely a domestic focus, now jet around the world to take part in high-powered summits. There has been a large rise in the number of environmental treaties.²²⁹⁶ In the name of preventing climate change, countries now accept constraints on things like the construction of out-of-town shopping centres.

The European Union seems to obstruct trade as much as promote it. For example, the agreements that led to the 1992 single market actually included some 300 new laws on the content and conduct of commerce. They could be interpreted as being more about protectionism than about free trade.²²⁹⁷ The EU emphasises standardisation and harmonisation to the point of suppressing innovation. In the manner of imperial China, it imposes on European businesses an inflexible view

of the world that stamps out diversity, initiative and originality. Ironically, the EU has a number of programmes designed to foster innovation by providing partial grants to develop new ideas. The trouble is that these involve large amounts of bureaucracy and are also the subject of fraud. The multinational consortia that must be constructed to win EU funding tend to be poor at co-operating and communicating among themselves. Many projects conceived under these schemes go nowhere. When they do produce genuine innovations these are not necessarily exploited by European businesses.²²⁹⁸

The starkest illustration of the EU's negative effect on commercial activity is its Common Agricultural Policy. This involves paying farmers not to grow crops or to destroy the crops that they have grown. Between 1992 and 1994, according to official figures, 84 percent of Greek peaches, 77 percent of French apples, 73 percent of Italian pears and 97 percent of the entire Spanish lemon crop were destroyed under EU auspices.²²⁹⁹ To be fair, these official figures are not very trustworthy. As the EU's auditors have clearly acknowledged, fraud is a huge problem.²³⁰⁰ Yet that is hardly much consolation. Paying people to be idle, and to leave their resources idle, is directly destructive of entrepreneurship and economic organisation. Europe's central planners are like bureaucrats of the old Soviet Union, out of touch with the needs of the real world and unerringly finding the worst of all solutions to practically every problem.

Protectionism

The GATT brought average tariffs down from about 40 percent to about 4 percent.²³⁰¹ Its successor, the WTO, provides a permanent forum for multilateral trade agreements, and has legal powers to enforce trade liberalisation. The nations behind these initiatives would seem to be highly committed to free trade. One might therefore expect that trade should now be freer than ever. In fact, this is not the case. There is an underlying tide of protectionism running throughout the world.²³⁰²

Despite all economic theory, ideas of autarky (economic self-sufficiency) have a perennial appeal. Following the 1974 oil crisis, President Nixon announced 'Project Independence' for the United States.²³⁰³ This project did not succeed, of course. The only truly autarkic communities are certain groups living in wild areas of the Amazon and maritime south-east Asia, and they enjoy an extraordinarily basic standard of living.²³⁰⁴

Even when governments acknowledge the value of international commerce, they approach it from a very narrow perspective. Recognising that it affects both domestic contentment and international prestige, they can take a competitive attitude towards what should really be a co-operative matter. For example, during an economic summit in the 1970s, one German civil servant admitted to the British chancellor of the exchequer that his

country favoured fixed exchange rates not because of their value for free trade per se but because they helped German industry to beat French and Italian industry.²³⁰⁵ The US, meanwhile, has established a National Economic Council to further its trading interests. Instead of promoting free trade per se, US negotiators on economic treaties quite deliberately speak for the interests of American companies. One official has been quoted as saying, 'I'm tired of a level playing field – we should tilt the playing field in our own favour'.²³⁰⁶ Since the end of the cold war, American intelligence agencies have been moving into the field of economic espionage. In a 1994 contract in Saudi Arabia, France's Airbus lost to America's Boeing when US spies discovered that the French were bribing an official and the matter was revealed to the Saudi authorities. Similar methods have helped American companies to win major competitions in India, Lebanon, Tunisia and Peru.²³⁰⁷

The idea that other countries' economic success is undesirable and that damaging their viability is helpful to one's own involves the classic mistake of forgetting that economic actors are connected in loops, which will only remain viable if all the participants benefit. For instance, western countries have frequently criticised Japan for its trade surplus. Yet Japan has long had a deficit in the middle east, where the west does not.²³⁰⁸ Around the global loop, things are balanced out. Inhibiting Japanese trade will only harm many western industries – airlines, hotels, department stores, luxury goods manufacturers, fine art auctioneers – that are heavily dependent on Japanese custom. Amazingly, the west seemed almost to gloat over seeing Japan's economy go into recession in 1998.

It is supposed that tariff barriers help a country's economy by 'protecting' domestic industry. For example, the European Union permits Russia and many developing countries to maintain asymmetrically high tariffs against its goods, supposedly as a favour to them.²³⁰⁹ Yet this means that someone wanting to set up say a software business in one of these developing countries will have to pay more for computers, operating systems and internet access than would someone in a European country. Clearly, that is a handicap more than a benefit. What these countries need is not tariffs but entrepreneurs. For decades, western countries have accused Japan of cheating through protectionism. Yet Japanese economic historians argue that trade barriers have probably not been an optimal policy for their country.²³¹⁰ In any case, the supposed Japanese protectionism exists largely in the western mind. Japan liberalised almost all its imports in 1963.²³¹¹ Indeed, exports have been only a minor factor in Japan's prosperity, which is primarily based on internal demand.²³¹² Insufficiently entrepreneurial western countries

simply assume that it must be doing something underhand.

Studies by both academic economists and international bodies such as the World Bank, have repeatedly demonstrated that protectionism results in stagnation.²³¹³ Over the last fifty years, those countries that opened themselves up to world trade have progressed economically, while those that pursued isolationist policies have almost invariably floundered.²³¹⁴ Nevertheless, the misguided faith in the 'protective' effect of tariff barriers remains, and one of the first responses to a trade crisis is to put them up. The recession of the early 1990s, for example, saw the US threatening to impose a range of new tariffs just as it had in the 1930s.²³¹⁵

The United States is supposed to be the principal champion of free trade. Since at least the 1980s, though, it has been more likely to erect barriers at home even while it is trying to pull them down abroad. In 1994, President Clinton signed an order giving him authority to apply stricter quotas and restraints on Japanese imports.²³¹⁶ Shortly after joining with Canada in NAFTA, the US slapped tariffs on Canadian cars and lumber, on quite spurious grounds and in complete perversion of the spirit of the agreement.²³¹⁷ Meanwhile, Europeans have imposed so-called anti-dumping duties on cheap imports from Asia, including Chinese ball bearings, Korean video cameras, and Russian chemicals.²³¹⁸ Objectively, it is crazy for Europe to hold back Chinese economic growth by preferring its own expensive ball bearings to China's cheap ones. However, when entrepreneurship is lacking, it can seem logical.

Having said all this, tariffs are arguably among the least of barriers to trade. Economic organisation is created by entrepreneurial innovation and not by narrow technical factors. The reason that removal of tariffs within the EU has apparently added no more than 1 percent to Europe's GNP²³¹⁹ is that they were not really such an obstacle to begin with. Cultural and technical differences may be much more effective at discouraging international entrepreneurs. For example, someone manufacturing three-pin plugs will not have much luck selling to a country that uses two-pin plugs. The manufacturer could get into the two-pin plug business, but that might imply setting up a whole new operation.

While seeming to embrace free trade by setting low tariffs, countries are in fact finding many ways to keep out unwanted imports. When one French car manufacturer tried exporting to Japan, it had to spend two years and large sums in legal fees just to get its vehicles through the cumbersome inspection process. Even then the Japanese decided that no foreign company could have more than eight dealerships nation-wide. The French got their own back with Japanese video recorders. These had to pass through a single small customs post in central

France, where every box was opened to check that the documents were in French as demanded by law.²³²⁰ Who benefited from all this? No one did. The populations of the relevant countries were simply denied desirable consumer products at an affordable price.

This is not just a problem between Japan and Europe. Developing countries have frequently discovered that, despite the free trade rhetoric, many regulations restrict what they can sell to the western world.²³²¹ When their products – ranging from Egyptian cotton to Gulf state petrochemicals – become too competitive, the EU swiftly moves to obstruct them.²³²² The EU has also heavily protected its vested interests in commercial agreements with eastern Europe, even while publicly declaring its enthusiasm for trade with the former communist bloc.²³²³ Even within the EU, protectionism is rife. Disputes about restrictive practices occupy much of the time of the European Court of Justice.²³²⁴

Health and safety have provided useful grounds for inhibiting international trade. The EU, for example, has threatened to keep out cheap agricultural products from countries like the Ukraine because of the land degradation supposedly occurring there.²³²⁵ It has also opposed the import of American beef because of concerns about the use of hormones – to which the Americans responded with bans on French mustard and British jam.²³²⁶ China has banned French wine for fear that the cow's blood used by some vintners in the filtering process may be infected with BSE.²³²⁷ Thailand has been told that it risks losing the right to sell rice to the EU if it starts cultivating a genetically modified strain that has been engineered to help produce vitamin A (whose deficiency kills an estimated one million children a year).²³²⁸

Trade sanctions are increasingly popular as a diplomatic instrument. In 1999, the US had sanctions in force against some 26 countries representing over half of the world's population.²³²⁹ On the pretext of the struggle against international terrorism, it has banned all European and Japanese companies that have business links with Cuba, Libya or Iran.²³³⁰ The US has proposed trade sanctions against countries responsible for such backward practices as employing child labour, even though the west did the same when it was first industrialising. Naturally, such sanctions will simply keep those countries poor and will do little to improve the lot of their children and other vulnerable groups. The US has also used the issue of 'intellectual property right' to prevent developing countries from emulating its techniques, though it never recognised the importance of this when it was itself developing.²³³¹ China has largely ignored such complaints, churning out pirate computer software

for example despite agreements to curb the activity.²³³² It is large enough to do so, but smaller countries are more easily intimidated.

Obstruction of trade is not even confined to national governments. Local governments and public institutions such as pension funds are increasingly banning foreign goods for reasons of their own. Pressure groups also encourage private boycotts and can help to shape trade policy.²³³³ A study of the international ban on ivory suggests that it shows a kind of misguided piety, with the interests of both elephants and third world farmers being sacrificed to the fund-raising needs of western environmentalist organisations. The elephant population is not under threat and, while elephants have been killed indiscriminately in the past, this is largely because of the damage they can do to crops. In fact, the ivory trade would provide countries with an incentive for conserving elephants. The ivory ban is a bit like banning milk in order to protect cows. The black rhinoceros has already been 'protected to extinction'.²³³⁴

The WTO is supposed to get rid not just of tariffs but of all these indirect barriers to trade. However, it faces an uphill task in telling countries that they must change the design of their electric sockets or accept hormone-treated foodstuffs. The leading trading nations have shown considerable readiness to ignore the WTO when it suits them. They set import quotas and contract bilateral agreements behind its back. When the US complained about EU policies favouring European banana traders, the EU changed its rules as ordered by the WTO. However, the US was still not satisfied and, completely disregarding the WTO's procedures, took unilateral action against various European goods.²³³⁵ Meanwhile, the WTO is routinely undermined by the existence of economic zones like the EU or NAFTA, with their cliques of trading partners. Overall, several economic historians have concluded that, despite appearances, trade is less free today than it was a hundred years ago.

Wealth differentials

South Korea and Taiwan have shown that it is possible to escape from third world poverty. Virtually all the developing countries have undergone industrialisation and seen an improvement in absolute standards of living. There are fewer really poor nations. Nevertheless, relative disadvantage has increased with every decade of the last fifty years. The wealth gap between the richest and poorest nations is large and growing larger.²³³⁶ Such a gap is a classic symptom of economic disorganisation.

In proportion to incomes in the developed world, African incomes have halved since the 1960s, while Africa's share of world trade has fallen by two thirds.²³³⁷ The world economy has probably never been more polarised than it is

today. In 1750, incomes in Britain were about the same as in Asia and Africa.²³³⁸ By 1820, they were two to three times ahead. Today, they are some 35 times ahead.²³³⁹ According to UN figures, the wealth of the world's few hundred richest individuals now exceeds that of nearly half the world's population added together. A fifth of this population is without adequate food, housing or water, while a third of the world's children can be classed as undernourished.²³⁴⁰ International inequality is even more pronounced than is inequality within countries.²³⁴¹

It is important to dispel the notion that developing countries are doomed to poverty because of some factor such as climate, disease, or a lack of agricultural or mineral resources. Singapore has thrived despite heat, humidity and the need to import virtually every vital resource, including water.²³⁴² In any case, the third world actually has plenty of resources. Some African countries are important producers of vital minerals.²³⁴³ For a variety of reasons, though, the third world has simply failed to develop its potential. The Congo area, in particular, has been described as 'fabulously rich', but it is also one of the most desperate, misgoverned, and forsaken regions in the world. It used to be a net food exporter but, after thirty years of civil war and rampant corruption, must now import food on a huge scale.

Although famine deaths have decreased as a proportion of the world's population, many people in the third world are still starving, or at least malnourished and chronically diseased.²³⁴⁴ In popular consciousness, this is seen as an inevitable consequence of climatic problems, perhaps exacerbated by excessive fecundity among populations without access to family planning measures. In fact, world food supplies grew faster than population for most of the twentieth century, the greatest increases being in the third world.²³⁴⁵ The earth's potential agricultural productivity is nearly ten times the actual needs of the world population.²³⁴⁶ Entrepreneurs in 'overpopulated' countries could, in principle, establish businesses to soak up excess labour and trade televisions or whatever it might be for some of the produce that the EU is currently paying to have destroyed. This is especially so in these days of internet commerce, when start-up costs are minimal and location is irrelevant. The amount of food not produced due to Europe's set-aside schemes could feed the world's famine victims ten or a hundred times over.

Much careful scholarship has shown that food catastrophes are largely a societal rather than a natural phenomenon. During one famine in sixteenth century Antwerp, a rich merchant's barn was so overloaded with grain that it collapsed, causing a riot.²³⁴⁷ The Irish potato famine of the mid-nineteenth century became a disaster because

the British government blocked relief, fearing it would encourage idleness and dependency. Many of the countries that experienced famine during the 1970s and asked for food aid were actually net exporters of food, notwithstanding widespread crop failure. In Bangladesh, there was plenty of rice in the country but its price had risen beyond the reach of the poor who had lost their livelihoods. This played into the hands of rich farmers and agribusinesses, who bought up the famished peasants' land at rock-bottom prices.²³⁴⁸

The Ethiopian famine of the 1980s, which was presented on western television screens as having a kind of Biblical inevitability, came after sixteen years of military dictatorship during which the disastrous combination of a Stalinist agricultural policy and civil war had actively destroyed the country's food-producing infrastructure.²³⁴⁹ Sudan has traditionally been called 'the bread basket of the Arabs', yet ordinary people there now have terrific trouble obtaining the means of subsistence at an affordable price, thanks to conflict and a collapsing economy.²³⁵⁰ In the 1990s, when famine-struck Sudan received huge donations of food aid, the government denied it to those districts that were suspected of supporting rebel factions in the country's civil war. In some refugee camps, people starved to death while donated food remained untouched in railway wagons just a few hundred metres away.²³⁵¹ People go hungry not because of the insufficiency of food but because of its maldistribution, not because of overpopulation or the weather but because of deeply rooted patterns of injustice and exploitation. In the words of Susan George, hunger is not a scourge but a scandal.²³⁵²

The third world's poverty can be regarded as a recent phenomenon and is by no means inevitable. In 1960, for example, Sierra Leone was a small and prosperous British colony, seemingly poised for success. It is a protracted civil war over control of its diamond mines that has now brought the country towards anarchy, mayhem and economic prostration.²³⁵³ In the backward parts of Africa, Asia and Latin America, instability and venality have discouraged both foreign investors and local entrepreneurs. Official tariffs can pale into insignificance besides the bribes that an importer may be expected to pay. Any natives of such countries who possess talent and enterprise are also likely to migrate to the developed world, thus depriving their own nations of their skills. The large number of doctors from developing countries working in western health services, for instance, is obviously linked to the third world's own atrociously low doctor-patient ratios.

The disadvantages of the third world are a function of the international institutional ensemble. The problem is not with the people who live there but with the global situation in which they find

themselves.²³⁵⁴ For example, some backward regions have shown considerable entrepreneurship in the production of illicit drugs.²³⁵⁵ Narcotics contributed billions of dollars to the Syrian economy in the 1980s.²³⁵⁶ Yet, while opium once brought profits to the British empire, power structures now prevailing within the world prevent other countries from developing legally and stably along these lines. Similarly, some third world countries found a niche in the global economy as recipients of hazardous waste. Yet this has now been banned by the 1991 Bamako convention, and only illicit shipments continue.²³⁵⁷ Thanks to the international community's static view of the world, third world entrepreneurs have been prohibited from getting on the first rung of a commercial career.

With their financial acumen and technological prowess, western firms have been able to run rings around third world governments. These firms have the expertise to help developing countries explore and exploit their reserves, but they will not do so unless they can be assured of keeping all but a fraction of the profits. Some developing countries are believed to have ample oil to meet at least their own needs, yet the western oil companies will not go there, fearing that the oil may be nationalised and they will be deprived of a customer.²³⁵⁸ Oil has been discovered in Sudan, for example, but it is proving difficult to develop because of the disastrous security situation.²³⁵⁹

Bauxite producers like Jamaica and Surinam have found that western firms actually refuse to help them develop their own refineries and factories.²³⁶⁰ When Ghana tried to establish an aluminium industry, its American contractors ruled out anything beyond the production of aluminium bars. This ensured that most profits would be generated not in Ghana but in the United States where the bars could be processed into finished goods. The political juniority of the third world forces it to accept such unfavourable, but just about economic, deals. The Ghanaian government realised that Africa would need to present a united front if it were to make any headway in international bargaining. However, such solidarity is not forthcoming in a continent that is being torn apart by disputes over the arbitrary borders formerly imposed by western colonial powers.²³⁶¹

At the same time, third world commodity producers are being disadvantaged by technical progress, which worsens the terms of trade for their primary products. Ephemerisation puts an increasing emphasis on know-how and a decreasing emphasis on raw materials. The president of Tanzania observed that in 1965 he could buy a tractor for the equivalent of 17 tons of sisal; in 1972, the same model needed 42 tons.²³⁶² Nevertheless, Ghana's experience of being stymied by western contractors shows that it is difficult for

poorer countries to acquire western know-how. It is equally difficult for them to develop their own. Their scientists are ignored by the international community²³⁶³ and indeed migrate northwards if they can.

A vicious circle is in operation. Economic backwardness keeps the third world politically weak, which then leaves it open to economic exploitation. Western firms have taken advantage of the relative lack of consumer standards in developing countries to conduct enterprises of the most dubious ethical quality. Nestlé put powdered baby milk saleswomen in third world maternity clinics where, dressed as nurses, they offered mothers a free tin and feeding bottle. Third world parents, who could scarcely afford it, were thus persuaded to purchase a product that is inferior to the mother's own breast milk and indeed is positively unhealthy when prepared for use in unsanitary conditions.²³⁶⁴ In effect, this western marketing campaign bears some of the responsibility for those statistics of third world disease, infant mortality, and malnutrition that tend to be presented as inevitable acts of God. Nestlé's campaign was ended by negative publicity, but the cynical and damaging abuse of third world consumers that it typifies remains a feature of western commercial practice within the poor countries.

Blaming the problems of the low-income countries on a self-reinforcing disadvantage with respect to the high-income countries naturally goes down well with third world governments. However, given that South Korea was on a par with many African countries a few decades ago and is now streets ahead, the Africans must obviously bear some of the blame for their own failure. After all, the governments of these penniless third world countries have squandered their resources on expensive arms races, largely on the back of loans from the west. By 1975, the developing world was spending more on arms than on health and education put together.²³⁶⁵

On the other hand, it is insufficient to attribute the failures of third world countries to simple fecklessness or dictatorship, as though the countries in question had an entirely free hand in the matter. The western arms companies, for example, have fed the culture of corruption in the countries they supply by a willingness to pay large bribes. What they gave out in bribes eventually came back to them in profits. The western banks loaned money to the developing countries, which then passed it on to the arms companies. Some was given in kickbacks to the purchaser and the rest was deposited in the original banks ready to be loaned out again. Everybody was a winner except for the third world populations who have remained saddled with huge debts long after their corrupt leaders have fled the country.

Overall, the negative policy choices of failed nations are derived from deep-seated logics in the contemporary situation. They cannot be explained in terms of a handful of wicked individuals in either third world governments or western boardrooms. The west as a whole has actively disrupted third world economies, sometimes through ignorance, sometimes through deliberate exploitation. Western governments have destabilised third world regimes in the pursuit of geopolitical objectives and, despite their rhetoric, usually preferred right-wing dictators to left-wing democrats.

Such a judgement might seem unfair given that the west ostensibly takes considerable interest in promoting third world development. Every year, there are thousands of meetings to discuss the issue, at the UN headquarters in New York, at the World Bank in Washington, at the European Commission in Brussels, at the Food and Agriculture Organisation in Rome and at the countless regional and sub-regional agencies of these institutions. Yet little progress has been observed and poverty, famine and civil strife persist.²³⁶⁶

No doubt, the delegates and officials who attend these meetings acutely feel the problems of the third world and sincerely want to help solve them. However, they have been strong on fine words but not so good at dealing with the practical issues arising when their declarations and resolutions make contact with the real world. After the UN's General Assembly decided that its 'Programme of Action for African Economic Recovery and Development, 1986-1990' had largely failed, the only thing it could think of was to call for a 'New Agenda for Development of Africa in the 1990s', which was unanimously adopted in due course.²³⁶⁷ This looks rather like a displacement activity, characteristic of people who feel anxious about a situation but are powerless to do anything about it.

Western assistance to the developing world is of questionable value and motivation. A British government paper of 1947 acknowledged that the colonies were losing more from subsidising the imperial power than they were ever getting back.²³⁶⁸ Grants of development aid have by no means always been helpful or selfless. One writer on the subject puts the term 'aid' in inverted commas and calls it a 'rent from compassion delivered to third world elites.'²³⁶⁹ 'Food aid', for instance, tends to undermine the local food-producing and distributing industries and perpetuates the situation of dependency. It is mainly motivated by Europe's and America's need to reduce their farm surpluses.

Financial aid is used as an instrument of foreign policy and comes with strings attached.²³⁷⁰ The real beneficiaries are often western

contractors, while the recipient countries are left with white elephant projects and ongoing maintenance costs not covered by the original grant.²³⁷¹ Aid also strengthens the authority of despotic third world regimes.²³⁷² It is often corruptly distributed and does not reach the people who actually need it, especially since they may well be fighting against their incompetent or brutal rulers.²³⁷³ One African government has used food aid as military rations, while another has sold the aid to its peasants and supplied various Swiss bank accounts with the proceeds.²³⁷⁴ In Somalia, a huge black market grew up around the refugee camps dealing in donated foodstuffs that were supposed to be free.²³⁷⁵

The problems of aid are as nothing compared to the problems of lending. The poor countries now owe enormous sums to the rich, a situation that has developed under the aegis of the World Bank. The Bank was set up to provide long term loans at low rates of interest for development-related projects in the third world. Its record, however, has been described by at least one commentator as a fiasco. In 1991, an internal study came to much the same conclusion.²³⁷⁶ The Bank has been associated with a high-handed approach, in which there is little attempt to investigate the real needs or desires of third world populations.²³⁷⁷ It has favoured large loans for prestige projects like dams, yet these run years behind schedule and are disproportionate to the everyday problems that poor people face. Micro-lending schemes developed by local charities, which put up small sums for establishing new businesses, do far more to help third world citizens get on their feet than these grandiose initiatives.

The World Bank bureaucrats, who enjoy high prestige and comfortable salaries, have been out of touch with the problems they are trying to solve. They have also sometimes shown as much sensitivity to the commercial interests of the US, their largest shareholder, as to their third world customers.²³⁷⁸ In the interests of alleviating American trade deficits, for example, the Bank has been known to cut back loans for third world steel, oil and copper production. A significant part of its spending has gone to western consultants and contractors, who enjoy expatriate lifestyles while making little attempt to engage in the local communities whom they are supposed to be serving.²³⁷⁹ Much of the rest ends up being corruptly diverted into the private accounts of local contractors, intermediaries and politicians who have no personal responsibility for paying it back.

After some fifty years of this unsatisfactory process, debt has ballooned in virtually every developing country, while the tangible benefits are difficult to discern. The lending institutions have been willing to turn a blind eye to obvious fraud. In the former Zaire (now Democratic Republic of

Congo), President Mobutu reputedly accumulated a personal fortune of \$4 billion, while his country accumulated a foreign debt of \$5 billion. Capital fleeing Latin America between 1976 and 1984 was also about equal to the increase in the continent's external debt. Neither of these was a coincidence.²³⁸⁰ The western banking network, as recipients of the stolen cash, must have had some inkling of what was going on. Yet this corruptly appropriated money was then lent back to the third world governments that deposited it. The process continues today. Russia has recently been receiving billions of dollars in loans, which fall into the hands of its shady business elite and are promptly exported back out of the country to be deposited in western banks.

Interest charges have turned out to be much higher than the borrowing countries were originally led to expect. Many debtor countries have committed between a third and a half of their foreign earnings to repay interest, without touching the principal at all. Since 1984, the debtor countries have been making a net transfer of funds to the rich countries.²³⁸¹ In some cases the situation has become truly absurd, with countries borrowing large sums merely to pay off the interest on old debts.²³⁸²

Apart from two escapees, Barbados and South Korea, third world debtors seem to be increasingly mired in a system that long ago ceased bringing them any benefit. Although some commentators have argued that the picture is not as bleak as it appears, the simple fact remains that the development lending that was supposed to help the world's most deprived people has if anything left them in a worse situation. The only people to benefit from the project have been western financial institutions and a diverse collection of some of the twentieth century's greatest rogues. Given that it was done knowingly, and given that some of the poorest and most vulnerable people on the planet were the ultimate victims, the word 'immoral' would seem inadequate to describe this activity.

Nevertheless, numerous impoverished lands still turn over much of their GNP to pay the bonuses of western bank executives.²³⁸³ Even then, it is not enough. All the major debtors are in default. Africa is barely paying half its dues. However, creditor countries and financial institutions have gone through considerable contortions to prevent out-and-out default, since this would be an embarrassing reflection on their own incompetence and might set off a chain reaction. Avoiding such a scenario has involved more lending, as an inducement for which the World Bank has allowed private banks to charge lucrative restructuring fees, which the borrowers have had to pay up front. Speaking of a nearly insolvent developing country, one banker said 'that

country is a cash cow for us – we hope they never repay!'.²³⁸⁴ Not surprisingly, most debtor countries have found that after a programme of restructuring they are in deeper crisis than before.

Many people might well think that the third world countries would be justified in repudiating their debts entirely. It is morally wrong to hold these desperately underprivileged people responsible for debts which were taken on by corrupt elites and spent on coercing their populations, lining their own pockets and seeing through economically useless projects.²³⁸⁵ Western financial institutions should bear the consequences of propping up these dictators, not their victims. In fact, behind the scenes, debts have indeed been disappearing as banks face reality and quietly write them off. It is recognised that the burden of third world debt is intolerable and undeserved, and there is growing public pressure to reduce it.

The US had to agree to cancel Egypt's debt in return for its support in the Gulf war.²³⁸⁶ The chances of widespread, overt default are increasing as declining western authority has made countries bolder. This prospect has recently encouraged a coalition of politicians and international financiers to agree a programme of debt forgiveness. It has been presented as an act of compassion by enlightened western governments. In reality, it is a self-interested step designed to protect western economies by winding down the debt burden in a controlled manner. Having agreed to these

measures, governments are still dragging their feet.²³⁸⁷ They want to minimise their embarrassment as western taxpayers end up bailing out the various banks that have been responsible for this sorry mess.²³⁸⁸

The writing off of debt implies disorganisation. Money loses its meaning as a store of value.²³⁸⁹ The gainers in this case will be the financial institutions who are given a face-saving way out of the situation created by their own ill-judged lending decisions. The losers are once again the poor countries, for debt will not be forgiven completely but just made less ludicrously disproportionate. There will still be repayments to be made for the indefinite future. Hence, debt forgiveness will only perpetuate the economic subordination of poor countries, bolster the dominance of corrupt elites and preclude development as it has been precluded in the past. Wealth differentials will remain large and apt to grow.

Overall, the situation of the third world is and will remain desperate and unjust. Yet one cannot keep the majority of the world's population in penury forever, nor leave them as destitute, non-participants in the human endeavour. Nevertheless, with every passing decade, the differences between winners and losers in the international system are more entrenched. This is a contradiction, and it spells trouble ahead.

Chapter 28 - International dis cohesion

The stalling of supranationalism

From the perspective of the elites, there was a considerable degree of cultural unification in medieval Europe.²³⁹⁰ They shared Roman Catholicism, gold currency, the literary language of Latin, and broadly similar tastes in art and architecture. They also acted in a co-ordinated manner to conduct the crusades.²³⁹¹ At grass roots level, however, loyalties, languages and customs were far more diversified and parochial than they are today. People had little truck with those of a hundred or so miles away and little sense of sharing a common agenda. In terms of mass consciousness, cohesion was narrow.

Over the last millennium, cohesion has tended to broaden. The size of social units has increased. Loyalties have become focused on the nation state, which is made up of tens of millions of people.²³⁹² Much of the change is quite recent. Dozens of national identities were only created in the twentieth century as colonial powers disbanded their empires. Even Germany and Italy were only unified in the late nineteenth century.

The last fifty years have seen several attempts to extend this process further, by merging today's nations into supranational units. Germany and Italy, for example, are founding members of the European Union, which explicitly promotes cultural convergence and social unification of its constituent peoples. Various other communities of nations have been established around the world, not to mention the United Nations itself.

Nevertheless, it does not look as though existing nations are ready to lose their identities within the international associations. Notwithstanding their membership of the EU, France, Germany and Britain show no prospect of merging into a common form with a common language and tastes. On the contrary, traditional rivalries remain secure. An EU-sponsored initiative to construct a common Euro-history textbook encountered fundamental mismatches of perception, such as a disagreement between the British and Spanish over whether Sir Francis Drake should be described as a great explorer or as a pirate.²³⁹³ When French fishermen recently blockaded the channel ports, and targeted British truckers and holidaymakers in a dispute that had nothing to do with Britain, 'English fury' was the source of much merriment in the French press.²³⁹⁴

Opinion polls suggest that most Europeans do not feel European.²³⁹⁵ The concept has little emotional resonance.²³⁹⁶ Norman Davies identifies at least six fault lines dividing the continent, including the tide marks left by Rome, the Ottomans, and nineteenth century industrialisation.²³⁹⁷ While some politicians may desire unity, ordinary citizens seem to be wary of submerging themselves in a monolithic

Europeanness. Even the French, supposedly one of the most communitaire of peoples, endorsed the unity-promoting Maastricht treaty by the narrowest possible margin – 51 percent to 49 percent. The Danes accepted it only on the second referendum, while Britons were never consulted. The Irish voted for the treaty with enthusiasm – but they receive six times as much from the EU budget as they put in.

In some quarters, hostility towards the EU is becoming quite vocal. The UK Independence Party, with an explicit platform of withdrawal from the EU, got three representatives elected to the European Parliament in 1999. The Austrian Freedom Party has also made significant electoral progress with its clear anti-European agenda. The party's misgivings seem to have been vindicated by the sermonising of other European nations when it entered Austria's government, and by the sanctions that were imposed.

There continues to be a cleft between the EU's original six member states and the later entrants, including Spain and Britain.²³⁹⁸ The latter's failure to join the single currency from the outset has further diminished its influence and insidership. Britain has also been coming under fire over its rebate from the EU budget. This was negotiated in the 1980s, to correct what Britain considered was a transparent unfairness in the assessment of its dues. Other member states, though, are now losing patience with this concession.²³⁹⁹

The multi-billion pound frauds that affect the EU budget are symptomatic of the low level of cohesion among the member states. Stealing from others indicates a failure to count their well-being as part of one's own. Despite the forced resignation of the entire body of European commissioners over the issue, there is little confidence that this problem is going to be resolved in the foreseeable future.²⁴⁰⁰ Apart from anything else, the new head of the commission was himself investigated for fraud when he was prime minister of Italy. That investigation was derailed after a catalogue of delays, missing documents and even death threats against the responsible magistrate.²⁴⁰¹

Optimists concerning the European Union point out that states are not leaving it but are queuing up to join.²⁴⁰² Yet if the EU has problems with cohesion now, they are as nothing compared to the problems that will arise with its enlargement. The new aspirants for membership are relatively poor central European states, who would expect to receive large transfers of funds if they joined. This will be resisted by existing members, who are conscious of the swelling financial burdens of their own populations. The result will be tension on both sides.

One of the candidates for EU membership is Turkey, a Muslim country. EU officials already

regard it as a mistake to have admitted Greece, which does not have the same values as other members and has behaved poorly within the EU.²⁴⁰³ Yet Turkey's culture is even further removed from that of the existing members. Its formal candidacy was accepted after a volte face in 1998, when it had been turned down a few months before. This seems to have been a sop to ease Turkey's humiliation, and was only offered under pressure from the United States.

According to one European Commission official, the present level of seriousness within the EU about enlargement is actually nil.²⁴⁰⁴ Even the best candidates, such as Poland, are making no progress beyond the EU anteroom.²⁴⁰⁵ Germany has begun linking its support for their admission to the resolution of issues lingering from the second world war, such as the return of the Prussian library currently in Cracow.²⁴⁰⁶ With the promises of potential membership proving to be hollow, tensions and resentment are increasing. In Turkey, Islamist parties have established the largest bloc in parliament. The country is becoming less secular, reflecting a growing antipathy towards western society. This makes it less attractive to the EU and only produces a vicious circle. Turkey is a less likely candidate for EU membership now than it was in the 1970s.²⁴⁰⁷

In terms of progress towards supranational unification, Europe is among the most advanced in the world. Yet its experience shows that the process is stalling. It is proving difficult to extend cohesion much beyond its present levels, either by strengthening the social bonds between existing members or by extending social bonds to peoples presently outside the community. Local consciousness may have become submerged in national consciousness, but national consciousness is substantially less willing to be submerged in still higher forms of social unit.

The old divisions

The demise of the Soviet Union in 1991 led to suggestions that the world was entering a new era of greater mutual understanding between nations. Totalitarian regimes began to disappear in southern Europe in the 1970s, and this trend later spread to Asia and Latin America. In reaching the Soviet Union it seemed to be almost complete. One view was that liberal democracy had effectively won the argument over alternative forms of society like state communism, and hence that people everywhere were coming to accept the same political and economic principles.²⁴⁰⁸ Such a convergence of institutional forms would imply that nations share fundamental values and beliefs, and hence would constitute a growth of world cohesion.

The Gulf war has also been said to illustrate the globalisation of moral principles. The international community stood together to reaffirm

the rights of freedom and self-determination. Iraq was opposed by a remarkably broad coalition, in which western countries were joined by Islamic states such as Saudi Arabia and even Syria, with whom the west's previous relations were at best cool. Similarly, in the Kosovo crisis, Greece held tight with NATO in order to discipline Serbia, despite its being a traditional friend of Serbia with whom it shares the Orthodox religion.

On the other hand, some observations suggest that the sharing of goals and values is largely a matter of perception and in reality peoples and nations do not care for each other any more than they ever have. Instead, associations that have bound nations together across cultural boundaries are becoming less convincing, and nations seem to be reverting to type. This is true, for instance, of America's ties with Japan, South Korea, and Pakistan, which are all weakening. A supposed manifestation of greater global cohesion involves international co-operation at the United Nations. Yet in its half-century of existence, the UN has seen relations between its members become, if anything, more conflictual. As the number of member states has proliferated, opinion within the UN's General Assembly has become fragmented and increasingly critical of the western-dominated agenda. The west is increasingly disregarding of the UN's legitimacy.²⁴⁰⁹ During the 1990s, the hopes that UN-sponsored cohesion might end international conflict and aggression proved to be optimistic to say the least.²⁴¹⁰

From its inception, the UN has been a hotbed of espionage, diplomatic rivalry and staff dissent.²⁴¹¹ Like the EU, it is plagued by corruption. In 1997, the UN's internal auditors reported widespread fraud and mismanagement. This was more than just a matter of fiddling travelling expenses. The report noted that 'more serious cases of broader scope and complexity' had been uncovered than ever before. In one case, a staff member defrauded the UN agency for Palestinian refugees of several hundred thousand dollars in false medical claims. In another, nearly four million dollars in cash was stolen from the bottom drawer of a filing cabinet during the UN operation in Somalia. One of the UN staffers investigated for embezzlement was a US citizen. UN agencies were also criticised for organising expensive but aimless conferences that were simply junkets for the attendees. The budget for one of these included around \$100,000 apiece for three fund-raising consultants, who brought in less than a tenth of what they were paid.²⁴¹²

The UN staff must have little fellow feeling for the people of the world if they are prepared to supplement their already high salaries at the expense of refugees and others who are sick or starving. Their corruption and selfishness not only demonstrate the UN's dis cohesion as an institution

but also symbolise the corresponding dis cohesion among its member states. The lack of empathy and compassion in the international community finds a sharp expression in the lack of empathy and compassion among the staff at the UN, the primary instantiation of that community.

In the Gulf war, the spectacle of Muslims allying with Christians to fight fellow Muslims in Iraq was certainly remarkable. However, this simply reflected the geopolitical interests that were at stake. Agreement with the western view was by no means automatic. The US had to threaten withdrawal of IMF financing before some countries agreed to a UN resolution permitting the war.²⁴¹³ Syria's co-operation was bought at the expense of an American commitment to put pressure on Israel concerning the status of the Golan Heights.²⁴¹⁴ Even so, Syrian and Egyptian troops burst into cheering when they heard of Iraq's Scud attacks on Israel.²⁴¹⁵ Jordan, widely perceived to be a moderate influence in the region and one sympathetic to the west, utterly refused to support the coalition action against Iraq. In Turkey, the government's backing of NATO led to public demonstrations and prompted the resignation of the foreign minister, the defence minister, and the chief of the general staff.²⁴¹⁶

The conflicts in the former Yugoslavia have reawakened geopolitical alignments that formerly had significance in the first and second world wars. During the Bosnian crisis, France and Britain, who went to war on behalf of Serbia in 1914, leaned towards Serbia again, while the old enemy Germany leaned towards Croatia. Russia and Greece also supported Serbia, while Turkey and other Muslim states supported the Bosnian Muslims (wounded Muslims were being flown to hospitals in Saudi Arabia).²⁴¹⁷ The US took the German view (there is a strong Germanic streak in the American make-up) and apparently regarded Serbia as a miniature Russia. Americans were furious when they discovered that British forces were declining to identify Serb targets for US warplanes to bomb.

The situation concerning Kosovo was more complex and the western alliance certainly seemed to line up behind the US in punishing Serbia. However, Greece and others did so only with reluctance, and at the cost of considerable public protest. Some of their military officials seem to have passed NATO secrets to the Serbian authorities. At a governmental level, Britain and France deviated a long way from their traditional stance, but on the ground British and French soldiers have reverted to type. A British general defied NATO's American commander by refusing to stop Russian troops from being first in to Kosovo's main airport – an act of insubordination that the US senate wants to see investigated.²⁴¹⁸ Subsequently, French troops have been quite

blatant in their sympathy for Serbians.²⁴¹⁹ A British police commander who criticised their partisan conduct was sent home.²⁴²⁰ NATO's action of course did nothing to reconcile Kosovo's different communities or promote cultural understanding in this part of the world. One KLA commander has spoken of the need to cleanse the land of the hated Serbs and to destroy them 'century after century'.²⁴²¹ The Serbs have matching views.

Old enmities are re-surfacing everywhere. Greece and Turkey have been vocal in support of their respective protégés in Greek and Turkish Cyprus, and, in 1996, the two countries were engaged in a naval stand-off over some uninhabited Aegean islets.²⁴²² In east Asia, ancient antipathies between Muslims and overseas Chinese are leading to renewed tension and violence. In 1998, Chinese businesses in Indonesia were targets of arson and looting, and there were even some instances of lynching. There are also tensions in Malaysia between an economically dominant Chinese minority and the Malay majority. Relations between Japan and Russia, which fought at the beginning of the twentieth century as well as in the second world war, have been of a low quality. Arguments concerning sovereignty over the Southern Kurile islands, owned by Russia but lying very close to the Japanese coast, are one vent for a submerged animosity.²⁴²³ Both countries have recently expressed a willingness to seek peaceful solutions, but little progress has been made and they are still technically at war.²⁴²⁴

Francis Fukuyama has said that he expects the twenty first century to be more enlightened and hence more peaceful than previous ones, since religion has become more tolerant and liberal.²⁴²⁵ This optimism apparently comes from looking at the institutionalised religions within dis cohesive developed countries. They are indeed becoming more tolerant, or in other words losing moral conviction. However, just as fast, people are reinventing religion because they cannot live without it. Religion has played such a central part in the human story that it obviously satisfies major needs. The rational assumption must be that, on long time scales, religion and religious conflict will play the same role in humanity's future as they have played in its past.

Ethnic conflict, which usually means religious conflict, has been rising steadily around the world.²⁴²⁶ During the 1990s, some fifty ethnic wars were in progress. Over half of them took place in the former Soviet Union, where more than a hundred other 'territorial-ethnic claims and conflicts concerning borders' threaten to break out into open fighting.²⁴²⁷ The Yugoslavian conflict introduced the concept of ethnic cleansing into public consciousness. People who seemed to be living together perfectly happy suddenly woke up to the fact that they loathed each other enough to

kill and raze villages, in a bid to drive each other away. Such ethnic cleansing is not confined to the former Yugoslavia. It is a frequent characteristic of contemporary conflicts and has occurred in Afghanistan, Tajikistan, the Caucasus, Liberia, and the Sudan.²⁴²⁸

The fact is that religious and cultural disputes are alive and well, and as bitter as ever. The Arab-Israeli conflict, for instance, has defied numerous peace initiatives. This is a dispute not just over ordinary territory but also over the ownership of Islam's and Judaism's holiest sites. Similarly, whereas in the cold war the west was challenged by communism, it is now challenged by Islam or by 'Asian values', i.e. by different forms of culture rather than by a different form of government. Enmities of this kind are particularly bitter and intractable, for they are sub-rational. They are not about political and economic institutions, where conflict can be resolved through compromise. They are about the fundamental questions: what it is to be a human being, what humanity's purpose is, how people should live. These are questions of absolute truth, where compromise is impossible.

Familiarity and contempt

Throughout the world, people of different cultures have been getting better acquainted, thanks to television and the huge growth of foreign holidays. Since 1960, tourism has risen by a factor of twenty. Even the people of countries like China and India are starting to go abroad – a trend that is likely to take off in view of the new-found purchasing power of their expanding middle classes.²⁴²⁹ However, such increased contact does not always produce improved understanding. Arguably, it can make people less sympathetic towards each other, as they become more aware of their differences.²⁴³⁰ The former soviet republics, for example, do not seem to have grown any closer through their submersion within the Soviet Union. Instead, they have emerged with a long list of resentments.²⁴³¹

In many places, resentment is growing at the patronising treatment doled out by the west. South-east Asians, for instance, feel that the IMF treated them in a noticeably unsympathetic manner during their recent crisis. They have also been maligned in the past for doing precisely what the western countries would like to do, i.e. grow their economies. South-east Asians are subjected to self-righteous and sometimes chauvinistic criticism regarding their economic and social systems, e.g. over such matters as human rights or intellectual property. During the mid-1980s, US workers turned their hammers on Japanese cars and television sets for the benefit of the television cameras.²⁴³² American politicians have also smashed up imported Japanese cars on the steps of the Capitol.²⁴³³ This does not do much to make south-east Asians feel appreciated or to foster

international cohesion. On the contrary, it is the kind of symbolic action that can lead to war. It combines insult and humiliation with a real threat to the enemy's livelihood.

Japan got barely a thank you for its large financial contribution to the Gulf war and it saw little of the lucrative commercial contracts handed out for the reconstruction of Kuwait.²⁴³⁴ The continuing presence of American troops in Japan is also a hindrance to mutual understanding. The Japanese resent paying most of the costs of an occupation force whose individual members are not noted for their sensitivity to local feelings and customs. In a 1995 poll, only 43 percent of Japanese expressed 'liking' for the US, the lowest for some time, though admittedly much higher than the liking for countries such as Russia (0.6 percent), China (10 percent) and North Korea (0.1 percent).²⁴³⁵ The Japanese are increasingly self-assertive as they recognise the west's lack of regard for their interests. Japan's parliament has recently re-legalised the 'rising sun' flag and the emperor's traditional hymn of praise, which were formerly outlawed because of their association with the country's past militarism.²⁴³⁶ In 1998, an employment tribunal heard how the boss of a Japanese firm based in Britain had said he did not want 'that big nosed princess' (Diana) to open a new building, and how other Japanese staff had regularly discussed British laziness and the decline of the west in front of British employees.²⁴³⁷ Such opinions are evidently the Japanese response to the boorish and irksome attitudes often directed towards them.

Japan's relations with China and South Korea are tending to worsen rather than improve as the amount of contact increases between the countries. In opinion surveys, Japanese and South Koreans say they do not believe that relations between the countries are going well. Negative sentiment is more intense on the Korean side.²⁴³⁸ In downtown Seoul, there are memorials to remind the public of Japan's past aggression.²⁴³⁹ One Japanese diplomat has acknowledged that his country's history of conquest remains a major obstacle between it and its neighbours.²⁴⁴⁰ In China, a new organisation has begun demanding reparations for Japanese war crimes,²⁴⁴¹ and China's official media recently attacked the Japanese war record during a visit by the Japanese prime minister.²⁴⁴² Some Chinese citizens have advocated a boycott of Japanese goods because of the feeling that Japanese companies treat Chinese consumers less well than they treat Americans.²⁴⁴³

China's relations with the west are not getting any better, despite a superficial rapprochement. The nineteenth century was a period of particular humiliation at the hands of western barbarians, and China shows no sign of forgetting this. One Chinese general has said that the country must

nurse its desire for vengeance, concealing its abilities and biding its time. China gives both moral and material support to countries that clash with the US, including Iran and Sudan.²⁴⁴⁴ When its embassy was bombed during NATO's raids on Belgrade, the Chinese government seemed to encourage violent anti-NATO demonstrations. The police in Beijing looked on benignly as rioters tore up the pavement and hurled pieces of it at the US embassy.²⁴⁴⁵ The rancour over this incident has been renewed by apparent American foot-dragging concerning the payment of compensation.²⁴⁴⁶

Even the most casual observer of world affairs will be familiar with the fact that relations between Muslims and other societies deteriorated sharply during the 1970s and 1980s. Increasing exposure to each other's cultures brought abhorrence rather than tolerance on both sides. Islamic societies found the west faithless and debauched, while western societies found Islam reactionary and illiberal. When Tony Blair visited South Africa in 1999, Muslim demonstrators chanted 'Death to Blair'. In south-east Asia, the Muslim states are resentful of the greater economic success and sometimes arrogance of Japan and the Sinic countries. Malaysia's premier was quoted as blaming his country's recent troubles on Jewish financiers and speculators, explaining that 'Jews do not want to see Muslims progress.' He tempered his remarks by saying 'we do not want to accuse them' and later claimed that he had been misinterpreted.²⁴⁴⁷ Nevertheless, the episode offered an authentic glimpse of implicit thinking in these countries. In Indonesia, Muslims have begun travelling from other islands to the Moluccas in order to join a holy war against the local Christians. This is a new development in an increasingly vicious confrontation.²⁴⁴⁸

In recent decades, disparate nations have come into closer contact, but this has not always increased their liking for one another. Often it has produced mutual suspicion and animosity. Neither east Asians nor Muslims are learning to love the west, and the west is not learning to love them. On the contrary, social relationships are deteriorating and goodwill is being lost.

Divergent values

In their five hundred years of hegemony western people have become accustomed to thinking of western interests as universal interests and of western values as universal values. Their societies have achieved apparently universal goods, such as material well-being and respect for human life, and this has encouraged the view that other regions should adopt western ways in order to enjoy the same benefits. In reality, of course, the west's favoured situation is a transient condition that many cultures have enjoyed before and that others will enjoy in future.

There is nothing peculiar to its cultural traditions that inevitably makes the west wealthy and humane. On the long view, the west's record on human rights or on poverty is no superior to that of many other regions. When western leaders and western-dominated international institutions lecture the rest of the world on the desirability of liberal democracy or of free enterprise, it is often in a highly selective fashion. Western governments have actually been prepared to overlook the grossest abuses of human rights by tyrants of the most hideous hue so long as they pursue policies generally favourable to western interests. When the west purports to speak for or act on behalf of the international community, as in the expulsion of Iraq from Kuwait, it is often a rhetorical smokescreen to disguise western and predominantly American interests.

Such institutions as democratic elections and joint stock companies are not inherently a part of western civilisation. The so-called westernisation of other societies as they adopt these institutions is really a political and economic transformation that is not peculiarly western. One could say that the west has 'westernised' itself over the last few hundred years. Countries that have these institutions do not necessarily share western values in other respects.²⁴⁴⁹ On the contrary, genuine democracy seldom produces pro-western governments in non-western societies. This is no doubt why the west has often found that it gets along better with dictators. Typically, the first elections after a country achieves democracy bring in western-oriented elites. However, indigenist parties with non-western agendas subsequently gain ground. This has been seen in Algeria, Turkey and Sri Lanka.²⁴⁵⁰

Samuel Huntington suggests that the evidence today is not for global convergence on a single western-derived civilisation, but rather for the emergence of seven or eight distinct civilisations, including Sinic and Islamic, all in search of self-realisation and increasingly likely to be in conflict with each other.²⁴⁵¹ On the other hand, some writers take exception to the idea that civilisations inevitably find themselves in conflict. They point out, for example, the trans-civilisational alliances seen in Kosovo and in the Gulf war.²⁴⁵² Kenichi Ohmae says that ethnic tensions arise simply when old-fashioned leaders look for old-fashioned ways to solve their problems.²⁴⁵³ In fact, Huntington also suggests that world leaders should drop their old-fashioned universalist pretensions and accept that this is a multicivilisational world.

Nevertheless, a multicivilisational world may be as unnatural as a multicultural society. Civilisations are instinctively universalist for otherwise they must admit that their most deeply held beliefs are arbitrary and therefore essentially meaningless. Those contemporary leaders who are

provoking inter-civilisational confrontations do not look particularly old-fashioned. If anything, the old-fashioned ones seem to be those who are clinging on to notions of universal peace and justice in a world made safe for western businesses and western tourists. By contrast, the confronters give the impression of having the most realistic grasp of where their interests lie in the world of the twenty first century. In reviving old ideas they are in tune with the times as the world moves backwards towards a dark age.

In the past, non-western societies did tend to emulate the west's culture as they acquired its techniques. They developed an admiration for Shakespeare, say, while adopting double-entry bookkeeping. Therefore, western values, attitudes and beliefs have to some extent infiltrated every other society around the world. However, this process is now moving in reverse. The long-established growth of English as a lingua franca stopped around 1960. The proportion of English speakers throughout the world has since been falling.²⁴⁵⁴ (A common language is a force for cohesion.) The Roman Catholic church, which once spread itself through Latin America, Africa and Asia is in a state of growing crisis everywhere. Its followers are variously shaking off papal authority, scattering into other Christian denominations, or departing altogether to join with Islam.²⁴⁵⁵ In general, countries are now rejecting western lifestyles and outlooks. In some countries, such as Iran, the switch has been obvious and decisive. In others, such as Japan or Singapore, the switch has been more subtle but it has occurred nonetheless.²⁴⁵⁶

The reason for this sea change is quite clear. The erosion of the west's economic and political dominance has seriously dented western prestige and has diminished the attractions of its message. In the same way, communism appealed to people in the 1950s and 1960s when it was associated with the apparent economic accomplishment and military force of the Soviet Union, but it lost its appeal as the Soviet experiment was seen to be heading for failure. Thus, the west's interpretations of human rights, liberalism and democracy have become less compelling in the light of an association with drug addiction, crime and family breakdown.²⁴⁵⁷ The central Asian republic of Georgia recently put caricatures of Bill Clinton and Monica Lewinsky on its stamps,²⁴⁵⁸ hardly an expression of admiration for western leadership. China has clearly indicated that America's internal problems make it unfit to lecture others.²⁴⁵⁹

East Asian countries once affected to study western secrets. Now they attribute their rapid development not to the import of western culture but to adherence to their own culture. Singapore's Lee Kuan Yew implicated Asian respect for authority and family values as a crucial factor in his

country's success. Malaysia's Dr Mahathir has suggested that Asian values are the truly universal values, not western ones.²⁴⁶⁰ These countries are increasingly ready to assert the independence and indeed superiority of east Asian civilisation. Symbolic of its growing prestige is Australia's growing interest in joining Asian supranational organisations rather than remaining within the western bloc. The Asians, however, view Australia's aspirations in a manner similar to the way Europeans view Turkey's aspirations to join the EU. They have rebuffed its overtures, and Lee Kuan Yew has called Australia 'the new white trash of Asia'.²⁴⁶¹

The international de-legitimisation of western values is reinforced by the west's failure to reassert those values, wherever and whenever they are breached. America's recent decision not to couple tariff reductions for China to progress on human rights issues was taken as a sign of western weakness. The United States lost legitimacy in the eyes of China's regime and of its people. It did not get the expected quid pro quo but rather found that it had opened the door for further contemptuous dismissals of its attempts at moral pressure.

Since the decolonisations of the 1950s and 1960s, the west has been content to tolerate third world regimes that flout the very principles of freedom and democracy which it nominally upholds at home and in international forums. In many countries, the local people have had to overthrow oppressive autocrats who had friendly relations with the west and even received considerable western assistance. Not surprisingly, these people see the west as having been hostile to their freedom and democracy. That has done nothing to promote the credibility of western rhetoric on these issues.

The west's ability to apply moral pressure in the international system is also undermined by its transparent hypocrisy. If one goes back more than a few decades, the west's ethical record is thoroughly deplorable. To Indians, for example, the British raj appears as an illegal invasion and Sir Robert Clive as a sly gangster. Their view has some logic. Indians celebrate their own unbroken resistance and not the supposed superiority of British governance.²⁴⁶² Britain's modern prosperity certainly has murky roots. The country's cotton industry was built on the back of American plantation slavery.²⁴⁶³ In the mid-nineteenth century, when China quite reasonably barred British opium traders whose product was having a devastating effect, Britain responded by launching a war. This led among other things to the cession of Hong Kong. Not surprisingly, China has never considered that a legitimate arrangement.²⁴⁶⁴

The west roundly condemns a handful of countries for sponsoring international terrorism but arguably it has been its greatest perpetrator. The

US has a long history of supporting insurrection in countries ranging from Greece to Afghanistan, usually in blatant violation of the UN charter and resolutions.²⁴⁶⁵ It has been known to encourage killing and torture.²⁴⁶⁶ The west may not be as malicious as some but, because of its greater power, it is responsible for more suffering overall.²⁴⁶⁷ In the 1950s, when Guatemala passed legislation to improve the conditions of local workers and cut the profits of American fruit businesses, the US fostered an armed rebellion that overthrew the democratically elected government and restored dictatorship.²⁴⁶⁸ In the 1980s, US agents attempted to murder a Hezbollah leader with a car bomb and killed eighty people but not the intended target.²⁴⁶⁹ The west has also attempted to assassinate various world leaders, including Fidel Castro and Colonel Gaddafi.²⁴⁷⁰

The west justified its war and subsequent sanctions against Iraq in terms of the highest morality – yet this moral sensibility was lacking during the 1980s, when western companies were quietly allowed to export arms to Iraq²⁴⁷¹ and Saddam Hussein brutalised Kurdish rebels without censure. It became an honourable imperative to turn back Iraq's 1990 invasion of Kuwait (in alliance with other dictatorial regimes),²⁴⁷² but not apparently to turn back its 1980 invasion of Iran. The US and UK also persistently opposed UN resolutions condemning Indonesia's 1975 invasion of East Timor.²⁴⁷³

Since the end of the Gulf war, the west has maintained sanctions against Iraq which even the UN believes to have caused the death of half a million Iraqi children. Saddam Hussein is undoubtedly a vicious psychopath, yet this hardly justifies an act of genocide against his long suffering population. Far from harming Saddam, it has helped him grow rich on the smuggling trade. Also, despite Iraq's repeated attempts to meet UN demands and end the sanctions, the west has consistently found reasons to keep them in force.²⁴⁷⁴ It has been convenient to do so. As the US recently admitted, the arms inspection regime was an ideal cover for American spies.²⁴⁷⁵

Similarly, the west's rhetoric against Yugoslavia could be regarded as highly deceitful given that western interference is at least partly responsible for the country's problems. In the 1980s, German secret agents and the Roman Catholic church were actively destabilising the communist regime. Germany and the Vatican then rushed to recognise Croatia and Slovenia when independent states were declared there in 1992, aggravating rather than calming a volatile situation.²⁴⁷⁶ During the war in Bosnia, the US demonised the Serbs and favoured bombing them at every opportunity, despite much evidence that the other parties were themselves far from blameless.²⁴⁷⁷ The Germans and Americans also

helped to build up Kosovo's KLA,²⁴⁷⁸ inflaming the situation in Serbia's southern province long before the actual conflict. In the Serbian view, the whole Kosovo crisis was manufactured by NATO for the purpose of extending its influence in the middle east.²⁴⁷⁹

There have been proposals to establish an international criminal court, supposedly to bring justice to dictators and other offenders against the international community. Were it not for the fact that the west will either control it or not co-operate, the west might have a lot to answer for in this court. Indeed, the US, alongside China, has strongly criticised the idea of such a court, fearing that it would be subject to 'malicious' prosecutions. Britain, on the other hand, has expressed enthusiasm,²⁴⁸⁰ apparently not recognising that it might itself end up in the dock. There has already been a threat to sue Britain in international courts coming from Kenyan veterans of the 1950s Mau-Mau uprising. This was a rather unsatisfactory period in the history of the British empire when some thirteen thousand Africans were killed and many times that number were mistreated in government prison camps.²⁴⁸¹ Much of the west's unsavoury behaviour, past and present, may pass the western public by, but it does not pass by those who have been its victims. To the latter the west's values seem not admirable but shot through with double standards, cant and misplaced sentimentality. China, for example, finds the west's high regard for the Dalai Lama to be nauseatingly simplistic and considers itself as having liberated the Tibetan people from what was an oppressive theocracy.²⁴⁸²

Since the 1970s, the leaders of the Islamic world have increasingly distanced themselves from western behaviour by identifying themselves with Islamic values. Yet standing up for their own way of life inevitably brings Muslims into conflict with the dominant west and makes them a target for harangues and hostility. Right-wing preacher and American presidential candidate Pat Buchanan has spoken of a thousand year struggle for humanity's destiny between Christianity and Islam, and said that he expects it to continue in the twenty first century. He has also referred to the west being 'humiliated' by Shi'ites as their co-religionists 'fill up' western countries.²⁴⁸³ In this respect, Buchanan is only the mouthpiece for a familiar line of argument. Cardinal Giacomo Biffi, a leading conservative contender for the papacy, has spoken of a 'Muslim invasion' threatening Europe. He has urged the EU to restrict future entry visas to Christians.²⁴⁸⁴

Some commentators reject the idea of a timeless challenge between Islam and the west.²⁴⁸⁵ One points out that the Islamic world does not have as its principal aim to overthrow the west, and is not sufficiently coherent as a bloc to mount an

effective challenge anyway, while in some countries Muslims are arguably the victims of others' aggression. Another contends that this is a counterfeit issue, based on hackneyed stereotypes, and fostering the enmity it purports to describe.²⁴⁸⁶

No doubt, there is nothing peculiar to Islam that makes it necessarily liable to be in conflict with the west. Islam is no more challenging and confronting the west than the west is challenging and confronting Islam. However, that is the problem. Two such distinct civilisations, with large populations behind them and different outlooks on the world, cannot help but find themselves in opposition. As they are forced into contact with each other, in a world of increasing scale, they inevitably find reasons for conflict. Occasionally, sparks will fly from the natural friction as two great civilisations rub against each other.

The awareness of opposed interests, and of the obligatory nature of mutual antipathy, is certainly felt on both sides. In 1980, Pakistan's chief justice wrote to a local religious leader about the need to create a truly Islamic society, free from 'the evil influence of alien cultures'.²⁴⁸⁷ A recent Islamic tract published in Britain characterises Italy's Capri as an island of nudism and homosexuality, while observing that God has repeatedly destroyed impious nations and will surely do so again.²⁴⁸⁸ In some Islamic thinking, Europe is the promised land, which Muslims will inherit once Christians have destroyed themselves.²⁴⁸⁹ Dr Kalim Saddiqi, leader of the British 'Muslim parliament', has repeatedly stated that the twenty first century will be characterised by the Islamic challenge to the west – and so he would clearly agree with Pat Buchanan on that score.

The typical western picture of Islam involves street fighting, suicide bombing, and hostage taking, as well as the mistreatment of women and ceremonial burning of the US flag. However, Islamic religion and Islamic civilisation are not necessarily violent and repressive. The prophet Mohammed originally denounced unnecessary bloodshed and the subordination of women. In the Ottoman empire and the Arab world, Christians and Jews were tolerated at a time when Europe's Inquisition was rooting out Jews and heretics. Jews lived peacefully in Islamic Spain but were brutally expelled when Christians reconquered the country. Muslims have never been responsible for anything like the Nazi Holocaust. Insofar as Muslim countries are morally restrictive today, it is a reflection of their being in a relatively more cohesive phase of their existence. For example, shari'a law – the hand-chopping, adultress-stoning legal code of Saudi Arabia that is spreading to places like Pakistan and Sudan – has no real Koranic justification and is not a necessary part of Islam.²⁴⁹⁰ Christian countries were once similarly violent, morally oppressive and brutal – tearing out

of tongues was a favourite punishment for enemies and heretics. Indeed, Christian fundamentalists continue to exist, making death threats against computer games manufacturers and murdering abortionists. Overall, the west's present liberalism is simply a phase through which many societies have passed on their way to a dark age.

When Muslims look at the west, they see a people far more vicious than themselves. The Christian crusades, for example, have been romanticised in the west but are remembered in the middle east for their bestial ghastliness. One group of crusaders killed eight thousand Jews before even leaving Germany.²⁴⁹¹ In the middle east, the crusaders slaughtered whole towns, even after the defenceless inhabitants surrendered, and they killed Muslims and Orthodox Christians indiscriminately. Their behaviour contrasted with the Islamic armies, who gave safe passage to non-combatants and generally adhered to recognised rules of warfare. This may be thought ancient history, but the same attitudes seemingly re-emerged during the Gulf conflict, when the west appeared intent on crushing Iraq and ignored at least six offers by Saddam Hussein to withdraw and negotiate.²⁴⁹² The allies then unleashed a ferocious bombing campaign, which involved heavy civilian casualties and massacred some 200,000 Iraqis for a mere 150 western deaths.²⁴⁹³

To Muslims, the twentieth century is replete with similar examples of the west's abusive treatment. In 1911, Italy initiated the favoured tactic of aerial bombing when its aircraft dropped grenades on a Libyan town.²⁴⁹⁴ In 1919, Winston Churchill approved the use of chemical weapons against Arabs, declaring it to be an ideal way of dealing with 'uncivilised tribes'.²⁴⁹⁵ The 1950s saw the illegal folly of the Suez operation, in which Britain, France and Israel launched an invasion of the canal zone, and caused the death of several Egyptian civilians during a naval bombardment of Port Said.²⁴⁹⁶ Muslims also blame the west for the long crisis regarding Israel – Britain for the Balfour declaration of 1917, which fed Zionist aspirations, and the United States for continuing to support its client. The west's record during the second world war is one of apparent extreme inhumanity even against itself – for which only a tiny minority of war criminals was ever punished.²⁴⁹⁷ Nazism was just part of it. The allies perpetrated extraordinary atrocities as well. The most notable were the incendiary raids that killed 600,000 civilians in Germany²⁴⁹⁸ and, along with two nuclear bombs, similar numbers in Japan.²⁴⁹⁹

Nevertheless, it is Islam's supposed savagery that is firmly established in the western mind. The Oklahoma bombing, for instance, was immediately assumed to be the work of Islamic extremists, though it had nothing whatsoever to do with them. In a shameful episode, for which it never really

apologised, the western media stimulated calls for revenge strikes on middle eastern states, and there was a wave of public attacks on Arabs and Muslims. Similarly, after the US Air Force launched a bomb attack on Libya from bases in the UK, the BBC news opened its evening bulletin by opining 'Britain is tonight bracing itself for a wave of terrorist revenge attacks...' The BBC subsequently apologised for presenting journalistic fantasy as fact.

Islam's current fundamentalism reflects a basically political agenda. The Islamist leaders of places like Algeria or Iran are characteristically young, university educated, from small towns, and the first in their family to get an education.²⁵⁰⁰ In other words, they have classic chips on their shoulders. It seems that they have everything going for them until they discover that they are second class citizens of a shrinking, seamless world. They are revolutionaries rather than reactionaries. Their fundamentalism is essentially a modern response to contemporary discontents. The shah of Iran, for example, created the conditions for his own downfall by a combination of murderous repression and thoroughgoing reforms that threatened many vested interests. The huge US presence in the country was the final straw as the Americans seemed to be getting rich on the country's oil boom, but not the locals.²⁵⁰¹ Islam provided the focus for protest because it represented moral re-assertion, and especially the re-assertion of distinctively Iranian values. In general, fundamentalism has taken root most successfully in those countries, like Algeria, where western influence had penetrated furthest.

Even Saudi Arabia, the homeland of Islam and site of Mecca, is threatened by fundamentalist protest. This is despite the fact that Saudi Arabia is the most conservative country in the middle east, where alcohol is illegal, women are forbidden to drive, miscreants are publicly flogged, and Christian worship is banned. One might wonder what more the fundamentalists could possibly want. The reasons for their dissatisfaction, though, are the too cosy relationship that Saudi leaders have with western countries and the extensive presence of western companies and expatriates in Islam's heartland. Muslim clerics complain about the presence of 'atheist' troops, and in the mid-1990s terrorists twice bombed America's Saudi Arabian barracks. The argument has little to do with religion and everything to do with dissatisfaction among those who are fed up with the parasitic royals, have missed out on a substantial share of Saudi Arabia's vast wealth and cannot console themselves at their subordinate position in a western-dominated world.

The gulf between the west and the Muslim peoples is growing. Fundamentalists have very obviously gained ground in Algeria, Sudan,

Nigeria, Afghanistan, and the former Soviet republics.²⁵⁰² Once the Afghan war ended, experienced guerrillas began exporting their movement to India, China, central Asia, and north and east Africa. They stirred up the Chechen conflict,²⁵⁰³ and fought on the Muslim side in Bosnia.²⁵⁰⁴ The west's strategy of encouraging fundamentalist Islam in Afghanistan as an ally against communism has come back to haunt it.

In the Indonesian province of Aceh and in the Philippines, Islamic secessionist movements chip away at the existing order. In Egypt, fundamentalists killed sixty tourists at Luxor in 1997. While a government crack-down has prevented further incidents, creeping Islamicisation is transforming Egypt's civil society. In 1993, an Egyptian academic fled the country in fear for his life after being found guilty of apostasy by an Islamic court and ordered to divorce his wife (an apostate may not be married to a Muslim).²⁵⁰⁵ Islamist movements are also growing among expatriate Muslims in Europe and North America.²⁵⁰⁶ A group associated with London's Finsbury Park mosque has offered military training for those interested in jihad. Most of the mosque's congregation deplore the cleric who is responsible, but hundreds of others attend his weekly prayer sessions.²⁵⁰⁷

The example of Islamic states successfully asserting themselves encourages others to resist western claims to authority. Iran and Afghanistan have sent the superpowers packing from their countries. Iraq, even though it was expelled from Kuwait, lived to tell the tale, and continues to run rings around the US in a cat and mouse game where the latter constantly finds itself in a reactive mode. During the Gulf war, 'Saddam' became a popular name for boy babies in Jordan, and women marched through Amman urging Iraq to 'hit Tel Aviv with chemicals.'²⁵⁰⁸ Iran is turning outwards with increased confidence. It has become less fanatical, but this does not mean it will be content to settle down and accept the west's priorities in international forums. It continues to export its Islamic revolution and supports extremist movements in Egypt, Sudan and Saudi Arabia.

There is a global traffic in cassette tapes disseminating the mosque sermons of influential Islamic preachers. These can reach wide audiences.²⁵⁰⁹ For the most part, western people have no idea what is being said behind their backs. They can be sure that it is not complimentary to the west or supportive of compromise. In fact, a key message is the need for Islamic solidarity to bring down the western ascendancy. Muslims are very vocal now about their dissent from the west's values, attitudes and beliefs. Of all international social relationships, this one is the most ruptured. In the aftermath of the Gulf war, a Muslim theologian in Mecca stated the matter as clearly as

it could be stated. Those Ba'athists of Iraq, he said, are our enemies for a few hours, but Rome is our enemy until doomsday.²⁵¹⁰

Discrepant interests

The fundamental condition for a social relationship is the existence of shared or aligned goals. Yet countries' goals are less likely to be aligned now than they were a few decades ago. The end of the cold war has removed one of the main factors that gave large regions of the world the shared goal of resisting a common enemy. International relations are now much more diverse. Former allies are no longer bound by this one overarching concern. The Warsaw Pact is already defunct, while NATO is looser than it was. The foreign policies of allied countries, and their goals in international diplomacy, now differ in respect of details that have suddenly become more important and consequential. Germany, for example, has diverged from its European partners in its orientation towards eastern and south-eastern Europe.

It has been suggested that the old east-west division might be replaced with a new north-south division, which would give a new reason for aligning foreign policies.²⁵¹¹ Certainly, it is true that the goals of the southern countries are opposed to those of the rich northern countries. However, there are too many divisions within the south, which includes Latin America, Africa and parts of Asia, for it to present a coherent challenge to the north. Besides this, the south is relatively so weak that the north does not need to combine to resist it. In practice, therefore, a north-south division is unlikely to have much effect in aligning goals on either side of the divide.

The main shared interest in the world today is a common dislike of the west. This is producing increased co-operation between the Islamic and Sinic countries. China, for instance, has helped both Pakistan and Iran with their nuclear weapons programmes. Russia is also attracted to the anti-western tendency. Commentators noted the warm embrace that President Putin gave to President Kim at the end of a recent visit to North Korea.²⁵¹² Nevertheless, there are no signs of a really coherent community forming around this cause. Various small acts of co-operation do not yet offset the overall growth of distrust. Russia, for instance, also courts the west, in search of financial and other support

International institutions like the UN and IMF have long tended to promote western goals. Other countries that once endorsed these institutions are now coming to realise that they do not embody their own goals. For example, from the earliest meetings of the UN Conference on Trade and Development, third world countries have expressed dissatisfaction with their position in world trade.²⁵¹³ With some justification, they have pointed to unfair

behaviour by the industrialised countries. Nevertheless, the third world countries have seen no improvement in the situation. They are participating in UNCTAD but they are getting much less out of the global trading system than the richer countries. It is being driven home to them that their interests are not well served by the existing arrangements, in which some forty million third worlders die every year from hunger-related diseases. They have very little to lose if the whole thing goes to pot.

Similarly, the environmental concerns that are taken increasingly seriously in rich northern countries have little relevance to people in the south. They are focused on surviving till next month, not on global warming and the hypothetical problems that might be faced by their grandchildren. It is not in the interests of the developing countries to cut back on their economic development just to pander to the half-baked worries of pampered western environmentalists.

When US marines went to Somalia in the early 1990s, it was ostensibly to provide humanitarian assistance to a country experiencing barbarous disorder. Yet the marines encountered considerable hostility from the locals. One might think this strange and cursed. However, the reason that the Somalis violently resisted the 'humanitarianism' of the US marines was because they had little interest in restoring peace and order when that meant return to a status quo ante that was of far more benefit to American business than to local people. The same point applies elsewhere. As they fall behind in relative terms, billions of people increasingly feel themselves to be mere objects of exploitation in the global economy.²⁵¹⁴ They are losing confidence that world welfare will rise steadily and indefinitely. This is detrimental to international social cohesion.²⁵¹⁵

The divergence of interests between rich and poor nations perhaps does not matter very much while the latter are too weak to do anything about it. However, the third world is becoming less inept and is better off in absolute terms. This is making it more able to resist compliance with western goals, as indeed the Somalis showed. Continuing economic amelioration in the third world, including clearing its debts, only increases the level of defiance towards western interests.

The other side of the dis cohesion between rich and poor is the west's selfishness in failing to recognise and incorporate third world goals into its own agendas. Notwithstanding the existence of numerous charities dedicated to famine relief, western people show little concern about the lives and deaths of people in third world countries. Global news services devote only a tiny proportion of their coverage to stories about Africa, and those mostly involve disasters.²⁵¹⁶ As Fukuyama observes, people in rich countries seem to care

more about baby seals than about mass starvation in Ethiopia.²⁵¹⁷ Television images of hungry, dying children in Africa's refugee camps function largely as entertainment. Part of the public expects and even likes images of war, underdevelopment and starvation.²⁵¹⁸ Instead of goading them into outraged action, it simply confirms their belief that this is the natural order of things.

The obviously chaotic condition of the most disadvantaged countries, combined with their expressions of hostility to the west, seems to be making western countries more indifferent to their plight with every decade. People come to the view that these societies, which will apparently not help themselves, are not worth helping. After decades of failure, the western response is increasingly to give up on its effort to encourage third world development rather than to tackle the very difficult questions about why this effort has been ineffective and how it can be improved. It is as though people feel they have tried but have only succeeded in proving the ingrained inferiority of the world's most backward regions.

The aid budgets of the developed countries now constitute a shrinking proportion of GNP.²⁵¹⁹ Some countries that were once significant recipients, like Kenya, are finding their sources of aid have dried up. Sweden, the most generous

donor in 1991, has slashed its foreign aid budget. Germany has also cut back drastically on its contributions to the third world.²⁵²⁰ It has become increasingly preoccupied with assimilating the former East Germany and extending its influence in eastern Europe. Meanwhile, the European Union's aid projects have been plagued by fraud and gross incompetence, so that virtually nothing has reached the intended recipients. By contrast, Kuwait has a strongly funded aid programme that is active in some eighty countries throughout the developing world, including among non-Muslims such as in the Czech Republic and the Caribbean.²⁵²¹ Kuwait's beneficiaries are coming to a new understanding of who their friends are and where their loyalties ought to lie.

As François Mitterand observed in 1995, the west's embarrassed indifference towards the third world has changed to smug indifference.²⁵²² People in the west no longer even care what the goals of some three quarters of the world's population may be. Smugness, however, is never a sensible policy in the long run. There is trouble building up in that part of the world that seems to have been written off. One day, the indignation there is likely to overrun its containment, and the west may then pay for its complacency.

Chapter 29 - Shocks to the system

Introduction

A scientist studying ancient tree rings recently reported that in AD 540 very poor growing seasons occurred across a wide area. Arguing that a comet may have struck the earth, throwing dust into the atmosphere and blocking sunlight, he suggested that this could account for the European dark age which occurred around the same time. The theory received abundant publicity, notwithstanding the fact that the dark age was in progress well before the comet's supposed impact.²⁵²³ People like explanations of decline and collapse that involve abrupt, external shocks. They are easy to assimilate and readily satisfy the demand for understanding. However, they are wholly inadequate accounts of real history, which is much more complex. Dark ages occur not because of some sudden catastrophe but because of deep-seated political, economic and social contradictions.

Most of history is about people overcoming shocks rather than succumbing to them. The twentieth century alone saw single floods that killed hundreds of thousands of people, flu epidemics that wiped out millions, hurricanes that devastated whole regions within a few days, and two episodes of war on an unprecedented scale. Yet people picked up the pieces and moved on, almost as if nothing had happened. Human societies absorb and adapt to the many insults they receive. It would be a sorry matter if they could not. Fortunately, and inevitably on a restless planet like this, resilience and adaptability are among life's most characteristic features.

Nevertheless, external shocks do play a role in history. They act as triggers that can make perceptions revert to reality. While the shocks do not cause a society's downfall, they can certainly hasten it. Thus, the world's fundamental problem is its state of disintegration, disorganisation and dis cohesion. However, its ultimate ruin may be associated with one or more quite specific events that reveal this state for what it is. There are several problems emerging in the world that might end up doing this. None of them is inherently insuperable and they do not threaten human progress in the long run. Yet contemporary institutional failures are imbuing these problems with the potential for catastrophe. Therefore, it may look to future generations as though the world succumbed to some unexpected calamity, just as people talk of such calamities in the past, although in both cases a fundamental rottenness was the real cause.

This book by no means underestimates human resourcefulness and ingenuity. It takes a mostly sceptical view of the obvious difficulties facing civilisation. Their very obviousness means that people can correct or accommodate to them. However, the underlying contradictions are not so easily solved, and their effect is to hinder human

adaptation. One might say that where there is a will, there is a way. The way is not the problem. It is the will that is lacking.

Too many mouths

Over the last forty years, world population doubled. For most of the twentieth century, it seemed to be following a curve that turned ever upward. In the last decade, however, the growth rate has begun to decline. There is an end in sight to the population explosion, which in the 1960s and 1970s was regarded as one of the greatest threats to the future world order. Like a supertanker, population growth takes a long time to slow down, with the most populous regions responding the slowest. Parents may be having fewer children, but there are many more parents than there were a generation ago. By 2050, therefore, world population is expected to have grown to around ten billion.

In the demonography of population alarmists, these extra billions of people are just so many more mouths to feed. There are already many people starving, the thinking goes, and there is already not enough to go round, so evidently the world cannot support these new arrivals. A perceived 'food crisis' in the 1970s led organisations like the World Health Organisation and various private groups to promote the use of birth control among mostly rural women in the third world. This was often with scant attention, incidentally, to the health and safety of the women involved.²⁵²⁴ It might also be thought somewhat hypocritical, given that the populations of the rich countries are the ones who continue to put by far the most pressure on the planet's resources.²⁵²⁵

The last time that humans suddenly multiplied very rapidly was when they took up agriculture, about ten thousand years ago. Numbers increased on the back of a more assured and abundant food supply. Population has grown again recently because technological innovations eased the problem of sustenance and provided economic niches for far more people.²⁵²⁶ This is a case not of 'overpopulation' but of population expanding to meet its potential. The fact that population growth is now slowing means that such potential is beginning to be exhausted.

Falling birth rates have been presented as a benign consequence of modernisation, with people's increased control over their lives leading them to have fewer children and invest more in them.²⁵²⁷ Yet shrinking family sizes also indicate the deceleration of progress in people's material wellbeing. When third world women bring their fertility under control it may be made possible by their improved sophistication, but it is made necessary by their meagre economic circumstances. The ending of the population boom, in Europe and in the world as a whole, is actually a consequence

of relative economic failure. A stagnant population is the sign of a stagnant society.

The fundamental reason for stagnation is that people are no longer pushing back the limits of world food supply as assuredly as they were. Today's extremely abundant agriculture is a product of the highly developed global economy. It relies on heavy machinery, artificial fertilisers, pesticides, and an extensive distribution network. It may be said that, for every calorie from sunshine, people get ten calories from oil.²⁵²⁸ Certainly, farm productivity is still improving with the spread of agricultural technology. There is also still three times as much potentially arable land in the world as is actually harvested in any given year.²⁵²⁹ Hence the global food supply and therefore population may continue to grow for some time. Nevertheless, the end of this growth is coming into sight.

Several major countries are experiencing problems with their subsistence base. The United States, whose agriculture was the envy of the world until the 1980s, is now facing declining soil productivity, deteriorating environmental quality and reduced profitability.²⁵³⁰ China, with 22 percent of the world's population but just 9 percent of its arable land, is in much worse shape and is experiencing very severe problems with salination of irrigated land.²⁵³¹ The environmental damage caused in many developing countries by ill-managed irrigation schemes has been characterised as a time bomb threatening to reverse the terrific progress in food production made in the last half century. A quarter of the agricultural land is thus damaged in Pakistan – a volatile, Islamic country, poor but proud and ambitious, and now a nuclear power.²⁵³²

If food production on land gives cause for concern, the exploitation of marine resources seems certainly to be heading for crisis. The world fish catch first fell in the 1970s. New technology allowed the catch to start rising again,²⁵³³ but this only meant that the world's fishing fleets were tracking down their quarry more efficiently than ever before. The total return peaked in 1989 and has since stagnated, with some areas being in severe decline.²⁵³⁴ The exploitation of this global resource is one of the most short-sighted activities presently in progress on the planet. The fishing industry is depleting fish stocks to the point of extinction.

Having said this, the difficulties affecting world food supply are short or medium term ones. In the long term, there are many avenues for making dramatic increases in food production and hence in human numbers. For example, people could farm the seas rather than forage in them. They could build huge agricultural modules in earth orbit. Yet though they could do these things, in the foreseeable future it looks as though they will not. A 1960s study, for instance, concluded

that maize could be grown at a fraction of the current price in an optimally designed nuclear-powered industrial complex.²⁵³⁵ Yet one can imagine how well 'nuclear' cornflakes are likely to go down, especially in a world where genetically modified crops are already encountering devastating media and consumer resistance. Whatever the advantages on paper, the heroic technologies that could make step-wise improvements in world food supply are unlikely to be adopted.

In effect, the human population may be coming up against the food-producing capacity of the world. Yet this is not because of incontrovertible physical law. It is because of human institutional failure. The net result is that countries will be trying to adapt to stresses in the fishing and farming industries at a time when the national and international climate is increasingly ossified and resistant to adaptation. The tensions that emerge within and between countries as they struggle against their self-imposed constraints will be the real threat to civilisation, and not the population growth that people so readily blame.

Resource exhaustion

If the consumption of the ten leading minerals were to continue growing at the rate of the last few decades, within a thousand years their combined tonnage would be greater than the weight of the earth. Obviously, this is impossible, and it is doubtful in fact whether such growth could be sustained even for as much as two hundred years.²⁵³⁶ In 1700, typical copper ores contained some 13 percent of the metal. Around 1900, it was still on average 4 percent. Today, the best ores contain barely 0.5 percent copper. Similar situations apply to other metals.²⁵³⁷

On this basis, the idea that industrial civilisation may be about to exhaust one or more of the crucial natural resources on which it depends has a prima facie plausibility. However, it implies a static view of the world. In 1977, for instance, a study led by Nobel Prize-winning economist Wassily Leontief expressed concern among other things about a potential shortage of asbestos! Little did the study team imagine that this one-time darling of industry was about to become a pariah. At the same time, some people were predicting that the world would run out of copper by 1995.²⁵³⁸ Not only has this not happened but copper has seldom been cheaper than it is today. The reason is falling demand, since the telecommunications industry, for example, has moved away from copper cable towards glass fibre, microwaves and satellite communications. Technological progress does not necessarily imply an ever heavier demand for natural resources – it usually implies the reverse. Compared to a mobile phone of ten years ago, today's model is far more sophisticated, but it is

also smaller, lighter and generally less demanding of raw materials.

The cost of almost every natural resource has fallen throughout history, showing that resources tend to become less scarce rather than more scarce.²⁵³⁹ With recycling and sufficient ephemeralisation, one could in principle enjoy indefinite economic growth without ever digging any more out of the ground. On the long term view, economic incentives and technical innovation have consistently solved problems of resource supply and confounded all the predictions of caps to human progress. Even where particular resources have come under pressure, people have been able to substitute new materials for old ones and developed more efficient processes. The price mechanism helps to ensure a soft landing by encouraging people to look around for alternatives before they come anywhere near to a crunch.

Nevertheless, disruptions and dislocations can and do occur as societies adapt to changing resource usage. For instance, coal supplies were not exhausted as some people feared. Yet when the coal mines closed down, it had significant social impacts. In the future, there are bound to be big changes in the supply and demand for various resources. Those changes could have many ill effects.

Oil is a major source of potential disruptions to the world order. It occupies a pivotal position in the global economy, yet has fewer reserves even than coal or gas. This industry's bonanza mentality could make sea-fishing look like far-sighted conservatism. To be fair, OPEC maintains production below capacity in order to support the oil price, and even then it dipped so low in the late 1990s that some oil companies were cutting back on their exploration budgets.²⁵⁴⁰ Thus, shortages are not in evidence today. Nevertheless, on the time scale of centuries, something is going to have to change. The problem does not come when the last barrel of oil is pumped. That will never happen, just as the pits closed long before the last ton of coal was dug. The problem comes some time beforehand, when the production capacity begins to fall. The industry seems to be getting close to this point.²⁵⁴¹ The most pessimistic predictions would have the crunch occurring around 2015 to 2020.²⁵⁴²

The fact that people continue to use ordinary incandescent light bulbs rather than the more efficient alternatives is a sign that energy is still cheap and abundant. Yet this is almost wholly because of the availability of fossil fuels. Consumption of coal, oil and gas are all increasing and the world is not going to be weaned off them easily.²⁵⁴³ Even an all-out effort to develop alternative energy sources would still leave fossil fuels as a major source of energy in any reasonable time scale. The trouble is that people are failing to develop alternatives in any serious manner. Solar

and wind power are politically and socially acceptable, but they are dilute and intermittent, and not viable as a general purpose solution to contemporary power needs. Despite governmental enthusiasm these sources remain marginal. Nuclear power, on the other hand, is a far more realistic solution, but its development is increasingly hampered by ill-informed public opposition and an oppressive regulatory environment.

The liking for solar or wind energy reflects characteristically delusional, pre-dark age thinking. People prefer wind and solar power stations to nuclear ones because they seem to be 'natural' – after all, what could be purer than wind and sunshine? Yet solar-electric cells and modern wind turbines are actually high-technology items, and are by no means wholly benign in their impact on the environment. A solar power plant uses hundreds of times as much metal and concrete as the equivalent coal fired or nuclear plant,²⁵⁴⁴ and the manufacture of solar panels requires some peculiarly noxious chemistry. Wind and solar power also produce more expensive electricity than nuclear. The virtuous image of these power sources is quite undeserved. Framing the debate as a competition between 'natural' wind/sunshine and 'unnatural' radioactivity is a blatant distortion.

Even if people did embrace nuclear power, it would not be a complete solution. Petroleum is still the only practical fuel for most forms of transport.²⁵⁴⁵ Yet research into realistic substitutes is negligible. To be sure, Brazil has pioneered the use of methanol in road vehicles, and in smog-ridden Los Angeles electric cars are gaining some ground. Nevertheless, one cannot envisage airliners being powered by electric batteries, let alone by solar or wind power.

Overall, the long term supply of energy and resources is not a problem. There is as much as people could wish for, including perhaps even vast new deposits of oil. The problem is, however, a political, economic and social order that is preventing people from exploiting the objective possibilities. Humanity's provisions for future energy supply are increasingly either non-existent or based upon fantasy. It is for this reason that there could be scarcities and resultant crises over the next few decades

The end of the oil bonanza will certainly create problems for the Arabian countries in their arid environments. Their palaces and shopping malls may be fated to go the same way as Petra, carved out of solid rock in the desert but abandoned when external economic conditions changed. Although these countries have been seeking alternative sources of income, the incentive is low and their fortunes are still hugely dependent on the world's thirst for oil. It is also a moot question whether the world can increase resource supply fast enough to assuage the developing world's increasingly

impatient desire for more affluent lifestyles. China, for instance, is launching a People's Car project that will create a huge surge in the demand for oil.²⁵⁴⁶ If the world cannot meet that demand, some people are going to suffer for it.

The most serious resource crisis facing the world may be not oil but fresh water. Due to industrialisation, water withdrawals are increasing more rapidly than world population.²⁵⁴⁷ China, with 22 percent of the world's people, but only 8 percent of its fresh water, faces falling water tables. Saudi Arabia is pumping water from a fossil aquifer (i.e. water trapped below the ground in past geologic times) with the same alacrity it is pumping oil.²⁵⁴⁸ Libya is planning a similar exercise. In both cases, the reservoirs are expected to be exhausted in about 50 years. Even North America now uses twice as much water as is replenished by rainfall, with the result that water tables are dropping all across the country.²⁵⁴⁹ Britain's water companies have been complaining of supply problems for some decades, and they have considered setting up desalination plants.²⁵⁵⁰ In other parts of the world, watercourses and lakes have been drying up. In 1999, the Sea of Galilee shrank to such a low level that it was in danger of suffering irreparable ecological damage, and Israel has been warned that it could run out of water in a decade or two.²⁵⁵¹

The world's renewable supply of fresh water is more or less fixed by the properties of the hydrologic cycle – the self-sustaining process by which water evaporates from the oceans, rains down over land and is then carried by rivers back whence it came. Although people still use less than a quarter of this supply, and could even use that more efficiently than they do, the problem is one of uneven distribution and local deficits.²⁵⁵² In 1992, the city of Bulawayo in Zimbabwe came very close to evacuation following an extended drought.²⁵⁵³ Other third world cities are at risk as they continue to expand and throw up thirsty, polluting industries.

On a planet whose surface is three quarters ocean, the possibility of actually running out of water is zero.²⁵⁵⁴ Desalination plants could satisfy any conceivable requirement. However, desalination requires energy, and while say nuclear power stations could supply this energy, people are unwilling to build them. Ironically, one of the favoured alternative energy sources is hydroelectricity, yet dams sequester water in warmer or higher regions where it is more likely to evaporate. Several countries, and even some districts within the United States, have already come into conflict over water rights.²⁵⁵⁵ Water scarcity also contributes to social problems in India. Even optimists acknowledge that the social complications of managing water will increase.²⁵⁵⁶ UN conferences have highlighted various intractable difficulties and have indicated the likelihood of some form of water crisis during the

twenty first century. The problem is again not one of absolute limits to human progress. It is the difficulty of adjusting to changing circumstances within a disintegrated, disorganised and discohesive world.

Ecocatastrophe

The most fashionable worry of today is neither the population explosion nor the exhaustion of natural resources. It is the possibility that humans may be intruding on the earth to such an extent that they are affecting its very viability. Not only are there billions of people on the planet, but also billions of sheep, cattle and poultry, while much of the productive soil is used to grow a very limited range of crop plants.²⁵⁵⁷ Furthermore, the waste from human industry has impacts in every corner of the planet. There is, for instance, one plastic bottle in every two square kilometres of the Pacific Ocean.²⁵⁵⁸

The fact that humans may be transforming the world's ecology cannot be regarded as a bad thing in itself. Living things have been changing the environment to suit themselves since the earliest history of the earth. It is only to be expected that humans, the most versatile and accomplished species yet to emerge, should continue this process on a vastly expanded scale. Indeed, humans have radically transformed certain environments already, without the world coming to an end. The great grassland ecosystems, the savannahs and prairies, which now seem so natural, are the product of fire-drive hunting by ancient foragers.²⁵⁵⁹

It is true that people have sometimes caused extensive damage to local environments, as in the American dust bowl of the 1930s. Therefore, the vastly expanded scale of human industry could suggest that the world as a whole is now at risk from some similar disaster. Yet there is little certain evidence that it is really within humanity's power to have a major effect on planetary systems. After all, the almost complete removal of the European forest cover over the last few thousand years does not seem to have had any marked climatic consequences. During the Vietnam war, the United States deliberately tried to alter Vietnam's climate by defoliating forests to interfere with the monsoon and ruin crops. The results however were very disappointing. Human impacts are still rather puny compared to some of the insults that the world deals out to itself. The ice ages, for example, did far more damage than urbanisation has done.²⁵⁶⁰ Earthquakes and floods produce more devastation on a regular basis than anything humans are yet responsible for.²⁵⁶¹ Even the firing of the Kuwaiti oil wells during the Gulf War, widely regarded as the largest pollution event ever seen,²⁵⁶² had a negligible impact in comparison to some volcanic eruptions. Antoine de Saint-Exupery, the French aviator and author, observed that people get an exaggerated view of

urban pollution, for they are always either in towns or moving between them along roads. From the air, however, one sees that the built environment is really a rarefied tracery set in the vast, green countryside.

The view of the natural environment as something fragile, delicate and vulnerable is quite simply a ridiculous human conceit. The earth's dynamic systems are far bigger and more powerful than people imagine. Life has clung on to existence despite magnetic reversals, major temperature swings and periodic cometary impacts. Life on earth is very tough, robust and adaptable.²⁵⁶³ Despite increased use of insecticides, insects are flourishing in the United States and continue to damage crops.²⁵⁶⁴ They are developing resistance to humans' dammedest efforts to wipe them out, for such is the power of natural selection. People's worries about extinction tend to be rather human-centric. Tigers and pandas may be aesthetic but they are not vital to the biosphere's existence, unlike the microbial life of the soil and seabeds.²⁵⁶⁵ Concern about the disappearance of certain mammals and birds should not be linked to questions about the long term viability of industrial civilisation. In any case, tigers have proven their adaptability and are making a comeback in many parts of Asia.²⁵⁶⁶

Human interference in nature need not be intrinsically harmful. Not even a square foot of Britain's countryside is 'natural' in the sense of being as it was before humans arrived on the scene, yet it is used quite sustainably. In mastering nature, people can reach an accommodation with it. Environmentalists deplore the effect of industrialisation on tree populations, yet the total quantity of trees in temperate zones has actually been increasing simply because the demand for paper has made tree cultivation commercially attractive. Contrary to popular opinion, the high consumption of paper is good for forests not bad for them.

People's efforts to 'protect' and 'preserve' nature are often crass, because nature does not need humanity's protection. Areas of woodland that were re-planted after Britain's great storm of 1987 had fared less well after ten years than areas that were left to fend for themselves.²⁵⁶⁷ Two American researchers have shown that the rainforest of Bolivia, where exploitation is completely unregulated, is in far better health than that of neighbouring Brazil, where it is closely monitored and supervised by the government.²⁵⁶⁸ After the Exxon Valdez oil spill in 1989, people set about steam-cleaning Alaska's beaches in much the same way as if the oil had been spilt on the drawing room carpet. Yet scientists assessing the results concluded that it might have been better to leave nature to deal with the pollution of its own accord.²⁵⁶⁹ Oil pollution is, after all, a natural

phenomenon. There has been seepage into the oceans for millions of years, and nature has plenty of experience at dealing with this problem.

In the 1970s, an influential report commissioned by President Jimmy Carter concluded that further technological growth would produce runaway pollution overwhelming the earth's ecosystems. In reality, however, new technologies have dramatically reduced pollution in the rich countries over the last fifty years. The North American Great Lakes and the River Thames are in much healthier condition than they were in the 1960s. During the nineteenth and early twentieth centuries, London suffered from notorious smogs. In 1952, a smog that lasted nearly a week saw London's death rate more than treble. People were coughing up black mucus and those who ventured out wearing white returned with grey clothing. Yet thanks to the Clean Air Act of 1956, and the new approach it stimulated, smog is no longer a problem.²⁵⁷⁰ In most other cities in the developed world, air quality has improved enormously over the last fifty years. It is in the technologically backward parts of the world, where smoke still streams out of factories unfiltered, that smog is a modern problem.²⁵⁷¹ The atmosphere of Bangkok, for instance, is choking. Traffic clogs the streets at all times of day and night, while idling engines spew out their noxious exhausts. Further industrialisation will not be harmful to this picture but will help poorer countries follow the developed world, which made a mess of the landscape at first but then improved.²⁵⁷² Overall, human-induced pollution is not, has not been, and never will be a significant threat to human survival or a barrier to progress. It is, as Dennis Gabor wrote in the 1960s, a major scandal but a minor problem.²⁵⁷³

On the other hand, people's increasingly zealous reactions to pollution may well be a problem. There is a tendency to ban first and ask questions later. For example, the seasonal hole in the ozone layer over the Antarctic continues to get bigger and to form earlier in the year, even though the CFCs that were supposed to cause it have been banned since 1987. Scientists say they are 'not sure' how this has happened.²⁵⁷⁴ While they remain unsure, the ban has denied humanity access to a very versatile range of substances and has arguably set back the provision of cheap refrigeration to people in the developing world. Whole industries can thus be destroyed on the basis of quite tenuous evidence. When some scientists in the United States believed that they detected excess mercury in swordfish, it was immediately taken off the market. Not only were the findings later shown to be incorrect, but also it was found that the permissible level of mercury had been set too low anyway because of an arithmetical error. Nevertheless, swordfish remained banned, even though cigarettes say were left on sale.²⁵⁷⁵

It is becoming harder to make innovations in a range of industries, such as medical technology, food processing, and agriculture, for fear of possibly minute effects on human health or the environment. Technological advance is discouraged in the name of preserving the environment, even though technological advance is the only way to mitigate the environmental impacts that will be caused by the ten billion people who will shortly be occupying this planet. Global civilisation is not going to collapse because of pollution, but its collapse may be accelerated by people's fear of pollution.

The view that the environmental status quo must be maintained at all costs blinds people to the need to adapt to environmental change. Such blindness is itself a threat. The environment is a dynamic, changeable system in its own right, regardless of whether humans are having any effect on it. Weather conditions fluctuate from year to year, affecting harvest times by a week or more, and producing economic impacts. On longer time scales, even larger changes may occur and affect human societies, such as the medieval warm period that saw vineyards in Scotland and hay making in what is now the Greenland tundra. Changing sea levels have in the past caused coastal towns to disappear beneath the waves, displacing industry and population.²⁵⁷⁶ At other times, falling seas have left ports high, dry, and economically useless. When such changes afflict vigorous societies, people have generally adapted. However, when societies become less resilient these disturbances could finish them off.

For a decade or two, climatologists have been saying that the world is due to grow significantly warmer. The level of various greenhouse gases, which help trap heat in the atmosphere, has been rising, apparently due to human industry.²⁵⁷⁷ Recent years also seem to have been warmer than usual and characterised by more extreme weather. Switzerland's glaciers have shrunk by a third since 1850.²⁵⁷⁸ Mount Kilimanjaro's ice cap is a quarter of the size it was before the first world war.²⁵⁷⁹ Submarine soundings suggest that the Arctic ice is nearly half as thick as it was forty years ago.²⁵⁸⁰ The Antarctic ice sheet is also said to be retreating while sea levels have risen by around 10 centimetres in the last century.²⁵⁸¹ Most people agree that global warming is on its way,²⁵⁸² although exactly how that will affect temperature and rainfall in particular places is harder to predict.²⁵⁸³

Nevertheless, plausible and widely accepted though it may be, global warming is not conclusively proven to be occurring. Satellite data and balloon records show that very little warming, if any, has actually occurred since 1945.²⁵⁸⁴ British scientists found that the thickness of the Antarctic ice sheet was hardly changing during the 1990s.²⁵⁸⁵

As for the Arctic, it has been thinning in the very north but has become more extensive along the Canadian coast. In 1998, Canada suffered an extreme cold spell in which much of the country was afflicted by vicious ice storms.²⁵⁸⁶ The winter of 1999 was Scandinavia's coldest for a hundred years. Mongolia has also lately experienced unusually bitter and long-lasting winters that have wiped out livestock. To some climatologists, even these cold snaps can be an example of warming on the grounds that weather will be more extreme, but one might think that this is stretching the bounds of credibility.

The weather is certainly warmer than it was a few hundred years ago. However, most of the warming took place between 1880 and 1940.²⁵⁸⁷ If there is any evidence for systematic change in global mean temperature during the twentieth century it is at the limits of perception. Records are limited and people are too ready to jump to conclusions. Climatologists were speaking of global warming during the early twentieth century. Then they switched to predictions of a new ice age.²⁵⁸⁸ Then they switched back again to global warming. As climate historians gain a better understanding of past weather, it is becoming clear that the early to middle part of the twentieth century, when climatic record-keeping really took off, was actually unusually mild and even, and the world is now returning to more normal, fluctuating conditions.

The weather is almost certainly a chaotic system, with a built-in tendency to fluctuate in an irregular and inherently unpredictable manner.²⁵⁸⁹ There is no 'normal' weather for the earth. Over the last 850,000 years, the earth has slipped repeatedly in and out of ice ages. On this time scale, the present interglacial is a relatively warm period, although as interglacials go it seems to be a relatively cool one.²⁵⁹⁰ On much longer time scales, of tens or hundreds of millions of years, the average climate is certainly warmer than today. The earth was much warmer when the dinosaurs were around, for example.²⁵⁹¹ Furthermore, some studies suggest that variation has been rapid in the geologic past, sometimes changing dramatically in a decade or less,²⁵⁹² so that little can be deduced from the pace of present change. Similarly, although the concentration of carbon dioxide is known to be rising, it has shown such variability in the past as well. About 5000 years ago, when Egyptian civilisation was getting started, there seems to have been about a third more carbon dioxide in the atmosphere than there is today.²⁵⁹³

Hence, climate is in the grip of big forces that nobody really understands. Even if it is true that the earth is warming up no one can be sure whether it would be doing this anyway, or whether human activity is driving it, or whether human activity is perhaps mitigating a potentially even bigger

warming trend. There is no obvious reason why today's warming trend should be any less natural than that of a thousand years ago, when there were no industrial emissions to blame. The earth's temperature varies over short, medium and long time scales, and has been doing so for long before humans evolved. Those who claim to be able to distinguish human-induced changes from natural variation are simply deceiving themselves and the general public. Scientists do not even have a clear model of how industry might produce global warming.²⁵⁹⁴ No one is sure about the effect of clouds, for example, which might increase in area due to higher evaporation from the oceans, and thus reflect more heat back into space. The processes involved are very complicated, involving much feedback, and are not fully understood.²⁵⁹⁵

The environmentalist argument is that in a state of incomplete knowledge it would be best for humanity not to push its luck. However, that is an argument for not going outside the front door. It does not make sense to curtail the thrilling story of human progress all because of suspect evidence for climatic change that no one is really sure is occurring and that may have nothing to do with humans anyway. Those people who want to smooth climate out and stop it changing are like politicians trying to bring the economy to equilibrium. By their very nature, these things are not in equilibrium. To argue that humanity should, let alone could, standardise on the set of weather conditions that happened to be in force around the middle of the twentieth century is to talk nonsense of the purest kind.

It seems likely in fact that the earth's climate regulates itself and may well be able to accommodate the effects of human industry. James Lovelock points out that the composition of gases in the atmosphere exceeds the expectations of chemical equilibrium by several orders of magnitude and must therefore be dynamic and self-regulating. For instance, methane from bacterial fermentation forms only 0.0001 percent of the atmosphere, yet without it the oxygen level would rise by 1 percent every 12,000 years, eventually making fires burn so fiercely that the earth's vegetation would be incinerated.²⁵⁹⁶ This suggests that nature has some very effective mechanisms for maintaining such a precise balance. Lovelock also points out that the earth's average temperature has remained within a narrow band of 10-20 degrees C over the last three billion years, despite changes in solar heat output that are larger than this. He posits that temperature must be maintained at this level, which seems to be optimal for life, by and for the biosphere itself.²⁵⁹⁷

It is not even clear that warming would necessarily be harmful. Neither warming nor cooling over the last thousand years has had any consistent effect on economic growth or human

development.²⁵⁹⁸ Agriculture might actually benefit from a warmer, wetter climate with more carbon dioxide (the limiting factor in photosynthesis).²⁵⁹⁹ Others have suggested that harmful effects would predominate,²⁶⁰⁰ yet that smacks of undue pessimism. The medieval warm period seems to have been a time of prosperity, in contrast to the plagues and wars of the cooler fourteenth century. In general, the world has become chillier on at least six occasions over the last five thousand years, and these are normally regarded as periods of deterioration in the climate. Perceived cooling in the 1970s was blamed for reduced rainfall and poor harvests.²⁶⁰¹ It is simply perverse to interpret the present amelioration as a problem. Such perversity, however, is wholly characteristic of the failing imagination of a declining society.

The need to prevent climate change is a great orthodoxy of today, and all sorts of economically harmful measures are being taken in its name. There is a common thread here, between the simplistic theories that attribute past dark ages to some abrupt calamity and the simplistic theories that are turning normal challenges to human development into calamities that may precipitate the coming dark age. What is known is some esoteric fact – about ancient tree rings, say, or the chemistry of CFCs – and from this is constructed a huge castle in the air, involving circumstantial evidence and mostly just pure speculation.

Instead of trying to prevent the climate from changing, which is impossible, people would do better to prepare themselves to cope with the changes that will inevitably occur. The problem is, however, that today's societies are losing their adaptability. They attempt to impose monolithic solutions by centralised decision making, rather than allow people to experiment and learn from their mistakes. Climate change is not in itself a problem, either for humans or life in general. It becomes a problem, however, when inflexible institutions wreak havoc on society in the name of preventing such change. Humans may fail in the next hundred years or so not because they make the climate change – it does that anyway – but because they prove unable to take it in their stride.

The unexpected

Population growth, resource exhaustion and environmental change are problems that can be seen coming from a long way away. If they turn into catastrophes it is because of the way that people react to them. Some other factors, may genuinely seem to come out of the blue, and expose a society's weaknesses so suddenly that the whole thing flies apart. Yet even then it is often the case that people have simply ignored the warning signs.

For instance, infectious disease, one of the horsemen of the apocalypse, has long limited life expectancy in urban settings. However, in the second half of the twentieth century and in the rich

countries, it seems to have been brought under control. If another plague came along, it might be thought unexpected. Yet the mistake would have been to assume that plague is a thing of the past. In the developing world, infectious disease is still widespread and far more lethal than wars or natural disasters. Indeed, diseases that were once under control are now reappearing. Malaria was on the brink of extinction in the 1960s but has made a comeback and kills two million people a year. The incidence of syphilis has increased by a factor of forty in the former Soviet Union since communism collapsed. Tuberculosis is also a major problem in Russian prisons and is spreading in the United States among the poor.²⁶⁰² Many African nations are being devastated by AIDS. It is the biggest killer in Africa and the fourth biggest in the world. In the urban areas of Uganda, Zimbabwe and South Africa, a quarter to a third of the sexually active population is infected.²⁶⁰³

The rich countries cannot afford to look on this as simply a faraway problem for others to deal with. Such an unfolding catastrophe is a threat to world order. In the United States, the African AIDS epidemic has been designated a national security issue, and the budget for tackling it has been increased. Meanwhile, it is by no means certain that control of disease-causing organisms in the developed world is anything more than a temporary situation. Evolution is very powerful and it is in for the long game. The medical advances of the twentieth century have been a battle won, but the war continues. In the last twenty years, there have been several scares involving apparently new viruses. Antibiotic-resistant bacteria are also a growing problem, especially in hospitals. Nearly two hundred British hospitals had superbug outbreaks in 1999 and five thousand people died.²⁶⁰⁴ New medicines are being developed but it takes only a few years for resistant strains to emerge after a drug has been introduced.²⁶⁰⁵

The problem of disease today is due at least in part to human failings and is not simply an act of god. According to the Red Cross organisation, the toll of preventable illness is rising as third world countries fall into turmoil and public health services deteriorate. In Zimbabwe, where AIDS is orphaning an entire generation, men still refuse to use the free condoms that are widely available.²⁶⁰⁶ In western countries, parents are declining to have their children vaccinated, and rubella for one has slightly risen after a dramatic fall between 1970 and 1990.²⁶⁰⁷ The population of black rats that was once responsible for transmitting bubonic plague has been increasing again in Britain.²⁶⁰⁸ The huge scale of the contemporary world, with its megacities and booming air travel, greatly facilitates the spread of disease.²⁶⁰⁹ It represents an enormous opportunity, and life exploits opportunities. For the right virus, the world's eight

billion strong population would be a huge bonanza, to be consumed as profligately as people consume oil. The more people there are infected with something like AIDS, the more disease-causing organisms are in existence and the greater the chance that one of them will mutate into something even more deadly. Meanwhile, there is a terrific process of natural selection going on in Africa right now that will ensure future generations of Africans have a genetic immunity to AIDS. The developed world, by contrast, remains wide open to this epidemic.

Besides disease, a second external insult that could plunge the world into a dark age is a geological cataclysm. There have been 250 such disasters in the last fifty years and the casualty rate seems to be increasing in line with the rising global population. Tokyo, one of the pivots of the world economy and of growing geopolitical significance, is overdue for a major earthquake. This could bankrupt the world's insurance industry and prove lethal for the world economy.²⁶¹⁰

Such a cataclysm would be unexpected only in the sense that the destruction of Pompeii, built at the foot of a known active volcano, was unexpected. The journalist Peter Hadfield has drawn attention to enormous complacency among Japanese politicians and business leaders. Oil, gas and chemical storage tanks are distributed all around the potential disaster zone and close to areas where large numbers of people are living. Ordinary people fail to take the simple precautions (such as securing furniture) mentioned in emergency pamphlets. They think 'it cannot happen to me'. National Disaster Day, when Japanese citizens are supposed to rehearse their civil defence skills, is more of a fun family outing than anything else.²⁶¹¹

Hadfield attributes all this to some quirk of the Japanese character. In fact, he is describing a purely human reaction of denial in the face of a threat that no one can do anything whatsoever about. Not just in Japan but all around the world, people are living like the Romans under Mount Vesuvius. Earthquakes, volcanic eruptions and even cometary impacts could all wreak havoc somewhere or other, and prove the final straw for a weakened and decadent civilisation.

Another potential threat from out of the blue, and probably the least hypothetical, is that of invasion from the barbarian lands of the developing world. Here war lords rule, tribal thinking is paramount, fighting is endemic, living standards are low and plunder is a more likely route to material gain than economic, entrepreneurial activity. Almost all the growth in human numbers is concentrated in such lands. Of the billions of people to be added to the world's population over the next fifty years, 96 percent will be in the third world.²⁶¹² The countries of the southern

Mediterranean rim, from Turkey round to Morocco, currently have populations totalling a little more than 200 million compared to the almost 400 million in Europe. Within a generation, however, there will be 450 million in the poorer countries and 420 million in the richer ones.²⁶¹³

The barbarian lands are filling up just as in the days of the Caesars. In the same way as then, the pressure of population is combining with the attractions of wealth and civilisation to encourage a growing number of third worlders to make their way to the rich countries. In effect, an insidious invasion is already under way. Not only is there a constant flow of immigration but also the immigrants tend to be more fertile and increase faster than the host populations. Furthermore, as immigrant populations grow and become more confident, they pave the way for further waves of migration, legal and illegal. In Britain the rules have recently been relaxed in order to attract more skilled workers from abroad.²⁶¹⁴ The country has also been receiving thousands of asylum seekers every month.²⁶¹⁵ Efforts are being made to stem the flow but they face the likelihood that people will simply find alternative ways round. One British woman was recently jailed for bigamously marrying seven Nigerians to circumvent immigration controls.²⁶¹⁶

In the United States, the proportion of citizens of European origin is falling quite sharply through a combination of immigration and differential birth rates. In Israel, those of European origin have already become a minority. Other western countries are, to varying degrees, moving in the same

direction. Eventually, the combination of growing pressure in the developing world and weakening barriers in the developed world will invite a dramatic irruption.

Finally, there is the possibility of another kind of invasion. No one knows whether there is intelligent life out there in the universe, whether it is capable of crossing interstellar distances to arrive on this planet, or what alien visitors might do when they arrive. However, some people believe that contact with extraterrestrials could be very harmful to human society. Martin Ryle, the Astronomer Royal and a Nobel laureate, after hearing that radio telescopes had been used to broadcast humanity's existence to the galaxy, circulated a letter suggesting that this might be very hazardous. For all that is known, he said, 'any creatures out there are malevolent or hungry', and 'might come to attack or eat us'. He strongly recommended that no such messages be sent again.

It seems highly unlikely that there are aliens relying on interstellar travel just to find their next meal. However, alien invaders could well destroy global civilisation without necessarily meaning to do so, in the same way that Europeans dealt the pre-Columbian American civilisations a blow from which they never recovered. Humans could find themselves as good as enslaved, or perhaps wiped out for being troublesome, as was the experience of many native Americans. On the other hand, the consequences might be entirely beneficial. Either way, contact with aliens would take the world into a wholly new situation and one in which the analyses of this book would lose all relevance.

Chapter 30 - A plague of blessings

Introduction

A civilisation can surely shake off individual problems. Yet new problems keep emerging. The logic is one-sided. Success in overcoming one problem does not make it any easier to deal with future problems. However, failure saps the society's vigour and increases the chances of further failure. The more problems accumulate, the more they are likely to accumulate. There can never be a final victory, but there can be a final catastrophic defeat, when contradictions multiply out of control.

The problems now facing the world are indeed numerous and mutually reinforcing. A society's ability to overcome such challenges depends upon the extent to which its institutions build up and reinforce the political, economic and social relationships that bind it together. Today, many institutions actually do little to build up these relationships and are more about exploiting the peace and wealth that already exist. Such institutions are the blessings of a prosperous and enlightened civilisation, but they are also parasitic overheads on the prevailing levels of integration, organisation and cohesion. Today, these handicaps that society imposes on itself seem to have accumulated beyond the point at which contemporary civilisation can disengage from them.

In the late 1990s, an armed robber, who had been paralysed from the neck down after being shot by rival criminals during a supermarket raid, was given his own purpose-built flat in London and a nursing team to provide personal round-the-clock care. The considerable cost of this was to be met by local taxpayers. The man had a string of convictions for violent crime and had spent much of his adult life in prison. While in hospital, he was infamous for abusing staff and other patients. Yet as a priority case, he had jumped straight to the top of the housing list.²⁶¹⁷

Many people might find this outrageous. Here was an individual who had contributed nothing to society, but rather preyed upon it. He continued to behave in an anti-social manner towards those who helped him. Yet he was given the most generous treatment, at the expense of people who worked hard for their living. It seems highly unjust. Nevertheless, few would advocate the only real alternative, which is that the man be left to die, and in short order – for his life was clearly non-viable without expensive intervention. He could not even breathe for himself, let alone feed and clothe himself.

One or two centuries ago, it would have been different. Not only would the relevant medical technology have been unavailable, but also, far from saving this criminal from the consequences of his broken neck, the state would have been more

likely to break it for him, on the gallows. People cannot go back to those conditions, because they wish to live in a humane and civilised society. Sometimes, the government may toughen up some legislation, or abolish some privilege, but, for the most part, society moves and strives to move in the direction of greater compassion.

This is not to suggest that compassion and humanity are inappropriate. That is not at issue. It is that these no doubt admirable qualities bring with them certain pathologies – the potential for abuse. If it were just a matter of one or two undeserving and anti-social individuals, one could regard it as the unfortunate but supportable price of living in a humane society. However, delinquents with broken necks are but the extreme tip of the iceberg. Beyond that there are many more who make little or no productive contribution to their society but extract from it free education, free health care, free housing, free food and much else besides. Indeed, everyone is involved to some extent. Everyone has abused the compassionate institutions of contemporary society, at some time and in some way or another.

Precious life and dignity

The proportion of public expenditure given over to the welfare of the individual has been growing for centuries.²⁶¹⁸ This reflects a growing sense of the importance of human life and dignity. In the rich countries, social security is now the biggest single item in government budgets, with health next. Even the United States, traditionally one of the least socialistic nations, has seen a dramatic rise in spending on these areas.²⁶¹⁹ Across the European Union, welfare spending continues to take a growing share of a growing pie.²⁶²⁰ In Britain, which is typical, social security spending doubled over the last two decades of the twentieth century.²⁶²¹

Welfare does not just help the feckless and ignorant. It has also made life better for ordinary people and allowed a large expansion of the middle class.²⁶²² People's economic fortunes tend to fluctuate over their lifetime, rising as children leave home, for example, and falling when children are born or upon retirement.²⁶²³ The contemporary welfare state is a way of smoothing out these fluctuations. The taxes of young single people or the affluent middle aged pay for child benefit and old age pensions. The welfare system also functions as a form of insurance, protecting those who are injured or put out of work. Seen in this light, welfare is something from which everyone benefits, since everyone experiences changing circumstances and runs the risk of financial calamity.²⁶²⁴

The welfare system has expanded because of perpetual re-definition of what constitutes an acceptable level of well-being. For instance, within

months of its 1948 foundation, the National Health Service found that demand was running at rates far higher than had been calculated from previous medical statistics.²⁶²⁵ The problem was not malingers, as initially feared, but people with genuine needs.²⁶²⁶ In the past, they had borne a considerable degree of ill health, but when treatment became free their levels of tolerance fell precipitously.

Medicine cannot be regarded as intrinsically burdensome, any more than any other service. If it results in a healthier and more productive population, the benefits may outweigh the costs. However, as medicine goes beyond basic care to more heroic interventions, there are rapidly diminishing returns.²⁶²⁷ The extreme lengths now involved are illustrated by the case of a woman suffering from Creutzfeld-Jakob Disease, who was being cared for at home in the mid-1990s. To all intents and purposes, she had ceased to function as a human being. Nevertheless, the state provided home helps and a retinue of night nurses, as well as a special bed, a suction pump to remove mucus from her throat, a nutrition pump, oxygen canisters, and a made-to-measure wheelchair. Instead of gratitude for the community's support, the most evident reaction from the family was one of anger. The ill woman's mother was described as having slapped a teacher in the face and as abusing nurses in casualty. The family involved had apparently never contributed much to society, their illegitimate children having been raised on social security. Yet all the efforts on behalf of their relative could not be enough, and indeed they were preparing claims for additional compensation.²⁶²⁸

The need to preserve and promote human dignity has become unchallengeable, whatever the financial implications. Money is spent on adapting buildings and public transport to the needs of disabled people, in the interests of preserving their self-esteem, when it would be cheaper to provide discreet entrances or lay on special transport services.²⁶²⁹ Removing one indignity seems only to increase the passion for eliminating yet smaller ones.²⁶³⁰ The high price now placed on dignity was revealed in 1997, when a man was given permission to sue his health authority for the 'stigma' of being diagnosed as a schizophrenic twenty five years earlier. A fresh diagnosis had suggested he was suffering only from 'phobic anxiety'.

The newspapers are filled with cases of people being handed out money for some slight, insult or physical injury. To be fair, this is not a new phenomenon. An eighteenth century MP successfully sued the government for wrongful arrest after an allegedly libellous attack on the King's Speech.²⁶³¹ Passengers involved in train accidents in the late nineteenth century sued railway companies under the 'spine theory' – the

idea that a violent blow or shake to the spine could cause mental disorder.²⁶³² However, compensation claims have boomed over recent decades and they often seem to involve a perverse interpretation of what constitutes an injury and who is to blame.²⁶³³ In 1997, the parents of a schizophrenic man who was shot while about to kill a supermarket manager were preparing to sue the health authority for not having saved their son from himself.²⁶³⁴ A woman in the United States received £90,000 for the distress caused when her landlady destroyed a wrens' nest outside her window.²⁶³⁵ Police officers, teachers and council staff are getting damages for being overworked. There have also recently been successful actions by people claiming that their life chances were blighted by incompetent teachers.²⁶³⁶

In Britain, the compensation bill has quadrupled in just eight years and 75 percent of the amount is drawn from the public purse.²⁶³⁷ These damages may assuage the suffering of individuals, but they work to the detriment of society as a whole. Schools are becoming frightened to teach sport because injuries are increasingly likely to produce claims for compensation.²⁶³⁸ One journalist argues that Americans pay a hefty 'safety tax' on many of the things they use, just to cover manufacturers' insurance premiums.²⁶³⁹ Fear of litigation means that there is now no diving in New York schools or sledding in Denver's parks. People have to be careful even about how they help their friends for fear that an accident may lead to a lawsuit.

A key area for compensation revolves around accusations of discrimination – the notion that one's negative experiences were somehow contingent on one's gender or race, or increasingly even on some more nebulous characteristic such as personality. Often the relevant legislation is stretched very thin in order to make a case. The European Court of Justice used sex discrimination laws to overturn Britain's rules denying part-time workers the right to join company pension schemes.²⁶⁴⁰

Such cases are nominally about fairness and equality. However, this is mainly rhetoric. In reality, they are often about leveraging claims for special treatment. For example, a train driver and single mother who claimed that new shift patterns prevented her from caring for her son recently won a sex discrimination case against London Underground. In fact, LU had considered a system of special shifts suitable for people like her, but the unions had rejected it as being unfair to other drivers.²⁶⁴¹ In essence, she used equal opportunities legislation to pursue her own self-interest.

An uncompromising emphasis on life and dignity represents a major social cost. The goal of absolute fairness is unreachable. The attempt to avoid losers and gainers is seriously inhibiting for human progress. Furthermore, it does no good

teaching people to succumb to their negative emotional experiences rather than take them in their stride. The actor Simon Beale has described how he hid his fears when travelling unaccompanied between Singapore and London as a child and soon came to think nothing of it. He suggests that ‘artifice and survival are very probably related’.²⁶⁴² Yet people are now encouraged to nurture feelings of grievance and despair, to give up work and to receive compensation, though that only harms themselves and renders them useless to the rest of the community. As Princess Anne once said when speaking out against the fashion for counselling, people involved in a traumatic experience are best advised to get on with their lives, not dwell on it. Unfortunately, her advice is out of tune with the times.

Decoupling from reality

Welfare systems may have helped strengthen society in the past.²⁶⁴³ However, they are now beginning to threaten social effectiveness, because their evolution is essentially unrelated to what society actually needs or can afford. As responsibility for individual welfare has shifted away from the family and local community to the remote state, it has become subject to a tragedy of the commons. People contribute to a common pool and then withdraw from that common pool in times of need. The right to withdraw is not dependent on the amount of one’s contribution. Therefore, the temptation for everyone is to minimise contributions and maximise withdrawals. Demand is not subjected to the discipline of what the system can sustain.

The overheads that result from the increased preciousness of life and dignity are growing according to a logic of their own, and in a way that is decoupled from the ability to support them. For instance, in opinion polls, people routinely express such views as that efforts to preserve the environment or the lives of premature babies should be made regardless of cost.²⁶⁴⁴ Yet, in reality, it is impossible for society as a whole to function at a level beyond what it can afford. Wishful thinking is not and never will be enough. The view that cost is irrelevant and should not provide a check to society’s ambitions is simply a delusion.

At Singaporean independence, Lee Kuan Yew decided against a British-style NHS because he foresaw the problem of unlimited liability that he said would ‘kill’ Singapore. He told his people that equality of outcome in health, or indeed in any area, is an impossible objective, suitable only for politicians who are ‘soft in the heart and soft in the head’.²⁶⁴⁵ The experience of the NHS in the intervening years has certainly borne out his view. When something is free there is no check to the demand for it. People are now actually suing health

authorities for access to drugs and treatment, with no thought as to how it will be paid for, or by whom.

The law itself enshrines responsibilities that must be met regardless of cost. Local authorities tried not to pay nursing home fees for elderly people until their savings fell below the cost of a funeral. However, in 1997, the Court of Appeal ruled this policy unlawful.²⁶⁴⁶ Similarly, the NHS has tried to ration scarce resources based on the benefit to be gained from different treatments, but this is undermined by the legal system. In 1997, the courts ruled that one health authority’s refusal to supply a victim of multiple sclerosis with an expensive new drug was ‘disingenuous’ and unlawful. A senior health official said that the NHS would simply have to rob two Peters to pay Paul because of the judgement. No doubt, the legal system would also find in favour of the two Peters should they ever present their cases, but the courts were not asked to face such a logical impasse. Furthermore, the health authority was ordered to pay the costs of the action and faced being sued for its earlier decision to deny the drug.²⁶⁴⁷

In the early nineteenth century, there was already a feeling that welfare was getting out of hand. The Poor Law Amendment of 1834 sharply cut back payments to paupers, arguing that they were largely to blame for their own misfortune, and that many were simply idle and wasted their limited resources on gin.²⁶⁴⁸ This initiative achieved its aims. Over the next twenty five years, dependence on welfare fell back by half. It produced the situation observed by Herman Melville in Liverpool of an unmarried mother starving to death in full view of passers by. Eventually, however, such suffering came to seem intolerable again and the expansion of welfare resumed.

Governments cannot realistically tackle the fundamental causes of runaway spending on welfare for there is no way to make drastic change without inflicting real pain – the sort of pain whereby multiple sclerosis sufferers are denied drugs because they are too expensive. Even Robert Bork, a strong critic of the American welfare system, balks at the suggestion of stopping welfare payments for illegitimate births. He notes that this would result in widespread misery, squalor and malnutrition, which, he concedes, is unthinkable.²⁶⁴⁹ The thing is, of course, that misery, squalor and malnutrition *were* at one time the consequences of illegitimacy. In the past, though, people did not know any better and accepted it as inevitable. Now, on the other hand, they do know better and cannot voluntarily go back to the conditions of the nineteenth century.

The introduction of the universal franchise has helped to make the gains of the welfare state largely irreversible. When the poor joined the

electorate, governments soon began redistributing income on a much larger scale.²⁶⁵⁰ Not surprisingly, the more dependent that voters are on the public sector for employment and consumption, the more likely they are to vote for the parties that favour its expansion.²⁶⁵¹ The competition for votes has been described as a powerful engine of public expenditure.²⁶⁵² A 'caring' MP is one who advocates high spending and swings special privileges for disgruntled constituents.²⁶⁵³ Governments are always boasting that they have thrown yet more money at health care or the education system. They are motivated to meet the aspirations of people who have the vote but who do not themselves pay for social services. The pressure on outgoings is therefore decoupled from the realities of income.

Since it is impossible to tackle the real issues behind welfare burdens, attempts at reform focus on bureaucratic solutions. Yet these are characteristically counterproductive. In the overstretched NHS, fire-fighting and reacting to events means that resources tend to be deployed inefficiently and certainly not always in the best interests of patients. As dissatisfied nurses quit, expensive agency staff are used and recruitment advertising absorbs enough money to fund a medium sized hospital.²⁶⁵⁴ Basic hygiene standards are falling, raising the risk of infections. A journalist who took her son to the casualty department of a London hospital one recent Sunday evening encountered a filthy, chaotic scene more reminiscent of an eighteenth century poorhouse, with 'pubic hair and other human detritus' in a layer of dust under the cubicle bed.²⁶⁵⁵ One nurse described her profession as 'ever more frustrating and depressing'. She cited, as a typical occurrence, an old lady who 'missed her last meal, suffered the indignity of incontinence and had no one to sit with her, hold her hand and talk to her over the last hours', all because the nurses were too busy to help.²⁶⁵⁶

In response to such sorry reports, governments have introduced initiatives such as league tables and the Patient's Charter. However, these are mere palliatives, destined to fail because they are out of touch with the human realities of this human institution, and because the statistics on which decisions are based convey mostly an illusion. In 1988, one hospital came top of a national performance league, even when it was receiving a high level of complaints from patients, and staff morale was at the lowest possible ebb.

None of the playing around with statistics, special action plans, or injections of cash, seems to have made a jot of difference to the continuing growth in the work that the NHS is expected to take on. Repeated efforts to reduce management overheads and cut waiting lists have seen them stubbornly remain the same, or even grow.²⁶⁵⁷ The

NHS can absorb almost any amount of cash. It has taken on a life of its own, attempting to satisfy society's infinite need for health care regardless of affordability. Health spending, in fact, bears little relation to health outcomes. Countries like Greece, Portugal and Spain, which spend less, have if anything healthier populations.

The decoupling of social activity from reality is reflected also in the growing tendency for minute risks to generate huge hysteria and disproportionately costly interventions. The BSE crisis, for instance, has seen a whole generation of cattle incinerated and farmers' livelihoods ruined all because of a supposed link between infected beef and 'new style' CJD. Yet BSE has probably been around for centuries. A butcher was indicted for selling the meat of a mad cow in the fifteenth century.²⁶⁵⁸ Millions of people have been eating large quantities of beef for years on end, and fewer than a hundred have contracted CJD in the last decade. The response to BSE is a ludicrous overreaction in comparison to the sanguine acceptance of cigarettes, whose health risks are far greater and better established. Yet it is not unique. In the 1980s, a similar scare over salmonella led to the slaughter of three million chickens and drove five thousand producers out of business, for no benefit whatsoever.²⁶⁵⁹

The legal system again plays a key role in decoupling perception from reality. A law court is essentially a Boolean mechanism. Any subtlety lies in the phrasing of the questions that are put to it. Otherwise, it reduces complex human situations to a simple decision: yes/no, true/false, guilty/not guilty. The court's inability to deal with ambiguity is exploited in cases like BSE, which are often based on hypothetical claims, whose scientific validity is dubious and in dispute. The Roche pharmaceutical company has recently been sued over the suicides of a few dozen people taking its drug Roaccutane, a treatment for severe acne. Roche points out that eight million people around the world have taken the drug.²⁶⁶⁰ With such large numbers, some suicides are bound to occur anyway, while severe acne could itself be a risk factor. Realistically, if 8,000,000 people take a drug and 7,999,900 of them do not attempt suicide, it is manifestly absurd to say that the drug causes suicide. Yet none of this will prevent Roche from facing a series of costly court battles and probably multi-million pound compensation awards to the aggrieved families. This is one more overhead that is losing touch with reality.

Problematic solutions

Many welfare interventions do not solve and may even cause the problems to which they are supposed to be the solutions. They actually encourage disadvantage by making failure pay.²⁶⁶¹ In Britain, for example, social security spending has grown roughly eight-fold since the 1940s, but

poverty has increased.²⁶⁶² Social problems that did not exist decades ago have been, if not conjured into existence, at least brought into the open by the availability of public funds intended to deal with them.

The number of supposed invalids has increased by one million since 1979. Clearly, Britain's population has not experienced a dramatic decline in health. What it has experienced is a dramatic expansion in the availability of sickness and incapacity benefit. Similarly, the number of young unmarried mothers has been growing for decades, and the cost of supporting them has trebled since 1979. The inescapable conclusion is that the benefit system has generated the very problem it is there to solve.²⁶⁶³

The perverse incentives that create this situation are not some simple blunder that can soon be corrected. The welfare system inherently encourages fraud and dependency. The journalist Will Hutton complains that the failure of the United States to check rampant social inequality has created a mutually reinforcing cycle of disadvantage, based around ignorance, poverty, drugs, crime and prison. Of course, he is correct. However, Hutton's implied solution – giving away even more money in welfare benefits – would be no solution at all. It would not end poverty. The recipients would just spend even larger amounts on drugs and other inappropriate purchases. It would hardly reduce the culture of dependency, but would more likely increase it.

In a similar way, the successes of the health care system have tended to increase the burdens on it. Having conquered infectious disease, the rich countries are now plagued by things like heart disease, cancer and diabetes.²⁶⁶⁴ These are the inevitable degenerative diseases associated with old age, which people are running into simply because they live longer.²⁶⁶⁵ An increasing proportion of medical effort is devoted to people who will never be able to repay the cost. In the unpleasantly brutal judgement of Ivan Illich, most of the health expenditure of contemporary industrial societies goes on keeping alive a few old people for a few extra weeks.²⁶⁶⁶

Medical advances mean that premature babies can now be kept alive, though they are far more likely to experience mental or physical disability and become chronically dependent on the rest of the community. Childhood asthma, which was rare a hundred years ago, has become an epidemic in developed countries.²⁶⁶⁷ It is virtually absent from rural Africa and is at a lower level even in highly polluted Eastern Europe,²⁶⁶⁸ which suggests that low infant mortality has resulted in a more sickly population generally. This is not an argument for giving up on medical care. However, it shows that the health service partly creates the problems to which it is the solution. Society has become

dependent on it just to function normally, and the more that is done the more that there is to do.

The health service is also becoming the first port of call for inadequate people who have no control over themselves and who are seeking a palliative for their ineffable frustrations as the losers in contemporary society. These frustrations are increased when the health service, with its finite capacity, falls short of the exaggerated expectations of it. This is behind a growing level of violence against medical staff. A 1997 conference on the issue revealed that violent incidents had tripled in four years. One nurse described her casualty department on New Year's Eve as 'like a nightclub at closing time' with people 'dripping blood, shouting, arguing and vomiting'. Staff were abused in foul language by patients they were trying to treat and by relatives who threatened to kill them or take legal action for perceived deficiencies. The nurse was herself punched by a drunken man, but a policewoman told her that any complaint would not be worth the paper it was written on.²⁶⁶⁹ Not surprisingly, it is becoming harder to recruit health service staff,²⁶⁷⁰ and those who are already there tend to take several times as much sick leave as people in the private sector.²⁶⁷¹ A leading Oxford neurosurgeon has said that morale in many hospitals, including his own, is the lowest ever seen. Britain is not alone. Thousands of French doctors and nurses recently staged a strike and protest march over working conditions and lack of funds.²⁶⁷²

To satisfy rising expectations, the scope and scale of medical interventions is increasing even though objectively people may be healthier than ever. The health service has created difficulties for itself by giving the impression that it has a response for every medical problem. In reality, in the face of many conditions, it is almost as helpless as people thousands of years ago. Doctors are still frankly outperformed by the human body and its power to heal itself. Many medical procedures seem to be solely about the need to do something, rather than stand by and wait for nature to take its course. Over a third of prescribed drugs are for conditions in which they are totally ineffective, simply because doctors find it hard to say there is nothing they can do.²⁶⁷³

The health system has a bias towards highly visible and heroic interventions. However, these can actually cause illness rather than cure it. The American medical profession has determined that a third of operations are completely unnecessary, and, because operations are risky, this leads to tens of thousands of needless deaths every year. Similar numbers die from infections picked up in hospital or from the side effects of drugs.²⁶⁷⁴ Medical mistakes kill tens of thousands more, according to the US Government's Institute of Medicine. The toll is greater than that from breast cancer or road

accidents. Naturally, these deaths must be set against the number of people who are cured by drugs and by hospital care. However, the equation does not necessarily come down in favour of the medical system. According to one study, the fewer the doctors in a population the lower the mortality rate (other things being equal).²⁶⁷⁵

Advanced medicine certainly does not seem to have had much of an impact on life expectancy. That is to say, life expectancy at birth has increased markedly over the last century. However, this is almost all due to decreased childhood mortality, and that can be attributed to better sanitation and nutrition as much as to medical advances.²⁶⁷⁶ Meanwhile, life expectancy past the age of 45 has not increased appreciably in any country in the world in the last 80 years. Indeed, life expectancy for the male population in the United States has actually fallen since 1960.²⁶⁷⁷ In Britain, the mortality rate among young men has recently increased.²⁶⁷⁸ Adults are not getting any healthier and, according to a 1995 government report, longer life span represents 'years with disability, not extra years of healthy life'.²⁶⁷⁹ Obesity is said to be a growing problem, affecting half of all fifteen year olds and nearly two thirds of adults, and is itself a major risk factor for many medical conditions.²⁶⁸⁰

Of course, medicine is not simply a waste of time and many people are helped by it to varying extents. However, only about 10 percent of health seems to be due to doctors, and the other 90 percent is due to general factors, such as eating habits, which individuals can control for themselves. In other words, the costly and overburdened medical systems of developed countries are largely irrelevant to the basic health problems of their citizens.²⁶⁸¹ The elaboration of these medical systems, and the important role they play in contemporary life, are all part of people's projection on to others of responsibility for their own behaviour. Instead of eating better and taking more exercise, people look to the doctors to keep them well with scalpels, pills and radioactivity.

A study by the World Health Organisation has shown that in both rich and poor countries, people are becoming more dissatisfied with their health care services, despite the way these have been expanded. Lurid media revelations of malpractice are fostering a view of the medical profession as arrogant and sinister. In 1990, fewer than one in three people in Britain expressed satisfaction with the medical system; in the United States it was only one in ten.²⁶⁸² People complain that the NHS is 'underfunded',²⁶⁸³ when, in fact, any conceivable level of funding would probably seem inadequate. There are always more strenuous and heroic treatments that could be tried. Despite almost continuous growth in its income, the NHS has found itself increasingly overstretched in the

attempt to meet its own and its patients' expectations.

Dealing with matters of life and death, the health care system is highly exposed to the contemporary culture of litigation and compensation. Doctors operate in a state of uncertainty, but they are judged after the fact as though all options are clear and there are precise means of distinguishing between right and wrong approaches. Medicine is not a precise and predictive science. In many ways doctors are ignorant, medicine is inadequate to the illnesses it is required to deal with, and medical procedures always carry some risk. It is inevitable that decisions will sometimes be made which in hindsight appear not to have been for the best.

The more elaborate the efforts to help people, the greater the chances that those efforts will fail. The availability of sophisticated technology for monitoring births has left hospitals liable for multi-million pound damages to babies whose oxygen starvation was not picked up. The Department of Health has had to make substantial payments to the families of people who were given growth hormone as children and who have now contracted CJD. One relative said 'I had always assumed that the NHS was there to really care for people who are in extreme distress, whatever their particular illness'.²⁶⁸⁴ However, whether or not this is the role of the NHS, it certainly does not imply that the NHS is also there to provide huge payouts when things go wrong. Nevertheless, this seems to be a growing presumption on behalf of the courts and many users of the health system. There are some fifteen thousand cases of medical negligence pending in Britain.²⁶⁸⁵ Compensation payouts now cost the NHS more than £300 million every year,²⁶⁸⁶ and the burden is growing.

In some cases, the health service has been sued for intervening when it would have been better to leave well alone. In other cases, it has been sued for negligence and not intervening when it should have. Thus, it cannot err on either side. In 1997, a woman whose left arm was amputated received a settlement of £95,000 after her lawyers claimed that different treatment for her problem of poor circulation might have had a better outcome. No one could know if that were really true. However, the health authority paid up anyway, because it would have been substantially out of pocket even if it had won the case.²⁶⁸⁷ In other words, negative medical outcomes may now lead to compensation, irrespective of whether an error has genuinely been made.

Reinforcement of dependency

In the medieval city, there were not many freeloaders. Some four fifths of the entire population were engaged in productive employment.²⁶⁸⁸ Today, barely two fifths are. Over the centuries a growing proportion of the

population has become dependent on the rest, which supplies all its needs. One might think this no bad thing. For many, work is mere drudgery after all. If people have been so clever as to invent machines that can do their work for them, then they should be glad to reap the consequences in the form of increased leisure.

However, many of those who are dependent on society do not do well out of their idleness. They are lacking in life skills as well as job skills and they drift easily into crime and drugs, failing to make the best use of their opportunities. Whereas the village simpletons of the past were incorporated into their communities and found some meaning and fulfilment, the equivalent individuals today are excluded from participation in the wider society and are reduced to living off it rather than in it – sometimes as predator, sometimes as parasite. Although the overall number of poor has actually been getting smaller over the last couple of decades, those that do fall behind live worse than ever.²⁶⁸⁹

Furthermore, these dependants not only contribute nothing to society but have a myriad ways of imposing costs upon it. They commit crime, have children they cannot afford and suffer poor health. In depressed areas, many patients presenting themselves at doctors' surgeries, with complaints about unexplained headache, listlessness and 'no hope for the future', are simply suffering from aimless lives, for which there is no medical treatment.²⁶⁹⁰ Their offspring are poorly socialised and likely to repeat the mistakes of their inadequate parents. This is not a situation that anyone should be complacent about. Such inadequate and dispossessed people cannot simply be forgotten. As they seek to resolve their problems, their actions will be seldom considered and often highly destructive.

It is not only among the underclass that dependency produces disproportionate burdens. Social security benefit also supports, say, the lifestyles of road protesters from middle class backgrounds as they launch their direct attacks on economic activity. It is becoming less worthwhile for anyone to take up a productive occupation. Welfare and social security create disincentives to entrepreneurship.²⁶⁹¹ Not only do people not have to work in order to survive, but part of anything they do earn will be taken away to support those who remain idle. This is presumably why unemployment has tended to remain high even when job vacancies have been soaring.²⁶⁹²

The difficulties of life in today's complex societies may also be encouraging people to withdraw from work. Jobs are less secure. Nearly half of men over fifty are out of work, double the figure in 1979. Employers no longer want this age group.²⁶⁹³ Even when people are not living in fear of redundancy, work as an ordinary employee in a

large organisation can be disagreeable in itself to the extent of causing illness. Getting on for half of all sickness absences are caused by mental health problems, and time off work for stress-related illness has increased five-fold since the 1950s. In the public sector, the number of people retiring early on health grounds has reached such a level (more than 50 percent in some regions) that the government recently ordered an investigation.²⁶⁹⁴ Unemployed people also experience feelings of rejection and worthlessness, and, if initial efforts do not bring work, it is understandable that they may give up trying. Overall therefore, people have more reason to opt out and they are more able to opt out. It is a push-pull effect.

Even among people who are in work, dependency seems to be growing. Since the beginning of the twentieth century, the proportion of proprietors and employers has declined, suggesting a decline of entrepreneurship, while the proportion of administrators, managers, inspectors, and supervisors has increased, suggesting an increase in the overheads of work.²⁶⁹⁵

There are also growing overheads imposed on the world of work by a host of public and private initiatives. On the private side are numerous charities and professional organisations that absorb funds for little tangible benefit. The Engineering Council is a microcosm of the proliferation of these self-justifying parasitic activities. It lobbies politicians and campaigns to improve the image of engineers or to lure women into the technical professions, while also promoting various diplomas and qualifications. It is steadily expanding its staff and budget. From a sensible original concept, it seems to have lost all focus, and the impact of its various projects on the country's engineering capabilities or productivity is difficult to identify.²⁶⁹⁶ Such bodies advance the cause of business certification schemes such as Investors In People and the International Standards Organisation's various quality management awards. Supposedly, these enhance work force skills and deliver the benefits of better competitive performance, higher productivity, and lower staff turnover and sickness absence.²⁶⁹⁷ Those with first hand experience of such initiatives, however, have a more sceptical view. Their main appeal is to directors and senior managers, who take pride in accumulating rosettes, and above all to the businesses and government departments that oversee the assessments.

On the public side, contributing to the overheads of work are the international bureaucracies, such as the United Nations, with all its agencies, and the European Union. Although these bureaucracies may be relatively small in themselves, they spawn a host of initiatives that require domestic legislation and concomitant growth in the domestic bureaucracies.²⁶⁹⁸ This

legislation then imposes additional burdens on business that have nothing to do with wealth creation and everything to do with the agendas of absolute fairness, extreme elevation of human dignity, and protection from any kind of injury or insult. These include boards for promoting sexual and racial equality, and the industrial tribunals, all of which have seen a growing demand for their services.²⁶⁹⁹ Health and safety is being taken to increasingly absurd lengths. In Britain, every organisation, public and private, must now produce a risk assessment. One compiled for London University advises staff, among other things, to ensure that they can see where they are putting their feet before walking. Public inquiries of all sorts also absorb millions of pounds and impose further billions of pounds of costs on industry through defensive legislation. The BSE inquiry, for instance, cost over £25 million and one consequence of its deliberations was a requirement for opticians to destroy trial contact lenses after every use.²⁷⁰⁰ As one journalist has put it, the red tape grows with every news story as government ministers are asked to explain how they will stop some accident or disaster occurring again.²⁷⁰¹

Symbiotic with the burgeoning bureaucracy is a variety of professions, including lawyers, accountants, auditors and management consultants, whose specialist skills are needed to cope with the increasingly complicated regulations. Accountancy showed the most sustained growth of all the professions during the 1980s.²⁷⁰² This is not entrepreneurial and takes place mostly after the fact of wealth creation, but it is in demand to deal with the intricacies of the tax system and various forms of statistics required by the government and the EU. Auditing and evaluation is another expanding industry that appears to be largely parasitic on the wider economy. There are few obvious improvements in the government departments, schools, police and other institutions that are forever being inspected and ranked in elaborate leagues.

The legal professions have shown strong growth over the last couple of decades, and have been busy making work for themselves. Legal aid is now costing a thousand times more than was originally intended,²⁷⁰³ despite increasingly strict rules. This is not surprising given that those who administer the system are themselves lawyers.²⁷⁰⁴ The legal industry happily helps the government to attack itself, absorbing people and material wealth in self-justifying circles of activity. Protesters received tens of thousands of pounds in legal aid to challenge the government over the Bristol ring road.²⁷⁰⁵ Meanwhile, the delays in the project caused more pollution from stop-start traffic, increased stress among drivers on the old inadequate roads and surely led to additional problems for the health system. The recent Human

Rights Act has vastly extended the scope for citizens to challenge both the government and the public bodies that work on its behalf. Lawyers have also recently lost their immunity from being sued by their clients, so that lawyers can now sue other lawyers in a system of almost perfect circularity.²⁷⁰⁶

The United States has three quarters of the world total of legal professionals, the number having quadrupled in thirty years.²⁷⁰⁷ Hardly surprisingly, it is infested with lawsuits. A decade ago, commentators suggested that the American legal system was getting out of hand, with its no-win-no-fee arrangements, and would have to return to something like the British model.²⁷⁰⁸ This prediction turned out to be incorrect. Far from America's system returning to the British model, the British system has actually moved nearer to that of America. Solicitors now advertise for clients with potential personal injury suits. In one newspaper investigation, legal firms proved enthusiastic about such absurd cases as one against the Milk Marketing Board for encouraging a man to drink too much milk and causing him to have a heart attack.²⁷⁰⁹ Even in Germany, where lawyers' contingency fees are prohibited, one enterprising firm is finding a way round the ban by offering a kind of venture capital for legal cases.²⁷¹⁰

At all levels, therefore, from the dissolute underclass to respected professionals, dependency tends to be self-reinforcing. The dependants create the conditions for their own existence, and they continually find new burdens and new costs to impose on society as a whole.

Ambitions and capacities

The types of misfortune that people seek to protect against grow ever more numerous. The circle of people who are eligible to be supported by the rest of the community grows ever larger. The range of services that one can expect to be provided with by right grows ever more extensive and expensive. These represent people's ambitions for a more caring and humane society, and they ratchet ever upwards. They depend, however, on strong political, economic and social relationships, i.e. on the fact that society is ordered, wealthy and morally responsible. Yet the growth in these factors, i.e. in society's capacities, is somewhat less assured than the growth in its ambition. Ambition ratchets upwards, but capacities do not. In this case, ambitions must eventually outstrip capacities.

Contemporary societies are already showing the strain of ambitions tending to push beyond capacities. The welfare state is being run down, in the sense that it is less generous to individuals.²⁷¹¹ Total welfare spending, though, has continued to grow, despite all the efforts to stabilise or reduce it.²⁷¹² A huge increase in the number of claimants has overwhelmed any reduction in the system's generosity.²⁷¹³ The developed countries are

beginning to feel the strain of this monster, while they cannot bring it under control. Evidently, it is the monster that will destroy them, for they cannot destroy the monster.

All across Europe, the demand for health services is outstripping the resources available, as spending rises well ahead of inflation and economic growth.²⁷¹⁴ In the mid-1990s, some hospitals in south London were asking to close their casualty departments for good, because they could not cope.²⁷¹⁵ Many NHS hospitals remain on the brink of system collapse. In most winters, some have to suspend or consider suspending all normal business. It is common for health authorities to begin the financial year already in debt.²⁷¹⁶ The 1998 conference of the Royal College of Nurses was told that the average hospital's food budget is inadequate for patient needs.²⁷¹⁷ Free eye tests and glasses ceased years ago, while the NHS dental service has shrunk considerably. Other parts of the service are being scrutinised for the possibility of making charges.²⁷¹⁸

Slashing back the welfare state is not really a solution. Old age pensions and health and unemployment insurance were introduced around the turn of the century to take the steam out of socialist agitation.²⁷¹⁹ These schemes expanded again after the second world war as a response to the social dislocations and breakdown of order during the 1930s. Extensive dismantling of the welfare state now might only bring forward some kind of sociological convulsion. In an American survey, around 1980, half of workers in their

thirties had little faith that their benefits and pensions would even be paid when they retire.²⁷²⁰ This is a serious situation. Political, economic and social stability hinges upon people's commitment to the whole project. Given that the rewards of the majority are obviously far less than those of a minority, such commitment depends on the belief that for everyone tomorrow will be better than today. Stagnation, let alone retrenchment, is a severe threat to that commitment.

People may be well aware of the disaster to which they are heading, but they cannot get off the conveyor belt they are on. They cannot go back in a controlled fashion to what they know for sure will be a somewhat harder, somewhat meaner society. They have to move forward because, whatever their fears, the future is still uncertain. They are sure of the misery that lies behind, but only half-believe in the misery that lies ahead. Confronting the notion that things will get better indefinitely may actually bring forward the crisis of disappointment. Hence, people must press on with their ambitions, even though their capacities may be falling behind. They must go on accumulating burdens. In putting off the day of reckoning, however, they ensure that when the shock comes it will be devastating indeed. They ensure that it will be the kind of shock that on many past occasions, and in every part of the world, has precipitated the descent into a dark age – a dark age that wipes away mistakes, resets expectations to zero, and allows the journey to begin again.

Part Four

*a history of the third
millennium*

Chapter 31 - The coming dark age

Phases of cultural change

The history of dark ages has been reviewed, a theory has been derived, and it has been argued that there are clear signs of a coming catastrophe. It is time to turn to the future. When will the dark age occur? By what stages will it arrive? How long will it last? What will it be like? What will come afterwards?

To deal with questions like these it will be helpful to introduce the model of cultural change shown in Figure 31-1. This suggests that there are essentially four phases of cultural change, which apply whether one is talking about the history of a musical genre or the life story of an entire civilisation.

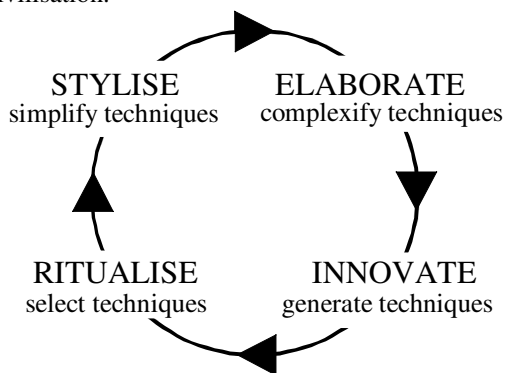


Figure 31-1: Phases of cultural change.

In the phase of *ritualisation*, certain techniques, practices or attitudes are selected from a multitude of possibilities. The selection is essentially arbitrary but the more that certain techniques are repeated, the more they are likely to be repeated. These techniques are passed on from person to person and from generation to generation. They serve as ready-made solutions to whatever issues arise in the relevant sphere of cultural activity (e.g. musical genre or entire civilisation). They acquire a self-justifying validity, to be performed or believed in because that is the way things have always been done. They become characteristic of the cultural activity and inform all of its subsequent history.

The next phase, *stylisation*, involves refinement of these ritualised beliefs and procedures, through elimination of extraneous details and focusing on core principles. By the end of this phase, the sphere of cultural activity is at its most sublime realisation. Simplicity is combined with proficiency. Form and function are in perfect harmony.

The process of social change moves inexorably onwards to the next phase, that of *elaboration*. This involves growing complexity and ambition. Attempts to improve on the existing techniques do not challenge the fundamental principles, which are taken for granted, but they embellish and enhance

them, bolting on extra detail. At the same time, self-doubt creeps in and, though people may do more, they do it less efficiently.

Eventually, the thing collapses under its own weight. The old rituals, first stylised, then elaborated, are now abandoned and swept away. This yields the phase of *innovation*, in which true novelty emerges to fill the vacuum. There is terrific freedom to explore the universe of ideas again and to re-consider things from first principles. The sphere of cultural activity is in disorder, as many things are tried, and there is no commonality or permanence in procedure or belief. After some time, ritualisation begins to occur again, and the cultural activity is re-born on a sounder footing and ready for a new era. The whole process starts over.

This model serves as a guide to the great patterns of history and the future. Global civilisation is presently in the phase of elaboration. As this continues, the world may get richer but also more bloated, more burdened, and more troubled. On the surface, things will seem to be getting better but, underneath, there will remain intractable problems, choking off further progress. This may be referred to as 'the descent'. It will culminate in a crisis of confidence, followed by the rapid destruction of the present order.

During the time that follows, everything that people have for centuries taken for granted, every basic precept, will be denied or will no longer apply. The old certainties will go for nought. This will be the phase of innovation. For those who desire orderliness, it will be a time of disorientation and dislocation. For those who relish novelty, it will be a time of opportunity and one that rewards the taking of risk. This is the dark age, or simply 'the darkness'.

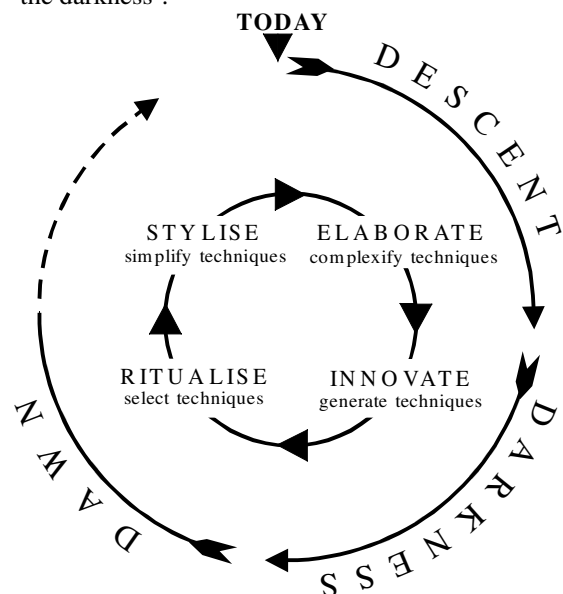


Figure 31-2: Changing world order.

Finally, the chaos will begin to resolve itself into a new order, though tentatively at first. This may be called 'the dawn', when the foundations are laid for a new era of human endeavour. (The term 'dawn' will be used to refer to the entire time after the coming dark age, including both the beginnings of the future civilisation and its heyday.)

Holding back the tide

During the period leading up to the crash of 1929, the US stock market repeatedly bounced back from precipitous falls. In mid-1928, the newspapers reported that 'yesterday the bull market finally ended' but it went on to pick up again. Another bad break occurred in December of that year, again followed by a recovery. In the crash itself, there were sudden falls and recoveries over the course of a fortnight.²⁷²¹ The market did not give up without a fight. This is a microcosm of the advent of the coming dark age. It will not come down smoothly and unequivocally. Crisis will often seem to have been averted, and gloomy predictions will regularly be denied.

Humans and their societies are extraordinarily resilient. When it seems that it is all over with them, they have a tremendous capacity to pull back from the brink and side-step what looked like inevitable disaster. Forecasts of doom often fail because they underestimate human ingenuity and overlook people's ability to recognise and overcome their problems. Today many attempts are being made to reform the follies and incentive traps that are responsible for the world's disintegrative, disorganising and dis cohesive trends. Some of these attempts will surely succeed and societies will generate solutions that cannot yet be conceived of. History is a ferment, and progress towards the dark age will not be a monotonic decline of steadily worsening conditions. The descent will be characterised by frequent reversals, with rallies within slides and slides within rallies. There will be times, even extended periods, when things seem to be getting better rather than worse.

However, one should not be fooled by these optimistic outbreaks. Tackling and solving specific problems is not the same as turning back the tide of history. It is within nobody's power to remove, just like that, the deep contradictions that thread through today's national and international institutions. No one can permanently defy the abstract and fundamental logic of the phoenix principle, whereby destruction is an inseparable element of creativity and progress. Large retrenchments are inherent to complex systems, of which societies are just one example.

Many solutions to civilisation's problems may simply involve buying time, making the situation worse in one obscure area in order to patch things up somewhere else. The world has recently seen widely hailed rapprochements, in places like Northern Ireland and the West Bank, that soon

enough degenerated into further bloodshed. Such a course of events has been quite predictable, for no memories were erased and no tensions relieved.

In the early days of the Kosovo conflict, an Albanian refugee made a videotape of his friends and neighbours lying murdered in the field near their village. He said that he intended to show to his children and his grandchildren 'what the Serbs have done to our people'. Clearly, the Kosovo conflict is by no means over, whatever temporary peace deals may be negotiated. This man's grandchildren are already involved. There is no peaceful, rational, gradualist solution to the problems of Kosovo. Only the coming dark age can finally resolve such fundamental contradictions. Most videotapes will then be destroyed, there will be no electricity to work the video recorders anyway, and the VHS format will be forgotten like the Egyptian hieroglyphs. Future archaeologists may painstakingly reconstruct a fragmentary understanding of events, but by then the ethnic hatreds involved will be dead and their bitterness dried up. They will be suitable only for the museum, well beyond doing anybody any harm.

One might contrast the situation of Kosovo with that of East Timor. In this case, the society has now passed through the bloodbath and been utterly destroyed. It has the chance to re-build itself in peace. On the basis of the phoenix principle, one would predict that a generation from now the seemingly unfortunate East Timor will be the most peaceful and most prosperous part of the Indonesian archipelago.

In general, the bumpy ride to the dark age will see crisis followed by resolution, followed by fresh crisis. There may even be large shocks that seem to abolish some of the impasses in today's world order. A nuclear world war, for example, might give way to a dramatic peace, with people speaking of the war to end wars as they did in 1918. Alternatively, some draconian government might slash welfare entitlements and harden its heart against those journalists who report the misery and starvation that results. Yet in the absence of a general collapse, these resolutions would prove a mirage. Enmity or compassion would soon return, and probably with a vengeance. To assess each solution for its ability to postpone the inevitable reckoning one should ask certain basic questions. In what way does it leave unsatisfied aspirations? To what extent does it attack selfish and parasitic motivations? One may then recognise passing shocks for what they are – the first lightning strikes of the coming storm.

Duration and nature

The duration of the descent depends upon how long the processes of disintegration, disorganisation and dis cohesion can continue before the contradictions become too obvious and there is a catastrophic breakdown. Depressing

though they may seem, these processes probably have some way to run. For a while yet, people will be able to enjoy the fruits of a thousand years of democratisation, wealth accumulation and cultural tolerance. Robert Bork recalls being so shocked by the farcical hearings relating to the appointment of Clarence Thomas as a supreme court judge that he remarked to a friend 'television is showing the end of western civilisation in living colour'. The friend replied 'of course it is coming to an end but don't worry; it takes a long time and in the meantime it is possible to live well'.²⁷²²

The processes of disintegration, disorganisation and dis cohesion, which have been in operation for centuries, are beginning to reveal their limitations. The welfare system is under pressure. Subordinate countries are beginning to challenge the western hegemony. The decline may indeed take some time and, as it proceeds, the more fortunate people, perhaps even the majority, may live better than they have ever lived before. Yet it will come to an end one day, and there will be a definite reckoning – a rapid and calamitous unravelling.

To estimate the timing of this calamity, one may consider the welfare system. Here there could be a crunch in no more than a generation or two. Today's work force is composed of the baby boomers, who were raised in the relatively sober times of the 1940s to the 1970s. Fifty years from now, this population bulge will have moved into the retirement bracket, when it will be demanding pensions and medical services. The work force will then consist of people raised between the 1980s to the 2020s – a time of widespread single parenthood and high welfare dependency, when traditional institutions have been chronically under attack and heavily de-legitimised. In Britain, by 2010, there will be four times as many people coming of working age who have been born to unwed mothers as there were in 1990. A full third of these will have been born to teenagers. Meanwhile, in most developed countries, ethnic minorities will be a far larger proportion of the population. The commitment of this future work force, both to the work ethic per se and to the traditional structures of western society, is very much in doubt. A period roughly equivalent to one working lifetime will see a marked downward shift in the reliability of the productive element of the population coinciding with an increase in the burden placed upon it.

An alternative estimate of the duration of the descent may be obtained by considering the chances of war erupting in the international system. NATO has already rejected the notion that it will supply a hegemonic peace to the world. It has stated that the Kosovo intervention was to protect its interests in its own near abroad, and should not be taken to imply that it will intervene in third party conflicts in regions such as east Asia, the middle

east, or Africa.²⁷²³ This is a signal to China and Japan that their geopolitical ambitions may grow unchecked for the time being, eroding the west's advantage. Several observers believe that the chances of war are likely to start rising most rapidly after 2020, when the United States will have lost power to China, and China itself may be less centralised and autocratic.²⁷²⁴ Again, this suggests a timescale of the order of fifty years within which a breakdown could occur.

These calculations ignore the issue of human adaptation and creativity. A more realistic estimate should take into account the fact that people may be able to reverse some of the negative trends. There is a limit to this. Adaptability can postpone collapse for a while, but not forever. To return wholeheartedly to a social order in which, say, single motherhood is not a viable life style would require the overturning of so many gains in freedom and welfare that it would very likely initiate the catastrophe it is intended to avoid. Perhaps it would be possible to wind back these trends, at the extreme, by a century or so. This would mean essentially wiping out the changes of the twentieth century. It would mean restoring the unchallenged supremacy of the west, while dismantling the welfare state down to the barebones provisions of the old Poor Laws. It would mean, among other things, being prepared to shoot people at dawn rather than compensate them for post-traumatic stress disorder. The figure of a century as the greatest amount it would be possible to stave off the inevitable is a guess, but it is an educated one. The Poor Law Commission of the nineteenth century succeeded in reversing welfare history by some thirty years. Rome lumbered on for something over a hundred years after the crises of the fourth century, when some historians believe it came close to collapse.

In round numbers, the descent might last somewhere between fifty and two hundred years. It is unlikely to be sooner, it could well be later, but the dark age is most likely to arrive within this time bracket. The collapse itself will be brief, taking a decade at most and possibly much less. Past instances of collapse have seemed to happen almost overnight. Once confidence goes out of the system it unravels very quickly. When perceptions return to reality, they do so abruptly.

Turning to the duration of the darkness that will follow collapse, past dark ages can serve as a guide. Typically, the period of utter obscurity and turmoil lasts between fifty and two hundred years, which may therefore be posited as the likely duration of the coming dark age. A duration nearer the upper limit of this range is probably more likely, since the most severe dark ages tend to follow from the first time that humans achieve a particular level of social complexity. The present era is the first time that humanity has achieved so

thoroughly connected a global civilisation, and some extreme contradictions have been accumulated. It seems that it will take not one but several human lifetimes to erase from memory the hatreds and conceits that ultimately pitch the present world order into the abyss.

Unlike the transition from descent to darkness, the transition from darkness to dawn will be relatively gradual. As J M Keynes observed, the substitution of a downward for an upward tendency often takes place suddenly and violently, whereas there is usually no such sharp turning point when an upward tendency is substituted for a downward one.²⁷²⁵ The dawn will therefore not represent instantaneous restoration of a highly ordered society. Rather it will represent the beginning of a slow process of recovery. In some respects, especially technological ones, the post-dark age world could quickly surpass what has gone before. However, in many other respects, it might take a long time indeed before the world again reaches the complexity and material well-being of the early twenty first century. It took a thousand years, for instance, before Britons began building paved roads to rival those that the Romans left behind. It may take a similar time before the post dark agers rebuild the internet on its existing scale. One can expect a millennium or two in which history is again characterised by generally upward progress. Beyond this lies the dark age after next. However, it would be rather ambitious to say anything very much about that.

As for the nature of these eras, the descent, firstly, will see more of the same. More people will opt out of productive activity. Challenges to the legitimacy of social institutions will intensify. Self-sacrifice and suppression of individual desire will be further disparaged and discarded. The emphasis will shift further in favour of the individual's entitlement to a comfortable life without effort. Dissatisfaction will increase, since it will be impossible to meet expectations. Impatient and selfish people will produce more crime and corrupt behaviour. Political authorities will find it harder to impose their will. Wealth differentials will grow. The world will become increasingly conflictual, with a growing tempo of military activity in conjunction with trade disputes and protectionism. International forums, such as the United Nations, will be riven by bitter argument and will become incapable of collective action. Nevertheless, some observers will be able to view all such developments in an optimistic light. The decline will be a wealthy one, with the diffusion of high technology increasing the availability of material goods.²⁷²⁶ Ever more extensive health care and welfare systems will make societies seem unprecedentedly gentle and responsible. Optimistic commentators will point to the potential for further

breakthroughs, though they will not realise that the breakthroughs require first a breakdown.

If the descent is a time of private selfishness behind public generosity, the darkness will be a time of private selfishness without public generosity. There will be no welfare system. People will be thrown back on their own devices and life will suddenly become much simpler. On the bright side, this will be a time of extreme personal freedom, given that freedom 'is just another word for nothing left to lose'.²⁷²⁷ It will also be a time of rapid change with no constraints on creativity. There will be a far-reaching failure to transmit the knowledge, attitudes and certainties of the pre-dark age society, providing fertile ground for new ideas. Yet people will be too busy struggling for survival to record what is happening to them. The burst of creativity will take place behind a thick screen, its details never to be revealed. To future historians looking back on the dark age, these fifty to two hundred years will be another chapter missing from the human story.

Finally, the dawn will see the world as if re-born and made innocent again. It will be a far more moral world, in which individual desire is subordinated to higher things and to the will of the community. Political authority will be jealous and ruthless. There will be few dependants, and almost everyone will be engaged in productive activity. The world will be at first highly fragmented but political, economic and social units will steadily grow by accretion. Although the world will be beginning again, some things will survive from before the dark age. New technologies, including ones that contemporary societies have failed to exploit, will soon create material possibilities in excess of anything known today. Things that people now take for granted, such as coal mining, will come to seem unbelievably uncivilised, like slavery.²⁷²⁸ In the long term, one can expect a far more enlightened civilisation – a civilisation perhaps that does not allow millions of people to starve in full view of the world's television cameras. However, one should not be too utopian. Human frailties will never be eliminated, at least not in the time scales one is dealing with here, and the world of a thousand years from now will have deficiencies of its own. These are likely to be deficiencies not so different from those that are apparent today, though they will certainly be transformed and re-interpreted.

Taken by surprise

It may seem to be taking an easy way out to predict a coming dark age with a fifty to two hundred year lead-time. There is apparently half a century's grace before this thesis can be called to account. It could be seen as hedging one's bets still further to note that progress towards the dark age will be uneven, with periodic reversals. Even if things get better in the near term, that does not

Table 31-1: *The next one thousand years – an overview.*

Phase	Duration	Nature
Descent	50 – 200 years	Growing wealth and welfare combined with increased selfishness, decreased entrepreneurship and de-legitimisation of traditional institutions.
Collapse	10 years or less	A crisis of confidence, leading to catastrophic unravelling of existing political, economic and social structures, on the national and international level.
Darkness	50 – 200 years	A highly creative but obscure time; extreme personal freedom combined with subsistence lifestyles; people will be self-sufficient and self-reliant.
Dawn	1000+ years	Re-emergence of highly moral, productive and disciplined societies; there will be a slow recovery, with the gradual extension of integration, organisation and cohesion; eventually, there will emerge a more civilised and enlightened world order, though this will become corrupt in its turn.

conclusively deny the predictions of long term decay and eventual collapse.

To be fair, it is not quite as simple as that. In what follows, there are specific predictions about events to look out for on the way down to a dark age. These forecasts can be tested well before the collapse itself. Furthermore, the book does not really aim to make detailed predictions about the next few years. Its true purpose is to present a theory of society and of long term historical phenomena. This theory can be evaluated immediately, in terms of how well it accounts for the historical events that are already known about, just as a new astronomical theory may be evaluated in terms of how well it accounts for what astronomers already know about stars and galaxies. Of course, the best test of the theory, in either case, will be against new data. In the present instance, because one is dealing with long term phenomena, it will inevitably take some time before conclusive results can be obtained.

Predictions of social phenomena almost invariably turn out to be wrong because they are based on simple extrapolation of current trends, often combined with a dose of wishful thinking. In 1900, for example, the analysis of a British victory in the Boer war led one newspaper to conclude that ‘the armies of the future will contain a vastly greater proportion of men with horses’.²⁷²⁹ Technological forecasts, in particular, emerge as comically fanciful even for a short time ahead. In 1980, commentators were predicting that the turn of the millennium would see people swallowing pills for breakfast, jetpacking to work, and tracking down criminals in space.²⁷³⁰ Such prediction of novelty is almost impossible to get right. The present project, however, is concerned not with novelty but with eternally recurrent themes. Its predictions are a by-product of statements about patterns in historical phenomena, with the presumption that these are as relevant to the future as to the past.

Of course, anything could actually happen in the future.²⁷³¹ Quite unexpected things may change the world’s circumstances in ways not yet thought of. Barring invasion by extraterrestrials, though, it is implausible that anything could permanently eliminate the prospect of a future catastrophe. History has been punctuated for thousands of years by the saga of decline, dark age and renewal, despite all the unexpected things that have happened in it. Unforeseen events may affect the timing of the dark age, either as last straws that precipitate the crisis or as lucky breaks that somehow stave it off, but they will not affect the essential logic carrying the world to such a denouement. That logic depends wholly on human relationships, whose nature is fixed and impervious to external, random events.

The likelihood is that when the dark age comes it will seem to be quite unexpected. Even those who have predicted it may find themselves surprised at the moment when collapse actually occurs. Humans are accustomed to thinking in terms of gradual change. It is difficult to believe or detect that sufficient strain has accumulated for a transition to an abrupt and catastrophic breakdown – even if one suspects that that is on the cards. In the year before communism triumphed in Russia, Lenin said that he did not expect to see it in his lifetime. In the year before communism collapsed again, the historian Paul Kennedy said that he did not expect to see it go. Throughout the twentieth century, people have been taken unawares by events. The outbreak of the first world war, the 1973 oil crisis, and the fall of the shah of Iran all seemed to contemporaries to come out of the blue.²⁷³²

The main reason why people are surprised by events is simply that they are usually ill-informed about what is going on in the world. They remain unaware of the trouble that is brewing until it erupts so dramatically as to make the nightly news. Then it seems to ordinary people as though it has all come from nowhere, though if they had been

reading the small print in obscure academic journals they might have been warned of its advent long before. Norman Myers has observed that people may have missed the build-up to seismic events in eastern Europe in 1989 because they were stuck with traditional views of geography and history, in which these countries seemed marginal to the main action. Writing just *before* Iraq's invasion of Kuwait, he asked whether people could similarly be missing hot spots in the Arabian peninsula, as well as in the Himalayas and the Caribbean basin. He also asked how many people in the west can name all the states of central Asia, let alone draw a map of the region or summarise its recent history.²⁷³³ Yet events are unfolding in these countries, where tensions similar to those of Yugoslavia are being played out. It is only their ignorance that will cause people to be surprised when some atrocity or armed clash in those places is a sufficient threat to western interests that it hits the headlines.

The fact is that expert analysts, with an in-depth understanding of their subject matter, have often given quite good accounts of future geopolitical events. In 1918, General Douglas Haig expressed concern about the exaction of humiliating terms from Germany, fearing that it would merely lay up trouble for the future. The Nazis subsequently proved him right. Similarly, though many contemporaries were misled by the switchback progress of the United States stock market in the late 1920s, those who had a correct model, and who kept their eyes wide open, could see what was coming. In March 1929, a Federal Reserve official pointed to certain structural features in the US economy as being 'always a precursor of a general decline',²⁷³⁴ whatever stock prices might be doing from one day to the next. As long ago as 1980, Kenneth Boulding was predicting (correctly) that the Soviet Union would eventually break up and that its constituent states would emerge intact from the experience of being submerged within it. He based his prediction on insights gained from a lifetime's study of how human institutions work. Another group of forecasters predicted Yugoslavia's civil wars a year before they actually erupted.²⁷³⁵ There is much value to be gained from considered evaluation of the facts, supported by a long historical perspective.

Another reason why people are often surprised by events is that they are unwilling to entertain unpalatable thoughts. The Australian academic Angus Martin has discussed this in the context of the Aberfan disaster of October 1966, in which more than a hundred children were buried beneath the waste material from a coal mine. According to typical accounts of the incident, 'the slag heap suddenly and without warning poured down upon Pantglas Junior School'. Without warning, Martin

asks? Slag heaps had been sliding into Welsh valleys for years. It was widely known that provision had to be made for drainage of such heaps – the Aberfan one was undrained. It was strictly recommended that slag heaps should not exceed 20 feet in height – the one at Aberfan towered more than 100 feet before its collapse. As Martin says, humans are incurable optimists whose default assumption is that 'it cannot happen here'.²⁷³⁶ There is hardly any major disaster in which it does not emerge that someone who understood the issues had been warning of the danger long before. In the case of the Three Mile Island incident, in which a US nuclear reactor came close to meltdown, two senior engineers had warned two and a half years earlier of precisely the scenario that came to pass. When their initial warnings failed to produce any response from the management, they issued further strongly worded memoranda. Though it was agreed to take the steps they recommended, nothing was done and the message never got out. Further warnings in a report for the Nuclear Regulatory Commission and from one of the shift supervisors were similarly ignored and forgotten.²⁷³⁷

This same incurable optimism influenced various authors who argued that world peace had become permanent, just before the outbreak of the first world war, the bloodiest and most destructive conflict hitherto. One said that war between civilised nations had become 'as antiquated as the duel'.²⁷³⁸ Yet historians now recognise that the evidence of gathering war clouds in Europe was there from at least the Bosnian crisis of 1908, had contemporaries chosen to see it. In December 1928, President Coolidge declared that Americans 'might regard the present with satisfaction and the future with optimism',²⁷³⁹ just a year before the United States was plunged into the decade-long misery of the great depression. One could fill a whole book with such examples. There is an endless supply of people who are prepared to ignore five thousand years of history, supposing that people have at last made a clean break with it and that the traditional laws of socio-economic gravity have somehow been suspended.

Humankind cannot bear very much reality, as T S Eliot put it. In the words of Francis Bacon, people most readily believe what they would like to believe. Angus Martin suggests an eleventh commandment: thou shalt not face reality nor ask others to face it. When a former British cabinet minister recently warned of the dangers of encouraging different groups to develop separately and of actively opposing efforts to forge a common culture, he was shouted down. Yet his message was not some hate-filled diatribe but a sober and realistic assessment of the situation, whose validity is evidenced by the numerous instances of ethnic conflict around the world. Nevertheless, received

opinion chooses to believe that the modern world can ignore the evidence of history because it is now immune from the problems that have plagued many historical and contemporary societies. It misconstrues and then rejects any conflicting observation. That is why, when reality catches up with them, to reveal the contradictions at the heart of a multicultural society, most people will feel that the disaster has arrived without warning. Only future historians will be surprised that people could have been so blithe.

One might ask whether people will ever actually know that they are in a dark age. Certainly, the poverty and turmoil of the dark age will be unmistakable. If people who are alive today were to be catapulted forward a century or so, they would no doubt recognise the dark age for what it was. However, those who are born into such a world may not think of it in the same way. Discontinuities in the transmission of knowledge may make the past seem like a fabled golden age. It is not clear for instance that the Anglo-Saxon invaders who settled Britain in sub-Roman times thought that they were in a dark age.²⁷⁴⁰ That is only the modern view of it, with the perspective of centuries-long hindsight. Even those who live through the transition to a dark age may not realise what is happening to them. The Romanized citizens of Britain and Gaul, who saw civilisation collapsing, tended to cling on to the notion that it was only a transient thing.

Although the final demise of the contemporary world order may take place in the space of a decade, that is still quite a long time in human terms. The collapse will happen quickly but not all at once. People will not go to sleep one night in a state of high civilisation, then wake up the next morning to find themselves in a full-blown dark age. The darkness will fall first over vulnerable areas and spread from there. It will not necessarily reach everything even at its nadir.²⁷⁴¹ Pockets of order and civilisation may persist in isolated areas. Furthermore, during the descent there will be rallies and bright spots. It will be possible to believe that a more sustained recovery is just around the corner. The erratic nature of decline may make it hard for people to accept that all is lost and that the catastrophe really is upon them.

Ordinary citizens may therefore pass into the dark age without knowing it, just as Columbus discovered America but never realised what he had done. What seems to future historians like a turning point – the event which showed that all was lost – may well go unnoticed by contemporaries. Looking back at the end of 1929, the *New York Times* identified its biggest story that year as Admiral Byrd's trip to the south pole. The editors did not see the importance of the stock market crash.²⁷⁴²

Thus, the dark age will arrive unexpectedly. Even the most obvious symptoms may not alert

people to the significance of their plight. However, this will not be because it has not been foretold, for it has been foretold, by many authors in many ways.²⁷⁴³ It will rather be because of the human inclination to downgrade unwanted information, and to suppose that tomorrow will always be as good as or even better than today.

The livable future

In a discussion of possible world futures, one group of commentators asks whether a desirable future is in sight.²⁷⁴⁴ This encapsulates the perennial fallacy in human orientations towards the future. The present has never been wholly 'desirable'. Why should the future be? The truth is rather that they are both 'livable', because of human adaptability.

One forecasting service has painted a rosy view of life in 2020. It predicts that a new age of altruism will dawn and people will spend one day a week working in the community. Growing numbers of people will choose to live alongside those with shared interests, for example in golf villages. Life expectancy will be in the mid-80s and the working week will shrink to 25 hours because of 'technology inspired productivity gains'.²⁷⁴⁵ The report might as well have added that, due to global warming, the weather will always be sunny. This vision of the future is pure fantasy, out of touch with the huge and growing discrepancies between people's expectations and what society can deliver. In fact, the forecast exhibits a distinctly schizophrenic character. It asserts, for instance, that most of the advances will be enjoyed by at least half of all British households. In other words, up to half of households are missing out. Similarly, one is to expect gated communities – symptoms of a breakdown in law and order – as well as the attractive-sounding golf villages. The 50 percent of the population who are the losers in this scenario cannot really be ignored. These sans-culottes are likely to bring down the whole dreamy project.

Such forecasts are typical of what most people idly suppose the future to be about, i.e. one step closer to paradise. In *The time machine*, H G Wells depicts a golden age of universal youth, beauty and leisure at the end of time (though, to be fair, he also draws attention to the downside of such a condition). The notion that life span will increase is readily believed in, despite the fact that (adult) life expectancy has not increased since pharaonic times. To be sure, the material conditions of life have more or less improved consistently over time. However, the age-old dreams of peace, riches without effort, and a universal brotherhood of man have remained forever elusive.

This book's vision of the future is not a rosy or romantic one. It is a realistic one, based on the uniformitarian assumption that people will behave in the next millennium as they have behaved during

the last five millennia. The long term outlook for humanity is as good as ever. The short term is indifferent. The medium term is distinctly bad. However, this need not be a depressing prospect. Those who live through the coming dark age and the times leading up to it will not necessarily experience only hardship and despair, any more than during other periods. It is not the times that

people live in that determine how happy they should be, but rather what they as individuals make of them. Insofar as the coming upheaval will create vast expanses of opportunity, one may look to it with some hopeful expectancy. That is to say, one can step into the future with informed, not naïve, optimism.

Chapter 32 - The disintegration process

Weakening domestic authority

One historian has predicted that there will be a Windsor on the throne in 2020, and that it will be either Charles III or William V.²⁷⁴⁶ In fact, barring disasters, it could equally be Elizabeth II. She will be 94, an age that her mother sailed past. Nevertheless, there must eventually be a change of reign, and that could be a dangerous time for the House of Windsor, whose authority and mystique are continually being eroded. The ejection of hereditary peers from the House of Lords has removed an important buffer zone around the royal family. Its privileges seem more exposed and anomalous. Australia's conversion to a republic will be another important milestone, which is bound to occur at some stage and will encourage further challenges to royal legitimacy. If Charles III or William V ever makes it to the throne, it is likely to be on reduced terms, with a role even more decorative and less relevant than it is today. The royal family is still popular, and dissolution of the monarchy seems a long way off, but its days are certainly numbered.

While the British monarchy has little to lose and may simply wither away quietly, in the Arab world, kings still have real power and to dispossess them may involve some fraught confrontations. Kuwait shows signs of liberalising peacefully, awarding votes to women and evolving in the direction of Europe's constitutional monarchies. Its suffering in the Gulf war may have provided an impetus for such change. However, in Saudi Arabia, the king still rules very directly. The mechanisms for a parliament exist but the king does not call it. Here, change could well be violent.

The declining authority of monarchy is part of a broader process in which traditional political structures are due to be broken down everywhere. Political parties are likely to proliferate as people are less prepared to work within the existing frameworks. In Britain, reforms such as proportional representation and state funding for political campaigns may boost the influence of minority parties and ensure weak governments. Western countries may move towards community-based politics reminiscent of the former Yugoslavia, with ethnic parties forming and being granted special rights of representation.

A source of contention in Yugoslavia in the late 1980s was the seeming injustice whereby the semi-autonomous provinces of Kosovo and Vojvodina had a say in the running of Serbia as a whole, but Serbia was unable to interfere in the internal affairs of these provinces. Exactly the same issue is now being raised in Britain. Scottish MPs at Westminster can vote on matters exclusively affecting England, but exclusively Scottish matters are dealt with in Scotland's own parliament, where English MPs do not have a voice. It has been

pointed out that this is unfair. If the rights of Scottish MPs to vote on English matters are removed, it could be only a few years before there are calls to apply the same model say to Muslim interests and to those of other groups. The result will be power becoming less concentrated and more fractured. The nominal leaders in each country will find it increasingly difficult to push through their agendas.

Future debates about equality and fairness will further constrain the freedom of action of all forms of authority. Not only governments but also police, employers and teachers will be held in increasing contempt in the law courts, in the media, and in popular discourse. As ordinary people recognise the shrinking of their entitlements regarding pensions, health care, and education for their children, their discontent and defiance will become more vocal. They are likely to call explicitly for constraints on the power of central authorities, which they will perceive to be failing to deliver expected benefits.²⁷⁴⁷ Weak governments will cave in to popular complaints and the demands of special interest groups.

During the descent, politicians will discredit themselves by wielding power incompetently. Charismatic leaders will be few and far between. The whole political process will become more brazenly corrupt and ineffectual. At best, governments will seem farcical and irrelevant. At worst, they may be pushed aside altogether and a series of tainted usurpers will rule. Ordinary citizens will be more ready to engage in minor forms of subversion, such as tax evasion and drug abuse. General crime and disorder will grow from an irritant to an ever present fact of life. In Europe, handguns will come into vogue and these societies will begin to emulate American attitudes towards their use and availability. Soon enough, one may expect Europe to witness the phenomenon of mass shootings by school students and disgruntled employees.

The criminal courts and prisons will become steadily busier, while new laws will flow out of Westminster and Brussels at a phenomenal rate. Such activity will be like Canute ordering back the tide. The jails may become more crowded than ever, but the number of miscreants waiting to be dealt with or evading justice altogether will rise even faster. More people will be in trouble, but the chances of an individual law-breaker being detected and punished will steadily diminish. Governments may attempt increasingly extreme measures, such as compulsory DNA databanks, but these will fail through being ignored and abused.

The denizens of the underclass, with a depressed standard of living and time on their hands, will become more obviously frustrated and angry. They will blame the elites for their hopeless

situation. Most of these losers will be restless young men, and they will be ready to support every kind of agitation and mischief-making. Riots, which are by no means rare in history, will be more serious and more frequent. The problem is likely to become acute first in the low and medium income countries, where the promise of development seems increasingly like a mirage. Here reactionary revolts may reverse the spread of western-style liberal democracy.²⁷⁴⁸ In Egypt, Islamic militants will re-emerge as a major problem, as that country's economy continues to drag along the bottom. In the Caribbean, where the pillars of society are crumbling fast,²⁷⁴⁹ democratic government will succumb to a tide of violent criminality. That region will be left in the hands of feuding gangsters. The latter will then be able to mount an attack, with near impunity, on law and order in the rich countries.

China is likely to be the scene of major upheaval over the coming decades. There will be renewed pro-democracy protests, like those of 1989 – which were themselves not the first to threaten the communist regime. China's leaders have spoken of moving towards general elections within fifty years, but the issue will probably be forced long before they expect it. The outcome of any rebellion is unlikely to be a stable and libertarian republic. Even if something is established along those lines it will soon mutate into new forms of authoritarianism, and the country as a whole may disintegrate into large fragments.²⁷⁵⁰

Even in the west, democracy cannot be assumed to be safe for the duration of the descent. As Mark Mazower points out, the roots of democracy in Europe are not that deep. A dozen new democracies were formed after the first world war, but almost all had fallen to authoritarian rule by 1940. With changing circumstances in future, today's democracies could similarly disappear.²⁷⁵¹ Europe very probably faces many troubles ahead. In Northern Ireland, where Roman Catholics are likely to be in the majority by 2020, the logic for unity with the Republic of Ireland will become irresistible.²⁷⁵² Those who favour continued union with Britain will take up arms against the transfer of sovereignty just as they did when it was mooted in the 1920s. Abandoned by both major powers, the province will likely dissolve into anarchy and become the first part of Europe to be touched by the dark age proper.

William Playfair, a largely forgotten social scientist of the nineteenth century, made a special study of social upheaval and found that disputes over taxation often precipitate disaster. 'Sometimes it is the manner of laying on the tax that gives offence, sometimes its nature, and sometimes its amount'.²⁷⁵³ Playfair cited the American revolution and other examples. His rule continues to hold true. The misjudged community charge was a factor in

Mrs Thatcher's fall from grace at the start of the 1990s. In 1999, British lorry drivers were disrupting traffic in protest against an increase in fuel taxes and in 2000 they effected a highly successful blockade of oil refineries, shutting down most garages for days. Similar protests occurred around the world. In Jamaica, several people were killed during days of rioting after fuel taxes there were subject to a 30 percent hike.

Growing tax burdens in conjunction with worsening social services are likely to make political crises become more common and graduate into full-blown insurrections. In Saudi Arabia, a rather familiar scenario could evolve. As the oil income becomes less reliable, the king might finally call a session of parliament to help him raise taxes. This might then backfire as parliament demands greater popular sovereignty and, with passions rising, eventually topples the monarchy altogether. This was the sequence of events that led to the downfalls of Charles I and Louis XVI. Both those kings were beheaded, and that is also still a practice in Saudi Arabia. The Saudi monarchy would be advised to consider its actions very carefully over the coming decades. The same applies to all governments as they push their extractive demands in a strongly disintegrating world.

Weakening hegemony

Disintegration in the international system will mean continuing erosion of the western hegemony. Today western militaries have superior technology and are well trained and organised, but their nations will display a growing weakness in the crucial moral dimension of military power, i.e. the ability and willingness to apply force.²⁷⁵⁴ During the twenty first century, the west will pull back when in the past it might have interfered with gusto. It may engage in low-risk actions that involve launching cruise missiles and air strikes against relatively puny opponents. However, when it comes to hard fighting on the ground, where there is a real danger of people being killed, the west's nerve will prove to be lacking.

Western citizens will be increasingly reluctant to see tax receipts being spent on maintaining their countries' influence in distant and chronically troubled parts of the world.²⁷⁵⁵ The Pentagon has already blamed a drop in income for problems with spare parts, modernisation programmes falling behind schedule, and personnel shortfalls. In the coming decades, the United States will repatriate its troops, cut back its support for NATO, and downsize its forces, in response to a federal defence budget that continues to be squeezed between burgeoning social security programmes and a public uncommitted to funding American power projection.²⁷⁵⁶ One of the consequences of this declining hegemony will be the reversal of globalisation and greater regionalism in world

trade.²⁷⁵⁷ Political authority guarantees a market, and when the authority disappears, the market will be shut down.

NATO will be forced to withdraw from Kosovo in failure, though it will be dressed up not to look like that. Quite simply, it will never resolve the ethnic disputes at issue here, nor finally crush the spirit of Serbia, whose people have been fighting for their territory almost for as long as historians can remember. Like the interventions in Somalia and Rwanda, this will finally be seen to have made essentially no difference either to the progress of the local war or to the suffering of the people caught up in it.

The Kosovo action was NATO's first war in its fifty year history. It could well be its last. During the conflict, splits emerged between the different members and there were security leaks to Serbia. The United States was angered at Europe's apparent unreliability.²⁷⁵⁸ Withdrawal in failure may be too much for the alliance, whose role is already blurred since the end of the cold war. NATO is certainly destined to break up within a decade or two, as European countries concentrate on their own security arrangements and the United States withdraws from its role as international hegemon. That will mean a further downward ratcheting of world political integration, and more trouble and turmoil to come.

The possibility of joining NATO has had a beneficial effect on the behaviour of aspirant countries like Poland, Hungary, Slovakia and the Czech Republic.²⁷⁵⁹ However, no future scenario regarding their membership is truly happy. If they do get in, it will only hasten the break up. Turkey, a NATO member, is opposed to enlargement and has threatened to veto new admissions if it is itself kept out of the European Union.²⁷⁶⁰ There is also the danger of confrontation with Russia. Boris Yeltsin said that the eastward expansion of NATO would plunge Europe into the flames of war.²⁷⁶¹ He knew what he was talking about. More likely is that east European hopes will be disappointed, and this will encourage a more belligerent attitude amongst themselves and towards their European neighbours.

Given the reluctance to expose its troops to danger, the west is settling on the same solution as the Greeks, Romans and other descendant civilisations – reliance on mercenaries. In places like Sierra Leone, Bosnia and Kosovo, peacekeeping forces are largely made up of Nigerians, Malaysians, Jordanians, Bangladeshis and other such nationalities – but no Americans. One might wonder why these poorer nations are so keen to take on the cost and danger of such operations, when western countries do not. The answer is that their troops are well paid for it by the United Nations. The rich countries, including Japan, are effectively funding them as mercenaries to do the dirty work of policing the world. In the

future, as conflict becomes more prevalent, western governments may openly give arms to irregular fighters like the KLA, who are more motivated and less inhibited about taking casualties, and may rely on them to fight western wars.

Such policies will prove short-sighted as other regions increasingly reject western perceptions of human rights and inter-state etiquette, and come to realise that the west is unable to enforce them. The likelihood of violent disorder by a minority group increases with the proportion of youths in its population, and when this proportion reaches about 20 percent, a struggle for autonomy almost invariably ensues.²⁷⁶² This is the situation that is emerging in the world as a whole. The most backward countries are the ones with the youngest and fastest growing populations. Over the next few decades, the world will come to encompass a billion disadvantaged youths. Recent improvements have raised their expectations higher than can possibly be fulfilled. They also have increasingly ready access to the means of causing havoc and devastation. Some kind of global uprising against western authority seems highly likely to occur.

What the west sees as troublesome states will become less constrained by the fear of American opinion, and will get away with successive acts of defiance. The tactic of imposing sanctions against impertinent governments will unravel, as is already occurring with Iraq. China particularly will become fed up with observing these international sanctions regimes as its relative power grows, and will flout them with growing openness. Third world countries will be increasingly forthright in their demands for a global redistribution of wealth.²⁷⁶³ They will not get their wish, but the west will be unable to prevent them from stoking up tension. These countries may also be more ready to complain about perceived ill-treatment of their nationals who have migrated northwards, while the latter will carry agitation about global injustices to the heart of the developed world.²⁷⁶⁴

Although the west will still be far more powerful than any individual third world state and should be able to prevail in any single showdown, the danger is that it will start being challenged on several fronts. In the summer of 1999, NATO's simultaneous commitments in Iraq and Kosovo stretched the alliance thin enough to leave no American aircraft carriers available to cover the Pacific. If a third trouble spot had opened up, it could have overwhelmed the west's ability to supply order. Some such scenario will inevitably emerge sooner or later and it will then lead to a runaway loss of credibility for the western hegemony.

The structure of the United Nations is likely to change significantly. The current arrangements certainly represent a considerable anachronism.

Japan contributes a large fraction of the UN budget yet has relatively few of its nationals on the UN staff. Its claim to permanent membership of the Security Council has considerable force. There is also much logic in favour of a more far-reaching shake-up. Samuel Huntington suggests that the French and British Security Council seats might be amalgamated into a general European seat, while new seats might be provided for India, the Muslim world, Latin America, and Africa.²⁷⁶⁵ Such changes will lead to a corresponding shift in the institution's priorities, reinforcing the other processes of disintegration. A more factionalised UN will probably become simply an irrelevancy in the international system.

Whatever the situation with the Security Council, Japan and Germany are likely to take increased responsibility for the protection of their overseas interests.²⁷⁶⁶ Japan in particular controls an enormous overseas financial empire yet has little or no political control over the places where its savings are invested. The decline of western hegemony and the resulting global disorder constitute a significant threat to Japan, which the country will have to deal with somehow. However, Japan cannot reasonably conquer and pacify the western countries where much of its money is invested. As civil order disintegrates, Japan may limit outflows of capital and indeed start repatriating it. This will be a shock to the west, especially the US, which has become accustomed to living beyond its means on the strength of Japanese generosity. The situation is gravid with potential for much bitterness and frustration on all sides.

Today, Japan and Germany still have significant internal opposition to the development of offensive military capabilities. However, attitudes are likely to change following some form of major disagreement between either of these countries and the US. The relevant populations and their leaders will feel slighted and frustrated, and they will be motivated to re-arm in a serious manner. Certainly, the inhibitions that stem from their defeats in 1945 will fade dramatically over the next few years. Ishihara Shintaro, co-author of *The Japan That Can Say No*, has said that Japan may not always have behaved admirably in the second world war, but it should at least be credited with ending western imperialism in Asia. He was recently elected governor of Tokyo.

The whole of east Asia can be expected to become much more assertive as its economic recovery takes off. People in the region may be more likely to favour extreme politics and to embrace the risks of direct confrontation with the United States. This is also the region with the greatest resources to mount a serious challenge. It would be premature to write off its potential on the basis of recent difficulties. East Asia's previous

economic growth was real, and so is its challenge to western power.²⁷⁶⁷ One consequence of this is likely to be felt in Hong Kong. The Sino-British agreements that supposedly guaranteed its freedoms for fifty years will be repudiated. Beijing is already undermining them,²⁷⁶⁸ and has read the signals that the west is not really bothered about its behaviour.²⁷⁶⁹

At the same time, there will be a steady elevation of tensions within east Asia, especially focused around the contest between China and Japan.²⁷⁷⁰ Japan's Ishihara has offended the Chinese by inviting the Taiwanese premier to visit Tokyo and by claiming that the so-called Rape of Nanking – a dreadful massacre according to conventional history – has been much exaggerated. Another source of potential trouble will be reunification of the two Koreas. This will seem to threaten the Japanese and could be another stimulus for them to intensify their war potential. Some observers see in east Asia an emerging balance of power game reminiscent of the one that eventually brought Europe to its confrontation in the fields of Flanders.

When one hegemon declines, another can take its place. The United States could therefore pass on its baton to some other power. One may count out Russia and Europe,²⁷⁷¹ but there is the possibility that Japan or China could take on the world leadership some time in the twenty first century. In previous transfers of hegemony, the hegemon has typically fallen to a challenger who has not in the end been the actual beneficiary. For example, the French bid for supremacy in the Napoleonic wars actually left Britain as the hegemon and a German challenge in the mid-twentieth century cleared the way for dominance by the United States. If something similar happens in future, it is most likely that China will be the challenger and Japan will be the beneficiary. A new pax Iaponica might postpone the dark age. However, over the last five hundred years, the baton of ascendancy has always moved around within western civilisation. Hegemony for east Asia, although arguably a case of returning the baton to its former owners,²⁷⁷² would be a more painful and far-reaching change. In a world that is plagued by contradictions, it is likely to be one step too far. The global disintegration due to western decline is therefore most likely to be terminal. The American mantle will not be taken over by Japan, by China or by any other power. The pax occidentalis will give way to anarchy and the dark age.

Warfighting

After the collapse of communist regimes in eastern Europe and the Soviet Union, people spoke optimistically of a new era of world peace. The fact that commerce has made countries heavily dependent on each other is said to provide a mechanism for maintaining this peace. However,

similar arguments about the peace-inducing effects of global commerce were being made before the first world war.²⁷⁷³ Indeed, a hundred years before that it was being suggested that 'commercial treaties between England and France ... show that mankind begin to be sensible of the folly of war and promise a new and important era in the state of the world'.²⁷⁷⁴ This was shortly before the highly destructive Napoleonic wars, which tore Europe apart. Peace did come after the battle of Waterloo, and lasted for a hundred years, but this was due to Britain's military supremacy rather than to any commercial treaties.

Whatever peace exists in the world today is not due to the growth of trade, and still less to the fact that humans have somehow grown out of warfare. It is due to the projection of western political authority. As this authority crumbles during the descent, the peace will crumble with it. Not for a long time will the world be as peaceful as has been the experience of Europeans and Americans over the last fifty years. The descent will be characterised by a punctuated crescendo of violence. After the most dangerous century yet experienced, this planet is going to become more dangerous still.

As one author puts it, the five thousand years that have elapsed since the founding of the first civilisations in the middle east have been five thousand years of bloody hell.²⁷⁷⁵ During that time, scarcely one year in ten was free even of major war. As far as long term trends are concerned, the consensus seems to be that wars have diminished in frequency but increased in severity. War is by no means outmoded. The west still has a massive arms industry, and the vested interests that this involves are always on the lookout to persuade governments of new threats that must be guarded against. Apart from anything else, they will ensure a continuing need for their ordnance around the world.²⁷⁷⁶

Field Marshal Moltke, chief of the German general staff during the Franco-Prussian war of 1870, said that 'eternal peace is a dream, and not even a pleasant one'.²⁷⁷⁷ Though it is respectable to deplore war, many people secretly long for its excitement and catharsis. After the start of the first world war, ordinary citizens enthused about the outbreak of hostilities. One prominent academic spoke thankfully of being released from a world of 'bovine contentment'.²⁷⁷⁸ Apparently sane and civilised people can easily be persuaded to take up their guns and machetes, and start killing. During the Kosovo crisis, radio phone-in programmes in Britain heard from plenty of normal men and women who not only endorsed the bombing but wished to see the tanks going in sooner rather than later. The media had aroused their passions and these people, who were not even directly involved and probably considered themselves quite rational

and caring, saw no other way forward than to escalate the slaughter.

The time when an existing hegemon is struggling to hold on to the number one position against a number of ambitious rivals is always dangerous, whether one is talking about chimpanzee bands or the system of international diplomacy. This is the situation today as western and especially American power declines. United States foreign policy is motivated primarily to ensure that no rival for world leadership should emerge.²⁷⁷⁹ It tries to keep Japan and Germany in a subordinate position, while also using Germany to oppose Russia, and Japan to play off China. This is a hazardous game. Frustrated ambitions are an important source of conflict, and the American policies are already leading to friction. France, for example, has expelled American diplomats. The US relationships with Europe and east Asia are going to change enormously over the coming decades. If history is any guide, this will not be achieved without a major fight.²⁷⁸⁰

As disintegration proceeds, the outbreak of serious wars is a certainty. What countries will actually find to quarrel about, and then fight about, is somewhat unpredictable. There are many contentious issues emerging in the world, usually based around jockeying for relative power and influence, protection of commercial interests, or concern over the maltreatment of overseas kinsfolk.²⁷⁸¹ Only a few of these disputes will degenerate into military clashes. Nevertheless, countries will quarrel more violently and fight more readily with every passing decade. Given that war preparedness is closely related to war proneness, and that economic stresses are a classic stimulus of hostilities, eastern Europe, the far east and the middle east are likely to be the hottest areas. A serious war starting in one of these regions could drag the whole world, more or less, into the proceedings.²⁷⁸²

A problem for western armies is that they may prove maladapted to the asymmetric conflicts of the twenty first century. Their structure and doctrine still resemble those of the nineteenth. The hierarchy of divisions, brigades, and battalions renders them relatively unresponsive and could leave them looking like a dinosaur on a battlefield with no clear front line, and where information flows freely in all directions. In a disintegrating world, the west may be confronted by well organised criminal gangs and by politically motivated guerrillas, as well as by conventional armies. Russian gangsters will become ever more obvious, while Japanese yakuza are also likely to spill out and cause trouble in the international system. One can therefore expect to see western militaries in action against such growing nuisances. Yet recent experience has shown how difficult it is

to impose a comprehensive defeat on these kinds of slippery, irregular militia.

The high-technology weapons that won the Gulf war will be effectively useless against small-scale, fluid, intangible groups. Hence, the military equipment and infrastructure that NATO purchased with trillions of dollars for the situation of the cold war may prove distinctly unsuited to combating the threats of the third millennium. In Kosovo, NATO's onslaught left the Serbian army largely intact. Tomorrow's generals could be in for a sharp lesson similar to that of their predecessors, whose cavalry charges were mown down by the newly invented machine gun. Western armies appreciate this fact, but they possess huge inertia and, for all the brave thinking that is going on in some quarters, it is doubtful that they will be any more prepared for the conditions of future conflict than armies have ever been.

Some writers have argued that future wars will exclusively involve non-traditional warfighting between mismatched opponents. This is wishful thinking and is unlikely to be the case. International disintegration will also see the return of total wars similar to those of the twentieth century. A number of future wars may resemble nothing so much as past wars, being fought by much the same actors over much the same issues. The Iran-Iraq war was a variation on a theme that goes back to Babylonian times. Iraq's attitude towards Kuwait has not changed since 1991 and it has already threatened to re-invade. Kuwait's days may yet prove to be numbered as American power crumbles. Iran is also a threat to the Gulf Arab states, while its twenty year opposition to the west may hot up considerably at some point in the early twenty first century. Iran is implacably opposed to Israel and has strong capabilities in biological, chemical, and probably nuclear, warfare.²⁷⁸³ The west should expect attacks against its interests from this source. Nevertheless, it will probably fear to confront such a dangerous enemy. It has a history of preferring to pick on scapegoats and whipping boys such as Colonel Gaddafi or the terrorist leader Osama bin Laden.

Other familiar conflicts include that between Pakistan and India, who are bound to be at each other's throats in due course.²⁷⁸⁴ The Arab-Israeli conflict is also destined to degenerate into a bloodbath. There have been repeated wars in the middle east since 1945, each more violent than the last.²⁷⁸⁵ Russia will continue to be embroiled in the Caucasus, as it was in the nineteenth century, dealing with recurrent uprisings among the ninety religious and ethnic units of the region.²⁷⁸⁶ Russia may also be fighting again for its window on the Baltic,²⁷⁸⁷ a foreign policy issue familiar to Peter the Great. The loss of the Baltic states has reduced it to a narrow beachhead in the far north and to the Kaliningrad naval base in the south, though the

latter is cut off from the rest of Russia by newly independent Lithuania. Meanwhile, Britain could find itself back at war with Germany during the next half century as tensions mount over resurgent German ambitions. A war between England and France might also seem attractive to people on both sides. To future historians, the last half century of peace in Europe may seem to be only a lull during which the fundamental issues did not go away.

Japan entered the second world war in response to western, primarily American, opposition to its imperialist activity in east Asia. It will be seen in the coming decades that this war was again far from the last word on the matter. Japanese aspirations will re-surface as the second world war victors weaken. If Japan acquires an independent nuclear deterrent and America's fears lead it to respond with trade sanctions, one will have the ingredients for the same kind of escalation as took place in the 1930s. The involvement of Chinese and European interests will add further layers of complication, making it possible for these countries to slide into war.

China lies at the centre of many potential *casus belli*. The Taiwan problem is not going to go away. The next source of tension in this dispute may involve Taiwan renewing its campaign to rejoin the United Nations. One American study suggests that Taiwan will retain sufficiently military advantage to deter China for as much as a decade.²⁷⁸⁸ Nevertheless, a war over this issue will eventually occur. The US has committed itself to help Japan in such a conflict – a commitment to which China has violently objected. The US commitment is real. American troops fought in this region three times in the last half century, each time to suppress the ambitions of an unfriendly power.²⁷⁸⁹

China is an awakening industrial giant that contains over 20 percent of the world's population and has a growing hunger for fresh water, agricultural land and all kinds of natural resources. Across its northern border lies the Russian far east, where Russian control is weak and there is open space, mineral wealth, and a large Chinese minority. China regards the region of Vladivostok as having been stolen by Russia in the last century, thereby cutting off two of its provinces from the sea.²⁷⁹⁰ There are also ethnic tensions between the impoverished Russians and the more enterprising Chinese immigrants.²⁷⁹¹ These are all precisely the kinds of issue that once led Hitler to seek *lebensraum* for the Germans. They have echoes on some of China's other frontiers. To the west lie the developing oilfields of central Asia, where China recently purchased 60 percent of Kazakhstan's leading oil company,²⁷⁹² and where any major war of the future is certainly likely to see campaigning. To the south-west lies India, which may be almost as populous as China by 2025, and continues to be in dispute with it over certain territory in the

Himalayas.²⁷⁹³ To the south-east lie Malaysia and Indonesia, where overseas Chinese are targets of resentment and sometimes violence, and their plight may draw China to their defence. It seems only a matter of time before the borders rupture and the Chinese military spills out over land and sea to secure China's future prosperity and seize what it considers its due.

Nuclear war

Russia has recently been announcing dramatic cuts in its nuclear arsenal.²⁷⁹⁴ This is motivated by the need to reduce maintenance and servicing costs, while some of the missiles to be scrapped are probably unreliable anyway. These cuts do not make the world any safer, but they do give Russia a more focused nuclear capability. The general disarmament process, which saw modest successes in the 1970s and 1980s, is not going to proceed any further now that the Indians and Pakistanis have nuclear weapons, and others might be acquiring them. There are too many players and too many mutual suspicions. Even potential opponents like the Somalis will be capable of acquiring some of the cut-down nuclear weapons currently being devised, and will be willing to use them. In this situation, the United States may actually start encouraging nuclear proliferation to some of its allies, notably Israel and Germany. Fifty to a hundred years hence the world will be awash with nuclear weapons.

Recognising the reality of the nuclear threat, the west is shifting its focus from countering the spread of nuclear weaponry towards constructing a shield against it. The United States has agreed to co-operate with Japan on research and development of missile defence systems for a five-year period.²⁷⁹⁵ Some technologists suggest that this effort is doomed to failure. Early experiments have not proved them wrong. Certainly, missile defence will never be perfectly effective and, if it is possessed on both sides, its promise of partial protection may only make nuclear war more conceivable. The main consequence of American work on missile defence, which seems to contravene international treaties, will probably be to raise tension, with non-western nuclear powers complaining about the reduced effectiveness of their deterrent and simultaneously seeking solutions.

The fact that nuclear weapons are available does not necessarily mean that people would be so lunatic as to use them. The fear of nuclear war seems to have kept peace between the west and Russia for some fifty years. Some analysts also point to the way that Hitler desisted from using powerful nerve agents, ostensibly because of his (erroneous) assumption that the allies had the same technology. On the other hand, people have often thought that the latest too-destructive weapons would keep the peace once and for all, and they

have been proved wrong. Alfred Nobel thought that dynamite would make war unthinkable.²⁷⁹⁶ Similar claims have been made for machine guns, poison gas and bomber aircraft. There is no reason to suppose that nuclear weapons are anything other than the latest technology to make war deadlier while failing to put an end to it.²⁷⁹⁷

The most impressive reason for thinking that nuclear weapons are likely to be used is that they already have been. Japan's experience in 1945 demonstrates unequivocally that human beings are prepared to visit nuclear violence on one another. The effects of the bomb were quite well understood at the time. Yet the allies decided to drop it on two city centres – meaning that the casualties would inevitably be thousands of non-combatant men, women and children – at a time when the war was already going their way. This was not the desperate act of an evil dictator for whom all other options were closing. It was done ruthlessly, rationally and in cold blood. Furthermore, it was done by the representatives of a democratic, civilised and supposedly responsible country.

The west has threatened the use of nuclear weapons against non-nuclear opponents on numerous occasions since 1945. These include the Korean war, the Suez crisis, the Iranian hostage crisis of 1980 and the Gulf war.²⁷⁹⁸ It was made clear that the allies would resort to nukes if Saddam used biological or chemical weapons.²⁷⁹⁹ Even without going nuclear, the allies proved willing to use many other unpleasant forms of ordnance in the Gulf, including napalm, cluster bombs, fuel-air explosives and possibly even chemical weapons.²⁸⁰⁰

A highly conflictual, disintegrated world, in which nuclear technology has reached most belligerents, will be a very dangerous world indeed. Some countries could stumble with little forethought into nuclear war. Even the most responsible members of the international system may have leaders who crack under the stress of the moment.²⁸⁰¹ Russia is arguably half way to a dark age already, and its people are running out of hope and patience. Yet the west adopts an often arrogant and confrontational stance that can only encourage the Russian desire for spectacular vindication. Chinese reactions when their embassy was hit during the bombing of Belgrade in 1999 revealed an explosive combination of resentment, hatred and suspicion behind the placid veneer. Some quite trivial dispute might in future release all that hidden hostility in a thermonuclear blood-lust. The discovery of oil in the Pacific, for example, would be enough to set China, Russia and the United States at each other's throats.²⁸⁰²

During the Cuban missile crisis of 1962, the world came within a few hairs' breadth of a nuclear exchange. Leaders on both sides actually believed that a nuclear war was about to take place. They

were clearly reconciled to their role in initiating it. Despite the nuclear risk, they engaged in the crudest saloon-bar-style showdown. Furthermore, it was democratic America and not autocratic Russia that arguably initiated the crisis and did most to turn it into a dangerous confrontation.²⁸⁰³ If the United States and Soviet Union were able to get themselves into this situation, one can have little confidence in the conduct of more volatile nations, such as India and Pakistan, or indeed in the conduct of other emerging nuclear powers whose reputation for responsible government is even less reliable.

A major war between nuclear powers could begin in a modest way over a side issue. Any initial reluctance to use nuclear forces will then undoubtedly diminish as either of the combatants comes to feel that its national survival is at stake. In fact, NATO's explicit doctrine is to fight with nuclear weapons rather than accept defeat.²⁸⁰⁴ The closing gap between conventional and nuclear weapons also means that one type of war may elide more readily into the other.²⁸⁰⁵ Military analysts have determined that, with suitable dispersion of the force, fighting with tactical nuclear weapons is realistically possible.²⁸⁰⁶ This would be just the latest development in military art, which has always involved reconciling structure and doctrine with changing firepower, so that casualty rates are kept within reasonable limits.

Hamish McRae concludes that the chance of some modest nuclear offensive occurring by 2020 is high.²⁸⁰⁷ The main lesson to be learnt from it will be that nuclear war is not the ultimate calamity it has often been painted. The biggest problem will be the destructive explosion and not the feared radiation. Cancer rates may certainly be elevated by a nuclear war, even greatly so, but this will fall far short of wiping out all humanity. Studies of the Bikini atoll show that, in spite of continuing radioactivity, the bomb tests conducted there in the 1950s scarcely affected its normal ecology, except in places where the initial blast blew away the topsoil.²⁸⁰⁸

Although a nuclear war might make some localities uninhabitable for generations, this would mainly be due to the difficulty of clearing rubble and the danger of disease from tens of thousands of unburied bodies. A 1975 study by the US National Academy of Sciences suggested that if half of the world's nuclear arsenal were used in a nuclear war the effects on most ecosystems would be small at first and would become negligible within thirty years. Conversely, some scientists caused alarm by arguing that there might occur a nuclear winter, in which dust thrown into the atmosphere would block sunlight, but their reasoning has subsequently been questioned.²⁸⁰⁹ It seems that even a few hundred nuclear explosions would throw up less dust than a major volcanic eruption.

The death tolls at Hiroshima and Nagasaki were less than those of some conventional bombing raids.²⁸¹⁰ The numbers that die in nuclear explosions, though fantastically high, will hardly dent the world population. Humanity has sustained similar casualties in natural disasters. Millions of people have been wiped out at a stroke by certain floods and famines. Yet societies have recovered with sometimes extraordinary speed. After an earthquake hit Tokyo in 1923, the subsequent fires killed half as many people again as died in the atom bombing of Hiroshima.²⁸¹¹ Nevertheless, Tokyo soon rebuilt itself in an orderly fashion, despite such problems as the destruction of whole districts, molten roads, and rivers choked with bodies. Similarly, in the summer of 1943, allied bombing killed a quarter of a million people in the city of Hamburg out of a population of one and a half million. Yet within a few weeks factory production in Hamburg was back to normal. This was not a unique occurrence.²⁸¹²

Nuclear war, even in the worst case scenario, does not threaten to destroy the biosphere – that is impossible – and humanity as a whole will also weather this catastrophe.²⁸¹³ Once people have come through such a war, the dread of it will have been greatly reduced. Nuclear weapons will then become more usable than ever and the chances of further nuclear conflicts will increase. In the long run history of the human race, nuclear war is likely to become a commonplace. That may not be so disastrous, though, when humans are spread across the solar system and perhaps eventually beyond that.

A nuclear war that takes place in the next few decades will probably be relatively controlled. It is not clear how useful nuclear weapons will be in the types of conflict likely to be encountered.²⁸¹⁴ States do not usually go on fighting when they are convinced that it will bring them little advantage. During the descent, limited nuclear exchanges could soon lead to negotiations.

When the descent finally culminates in collapse, disintegration will be extreme. One can expect uncontrolled fighting and extreme irresponsibility on behalf of the belligerents. This period may be marked by a prolonged and massive thermonuclear orgy, in which virtually every remaining warhead will eventually be exploded. In this case, the whole fabric of society may unravel. With famine, disease and civil disorder, population numbers are likely to fall precipitously over the following decade. This could subsequently be seen as the trigger for the dark age, confirming the traditional vision of thermonuclear doomsday. In reality, of course, it will have been the deep historical trends that will have brought humanity to this pass.

During the dark age itself, people will continue to be very ready to use the nuclear option.

However, large warheads will be inappropriate for the small-scale fighting of a thoroughly disintegrated world, and people will probably not have the expertise to make them anyway. They may find other uses for nuclear materials. Plutonium, for instance, is a deadly poison as well as a nuclear fuel and explosive. A few kilograms could wipe out the entire human race, if suitably distributed. There are now tons of it on the earth, and this supply will be around for a long time – plutonium has a half life of 24,400 years. Such a potent material could be a popular weapon in the disordered and unstable conditions of the dark age.²⁸¹⁵

Terrible wars lie ahead. Just as the sailor-suited boys of the Edwardian era were unwittingly destined for the carnage of the battles at Ypres, so today's young children are fated to shed their blood on the battlefields of the future. Only it will probably be far worse. Nuclear wars could easily kill many hundreds of millions. Nevertheless, after the mushroom clouds have dissipated, the incredibly resilient human race, which will still number in the billions, will pick up the pieces and carry on. People will have discovered that nuclear war is survivable. They will then be ready for another one. The dark age, in which no one has either the knowledge or the resources to build a nuclear arsenal, will be a merciful release.

Chapter 33 - The disorganisation process

Boom and bust

At the start of the twenty first century, western economies are booming. It does not look as though global civilisation is in terminal decline. People feel more prosperous than ever, and all the expectations are that things will get better still. The catastrophic economic unravelling of a dark age seems very unlikely and very far away.

Some calculate that the next two or three decades will see an expansionary phase of the world economy.²⁸¹⁶ George Soros, on the other hand, believes that east Asia's crisis may have been the classic foreshock preceding a much wider crash.²⁸¹⁷ There have been many periods of strong economic growth in the past, and none has ever been permanent. Clearly, the present boom will not last forever or even for more than a few years. By the same token, the next economic downturn may be equally transient and not necessarily the immediate prelude to collapse. The descent has some way to run, and world economies could go through several more cycles of boom and bust before the dark age arrives.

The worse the busts are, the longer the descent is likely to take. A bust acts like a miniature dark age, forcing people to take a more realistic view of things, and to work harder while expecting less. South Korea built up a series of white elephant industries in shipbuilding, petrochemicals and heavy manufacturing in the late twentieth century,²⁸¹⁸ and it has now paid dearly for its centralisation and inflexibility. However, it will come out of the experience wiser and in better shape.²⁸¹⁹ As east Asian entrepreneurship is unleashed again, it will re-invigorate the entire world economy, with America and Europe being among the beneficiaries. That may make predictions of a coming dark age look less warranted than ever. Nevertheless, the west's burst of growth that came after the second world war faltered within a few decades. Similarly, even the most spectacular Asian recovery will not touch the deep historical currents that are carrying the world towards catastrophe.

The descent will be characterised by economic false dawns. The United States budget and trade deficits, for example, may occasionally improve, but they will soon worsen again. These deficits are intimately connected with other features of the current order, such as drugs trafficking, welfare dependency, and the costly protection of American interests world wide. No one, however determined, can rationally sort out these problems, whose interactions are far from fully understood. The deficits must remain a chronic problem.

The booms that take place during the descent will be based on much less substance than were former periods of great growth in the world economy. The mobile phone, the internet and

computer games will not create eddies upon eddies of economic organisation in the way that the steam engine did, or the aeroplane. Economic growth may occur on paper but there will be fewer real differences to people's material standard of living. It will not deliver tangible utilities like cars, televisions and foreign holidays. Instead, one of the big growth industries today is gambling, and it is questionable how far that can be said to make people feel better and live better. Similarly, the internet is certainly a boon, but its overall contribution to human welfare is mediocre. Giving people ready access to vast amounts of pornography hardly compares with the drama of the industrial revolution.

In future, therefore, to gauge how the descent is going, one should not be taken in by statistics. The crucial measure of economic health will be the evidence of genuine innovation that people experience in their everyday lives. If some major new item appears in one's home, comparable to the vacuum cleaner, the video recorder, or the microwave oven, one can assume that the dark age is getting further away, perhaps by a quarter of a century or more. On the other hand, one may find it difficult to identify what is driving the stock market. One's own consumption may be of mostly transient pleasures, and one may worry whether one's work is really making a positive contribution to the commonweal. In that case, the economic descent will be proceeding unchecked.

Changing fortunes

The economic and monetary unification of the European Union was intended to be highly beneficial for trade, organisation and wealth. Its architects hoped that the newly unified Euroland, with its market of 270 million people, would shoot in at number one on the chart of economic superpowers. That has not happened. Of course, one should not judge the situation too soon. In the next few years, Europe might show strong and obvious signs of being economically transformed, and in that case one may assume that the descent has been delayed.

However, in practice, monetary union will probably not cure the underlying rottenness of the economic order, and European economies will continue to stagnate over the long run. Given ongoing failures of entrepreneurship, the economic unification of Euroland is likely to accelerate the impoverishment of some regions, as workers, companies and capital move more easily to where the pickings are richest. The EU proposes to counter this by channelling money into the depressed regions via various grants and loans, but this is sure to fail as much of the money will be wasted and misappropriated.²⁸²⁰ The proposed harmonisation of tax regimes will also damage Europe's economic vitality. In the past, tax

competition has encouraged governments to keep their spending in check. If this discipline is removed, their take of the continent's wealth will drift more quickly upwards.²⁸²¹

Conventional wisdom has suggested for some time that the future world economy will be focused around Asia-Pacific, rather than America-Europe. The Asian depression has made that view rather less widely heard, though arguably and by the logic of the phoenix principle it has actually made such a prospect more likely.²⁸²² It was clearly wrong to assume that the region's high growth could continue indefinitely and that it would shoot past the west at the same terrific rate. Similar optimistic predictions were made about the Soviet economy during the 1950s and 1960s, but by the Brezhnev era they looked decidedly mistaken. All economies have grown rapidly during their initial phase of industrialisation, slowing to a more manageable pace as they mature. Arguably, the high growth of the tiger economies only showed how far they had to catch up.²⁸²³

The entry of the former communist states into the global free market might have been expected to produce a stimulating effect on it, rather like the opening up of the new world. In eastern Europe, 120 million new producers and consumers were suddenly added to the international economy.²⁸²⁴ However, though the individual countries have mostly seen progress, the wider benefits are so far quite modest.

In 1996, two authors were predicting a coming Russian boom.²⁸²⁵ By 2020, they expected Russia to have outstripped much of eastern Europe and South America, and to have left China far behind. These predictions were based on insights into the Russian people's huge potential, given that they are well educated, ambitious, and constitute a vast, uniform market. Furthermore, if their human resources are good, their natural resources are stupendous. However, Russia's boom has yet to materialise. Instead, the country has slipped back into harsher financial difficulties. Among its problems is a large and growing incidence of fatal alcohol poisoning.²⁸²⁶ Russia appears to be on a self-reinforcing trajectory towards chaos that no politician or entrepreneur is likely to reverse.

The Russian, east European and east Asian cases suggest that the world economic order will probably not be transformed in a major way this side of the coming dark age. One can gauge the progress of the descent by looking for such major changes. If Russia is indeed making robust economic headway by 2020, then the estimated time to the dark age must be put back. If, on the other hand, Russia has slipped into the third world, with no meaningful government and a population for whom day to day survival is a perpetual struggle, then a more general collapse is likely to follow.

Similarly, it will be significant whether Asia-Pacific really is uncontested leader of the world economy by 2020. By this is meant more than just east Asian companies being lauded in the business pages. Instead, New York, London and Frankfurt will have become second-rate cities of faded glory. Every enterprise will be relocating its offices, its people and its money out of these cities, in search of the new opportunities in the Pacific basin. Europeans and east coast Americans will look poorer and live worse than their counterparts in Japan, Korea and Singapore. Their cars will be older, their mobile phones bulkier, and their whole experience and appearance more provincial and desperate.

If such a radical shift in world economic leadership really does occur, then the coming dark age may not be a global one after all. Only some regions, like Africa, will be sunk into true, ahistorical darkness. Over other regions, such as Europe and the Americas, a partial though deep shadow may be cast. These continents will experience immense poverty, ignorance and general warfare, but a weak historical thread will nevertheless be kept alive through their contact with the still civilised east. Finally, Asia-Pacific will continue to shine bright, if somewhat lonely and not as bright as before, and it will preserve the flame of civilisation until it can be reignited in the rest of the world.

That scenario, however, probably will not materialise. It is more likely that in 2020 the world economic order will not be so different from where it is today. In this case, there will be no beacon shining through the darkness. The dark age will be global.

Trade disputes

During the twenty first century, a growing number of difficulties and obstructions will face international trade. As global economic confidence wanes, protectionist attitudes will come to the fore. For the last few decades, the importance of free trade has been an article of faith with the governments of most developed countries, though many of them have undermined free trade in practice. In the future, this orthodoxy may lose its hold over the political imagination altogether. Public hostility towards the activities of the WTO and IMF is likely to strengthen. Fringe politicians will seriously question the benefits of free trade. The arguments will then be taken up in the media, where they will mature, and eventually mainstream politicians will be presenting themselves as the champions of autarky.

Disputes over trade are likely to become a considerable source of tension from time to time, though they may take many different forms. In the recent banana row, the United States required sureties from European exporters against its future imposition of a retrospective tariff. It thus

lumbered them with a financial penalty without breaking the letter of WTO rules. Another tactic might be to freeze the assets of foreign companies. That would be potentially much more provocative. If tempers really flared, a country could actually confiscate the assets of its trading partners.²⁸²⁷ Japan, which has very large overseas investments, is particularly exposed to this kind of action. Thus, arguments regarding ownership and control of foreign investments will certainly be something to watch out for during the descent, and Japan may be a primary danger zone.

Deteriorating diplomatic relations between the west, Russia, east Asia and other regions will also make it harder for international business. Economic frictions and political disagreements will intensify each other. As the original head of the WTO frequently stated, when trade cannot cross borders soldiers will.²⁸²⁸ The obstruction of global commerce may therefore be linked to the passage to general war that characterises the collapse.

Wealth differentials

As economic disorganisation increases, the gap between rich and poor will continue to grow. This applies on both the international and domestic scales.

In western countries, boom conditions are not being felt everywhere by any means. Even in provincial towns, one encounters squalidly dressed beggars who are not welcome in the shops and restaurants, and whose bed is a flattened cardboard box in some shop doorway. These people are not participating in the boom. They are but the visible flotsam of a vast submerged wreck of human destitution. There are millions of people in Britain whose desperation is unimaginable by those leading middle class lives. These are the unemployment statistics, the feckless parents whom the newspapers deplore, the burglars, joyriders, and frustrated, aggressive patients in casualty. That they are slipping further behind is additional evidence of the artificial nature of contemporary economic growth. An economy that provides no place for these least capable individuals is surely hollow and incomplete.

Over the coming decades, one should look behind the economic statistics to see what is happening to the losers in the booming or busting economy. Their fate will give the best indication of the status of the descent. With ongoing disorganisation, their welfare-derived incomes will become ever more meagre, and their housing and general environment ever more depressing. Many will be left with no support at all, thanks to new laws that attempt to reduce the burden of social security. The sight of these failures will become more familiar and the fear of joining them more real. The way these people live will represent a foretaste of what is waiting for everybody in the dark age to come. They will lack skills, produce

nothing, and fend for themselves in the decaying infrastructure of a civilisation that they know nothing of and whose achievements they could not even conceive of reproducing.

On the international scale, the world's poorest nations will continue to lose out. As the descent proceeds, trade between the developed and developing world will dwindle to nothing. Languishing at the foot of the UN's table of human development, there will be a residue of basket cases that have fallen through the bottom of the world economy. Their life expectancy will be falling as sanitation and basic medicine become unaffordable. Eventually, they will run out of money to import even the bullets for their rusting rifles, and they will resort to the sword to continue their chronic civil wars. Meanwhile, countries like India, Mexico, Brazil, Indonesia and Turkey are likely to start repudiating their international debts. Once one or two have done so, there will be a general default. The World Bank, which once kept failed countries afloat, will then disappear, not with a bang but with a whimper.

Dependency

There will be further growth in the number of dependants in relation to workers. This will fluctuate to some extent, partly in relation to the economic cycle. However, on the scale of decades, the movement will be inexorably upwards.

Almost all of the rich countries, and even some of the not so rich, are experiencing an ageing population.²⁸²⁹ This is producing a significant growth of dependency, which will peak in about thirty years time. In Germany, France and Italy, by 2020, there will be more than one elderly person for every two people in employment instead of three as at present. In Japan, where eight people in work now support each pensioner, it is expected to be only three by 2020.²⁸³⁰ At the same time, there is a growing trend towards early retirement, which creates a largely hidden burden of dependency. Fewer than half of men aged between 55 and 64 are still in employment in many European countries. Elderly people also have the most health problems and incur medical costs at some five times the rate of other groups.²⁸³¹

Thus, pensioners are likely to swamp the welfare systems of the developed world and will place a severe strain on the system of transfer payments. Inevitably, there must be a large increase in the burden of taxes or a large decrease in the living conditions of pensioners – and in all probability both.

Having said this, the problem of ageing populations is a relatively transient one. Even if birth rates just remain stable from now on, societies will eventually pass into a new regime with the balance restored. If they actually rise again, the problem will be reversed. People learn and adjust. Even in so predictable an area as demography,

things can turn around within a generation or two. Wars or other major social events of the twenty first century are especially likely to have that effect. Nevertheless, over the next fifty years, the ageing of the industrial countries will certainly aggravate other problems and speed the descent.

Governments will intensify their efforts to turn back the tide of dependency. They will try means testing, medical checks, workfare schemes, abolition of certain benefits, and anything else they can dream up to prevent frivolous claims. Official retirement ages may also have to be raised.²⁸³² However, these policies will invariably fail in the long run. People will always manage to re-define themselves according to the new rules so that they appear as legitimate claimants.

In Europe, the actual amounts available for governments to disburse will probably not increase very much, for they are entering a region of diminishing marginal returns. Heavier demands will fall on fewer heads because they make people give up economic activity altogether. A larger number of dependants will therefore have to share a largely static pot of money. Paradoxically, as the official economy labours under a growing weight of dependency, people may find themselves starting to work harder again, in the informal economy. Dependants' incomes will shrink as their numbers increase, and they will need to supplement them in other ways.

In east Asia, welfare systems will expand from their present slim proportions, and they will move towards the European model of reduced work effort and extensive income redistribution.²⁸³³ The United States will similarly tolerate substantial growth of its welfare system, and, shortly before the final collapse, it will become the most bloated on the planet.

Dependency in the form of pensioners and welfare claimants will be compounded by continued growth of the parasitic occupations – the lawyers, bureaucrats and consultants. In effect, people will find ways to occupy themselves, even though there is nothing constructive for them to do. However, the returns to these parasitic occupations will come under pressure. The average lawyer or accountant of thirty years hence will not be as well rewarded as those of today. Nevertheless, there will be many more of them.

Innovation failure

Today, the areas which seem to have most potential for radical inventiveness include exploration of space and exploitation of the oceans. Therefore, one might watch the technology news for progress in these areas. The extent to which innovation succeeds or fails will be a barometer of decline.

In spaceflight, there are some apparently optimistic signs, such as construction of the International Space Station (ISS) and the

emergence of commercial space launch companies. However, one can expect these efforts to come to nothing, and to appear as the late flowerings of a doomed project. In principle, the ISS could stimulate whole new industries in space, with thousands then millions of people coming to work off-planet. However, it is more likely that it turns out to be a white elephant concerned primarily with the usual microgravity experiments, such as how spiders spin their webs, producing minuscule additions to human knowledge and essentially leading nowhere.

On earth, people will probably fail to realise the potential of the oceans. Under the UN Convention on the Law of the Sea (UNCLOS), an International Seabed Authority has been established to oversee the exploitation of marine resources by private and state ventures. Yet predictions that sea-bed mining would soon be well under way have failed to materialise. The cost-benefit equation currently comes down against it. Also it is unclear who will protect expensive floating refineries in international waters, which is an important issue at a time when ocean piracy is rising around the world. If anyone does take the risk and start mining, there will inevitably be environmentalist opposition. The more people find out about plans to scrape the seabed with a fifty foot vacuum cleaner, destroying million year old ecosystems in the process, the less they are going to like it.²⁸³⁴

It now seems unlikely that exploitation of the oceans will take place on any scale during the descent. The amounts at stake are considerable, and there is considerable potential for rancour.²⁸³⁵ To the third world it seems unfair that the west should get all the benefits from this planetary resource, just because it has the necessary capital and expertise. To the west it seems unreasonable that it should pay royalties to third world governments for doing nothing at all. These differences have been buried, but if western companies start hauling away large quantities of metals from the Pacific and Indian Oceans, then they may resurface and the UNCLOS agreement will probably unravel. Today demand can be satisfactorily met from land-based operations, and uncertainty over the operation of UNCLOS is reducing the incentive for prospectors. However, the oceans represent a long term contentious issue, towards which the world is moving slowly and for the most part unknowingly.

The inability to innovate will be partly due to a failure of energy and imagination on the part of inventors, but also partly due to a failure of the wider society to accept innovation. It will become harder to introduce new kinds of technology. Those that are not strangled at birth by media hysteria will be done in later by the costs of relentless litigation. Over the coming decades, technological progress will actually be reversed, with mobile phones, for

example, being blamed for all kinds of health problem, to the extent that their manufacture is no longer viable and public opposition prevents extension of the relevant infrastructures. The pharmaceutical and biotechnology companies will also suffer. It costs very large sums to develop a new drug, and the costs are rising as regulations become ever more stringent. If all that investment is rewarded only with bans, moratoria and boycotts, of the kind now facing genetically modified crops, as well as with hefty compensation claims, it rapidly ceases to be worthwhile. In ten or twenty years time, the whole pharmaceutical industry is likely to be bankrupted by litigation, and it will collapse in the face of insurmountable societal opposition to its innovation programme.

The internet, the current darling of public and politicians, could also be denounced and outlawed later on in the descent. The entertainment industry is finding itself successfully sued for influencing anti-social people, such as murderers who emulate film plots. The internet is an even more obvious source of incitement to such behaviour, given that it offers sites covering everything from bomb making to sexual torture. So far, legal attempts to close down or block access to such material have been unsuccessful. The principal architects of the internet remain ever vigilant and vocal in their opposition to censorship. However, the present extreme tolerance will surely create a future backlash. When the culture of complaint and culpability finally catches up with the internet, the impact could very well be fatal. There is little doubt that the providers of internet services face the eventual nemesis of litigation over their 'negligence' in failing to block access to unsavoury material.

During the next ten years, one may expect scientists to discover that global warming has given way to global cooling. However, environmentalists will not say that this shows climate change to be a product of normal variation and that the furore over global warming was a piece of nonsense after all. On the contrary, it will be stated that the world has overshot in its efforts to prevent warming, or there will be some other explanation, and the result will be a new round of self-flagellation and even more extreme onslaughts on economic activity.

A form of innovation failure will also be found in pure science. The nineteenth and early twentieth centuries saw mind-expanding advances in physics, with the theories of electromagnetism, relativity and quantum mechanics. The mid-twentieth century saw the discovery of DNA's double helix and the sudden opening up of huge possibilities in biochemistry. During the descent, one should not expect any further epochal discoveries of this kind. This is not because most things about the natural world have already been discovered (though many people believe that), any more than that the decline

of Greek science was because Aristotle had described everything there was to know (though that is what medieval professors supposed). It is because the imagination is failing and scientists cannot think outside the narrow orthodoxies they have now constructed.²⁸³⁶

Criminal economy

Since the ending of communism, there has been an explosion of entrepreneurial activity in Russia. However, the political weakness of the post-Soviet state means that it has been allowed to take on a criminal form. The Russian mafias have built up impressive empires based on such lucrative lines of business as extortion, drug running, art theft, and forcing women into prostitution. In this respect, Russia's experience is a foretaste of the future for western countries. As they continue to develop in the context of ongoing political disintegration, their economies will also become increasingly illegitimate and out of control.

Mafias emerge as a natural consequence of political disintegration. When the state is weak, some individuals will be tempted to conduct economic transactions outside of its regulation, ignoring the laws and not paying business taxes. In this case, the most profitable opportunities will be in areas like drugs and the sex industry, where supply has previously been restricted by regulation. Those who run these illegitimate businesses obviously cannot rely on the police to protect their assets or on the courts to help enforce their contracts. They must be their own protectors and enforcers, and so they are invariably well armed and prone to violence.

As the descent continues, the mafias will expand, and ordinary people will be drawn into their ambit. The only way to beat the gangsters will be to join them. It will therefore become increasingly common to work for organisations with underworld affiliations and credentials. In a few decades time, one can expect one's firm to be routinely handling stolen goods and practising fiscal fraud. Key figures in the office of the future, besides the receptionist and the mail clerk, will be the heavily built thugs who guard its premises and who occasionally go off to deal with errant clients or suppliers.

Meanwhile, the bosses of the criminal gangs, the delinquent captains of industry in future western economies, will probably be mostly migrants from places like eastern Europe and north Africa, which are already far ahead of the west in criminal sophistication. These gangsters will flood into the disintegrating west as air into a vacuum. Africa could gain a new economic lease of life from moving into the cultivation of narcotics, for which it has much suitable land.²⁸³⁷ However, it will be necessary for some warlords there first to win their wars and impose a reasonable peace.

The criminal economy may serve to prop up the legitimate economy beyond the point at which the latter might have been expected to collapse under the weight of dependency, litigation, and innovation failure. On the other hand, part of the cost of living in future will be payments to ensure that windows are not broken and loved ones are left unharmed. This kind of arbitrary taxation never has good results. The more the polity disintegrates, the more the underworld will boom. Yet universal criminality is self-defeating, and it will destroy the economy on which it preys.

Ill education

As the descent proceeds, academic success will become something to be ashamed of. Those who study too hard or who hold obvious ambitions of excellence will be thoroughly derided. Of course, swots have always been somewhat socially unacceptable. However, this attitude will become increasingly institutionalised, spreading beyond teenage culture to society as a whole. Intellectuals, who were admired 50 or 100 years ago, will be despised and discredited, and it will become increasingly modish to profess distaste for learning, for books, and for contemplation. Educationalists will actually declare that knowledge is the least important product of an education. The system of public examinations will be discontinued.

Far from preparing the next generation for productive economic activity, the school curriculum will concentrate on degrading the entire status of productive effort. One school inspector has described with dismay hearing teachers state that industry exploits the environment and poor people, without any reference to its role in producing the books and pens that the students use to document its deficiencies.²⁸³⁸ In future, youngsters will emerge from school and university, not only without an understanding of how western nations became strong and wealthy, but also with the utmost contempt for the values that brought that situation into existence. Clearly, those who have been taught that the manufacture of books and writing implements visits only evil upon humanity will not be the most reliable people to be entrusted with the scholarship and enterprise that western societies have built up over the last thousand years.

The increasingly commercially driven institutes of higher education will churn out students in parasitic or get-rich-quick disciplines like law or business studies. They will produce few graduates in innovation-rich areas such as science and engineering. Given the association between biology and genetic engineering or between physics and rape (viz. the characterisation of Newton's *Principia* as a 'rape manual'), such subjects may end up being forcibly closed down. Innovation failure will extend to the point of nipping potential innovators in the bud, before they even have the

chance to gain an unwelcome understanding of the natural world.

Things falling apart

The decline of education means that future generations will not have the basic knowledge to maintain, let alone develop, the technological infrastructure that they receive as a legacy. Towards the end of the descent, it will become difficult to find people who are both willing and sufficiently skilled to perform involved technical tasks. Airlines, for instance, will face problems with servicing their aircraft, as qualified technicians become rarer. If one's central heating system goes wrong or one's piano needs to be tuned, it will take a long time to track down people to do the work and an even longer time for them to come and do it.

The existing technological infrastructure will fall apart, bit by bit. People will eventually be forced to abandon advanced technology that has become impossible to maintain. When the computerised engine management system of one's car breaks down, that will be it. If one knows the right people, one may be able to rip out the microchips and rig up a basic version of the internal combustion engine that with care and attention will last twenty years longer. Otherwise, one will have to walk or get a bicycle.

The failure of high technology transport and telecommunications will mean a shrinking of scale. People will cease trading with others far away. Japanese electronics will disappear from the high street, and Kenyan mangetout will disappear from the supermarket. Everywhere the range of goods on offer will be less diverse and more expensive. These processes will reinforce each other. Transport difficulties will make spare parts harder to track down, and the lack of spare parts will create transport difficulties. Eventually, this technological regression will run away with itself, reducing people to their own devices.

Over the coming decades one should look for signs of things falling apart. The average age of equipment will increase. Newspaper articles and private conversations will lament the difficulties of getting things repaired. The gains in order and cleanliness of the last few centuries will be reversed. The built environment will look seedier and more patched up. Weeds will grow on city streets. The drains will become less reliable, as will the supplies of water, gas and electricity. In due course, every modern convenience will become a thing of the past.

Squatting

The twilight of most historical civilisations has been characterised by the emergence of a squatter mentality. New houses cannot match the magnificent buildings of the ascendant era. People start dividing up the spacious old buildings, erecting flimsy partitions within the rooms.

Sometimes, they repair the fabric in a desultory fashion, but otherwise they let the old buildings fall apart and board up the rooms where the ceilings have fallen in. Already, western countries are beginning to repeat this pattern. Future archaeologists will dig up the remnants of today's bedsit-lands and remark how people turned handsome Victorian town houses into a warren of squats.

The new houses that people are constructing today, and those of the descent, will also earn the contempt of these future archaeologists. They will not survive so well as houses a hundred years older. The archaeologists will comment on their cheap construction, their smallness, their closeness together. They will trace in the soil how new structures become both rarer and ruder towards the end of the descent, until building stops altogether.

One should therefore keep a close eye on building activity, for it will be a sensitive barometer of the status of the descent. When the builders start dividing up the factories of the 1950s and 1960s into meagre apartments, it will be clear that the squatter mentality is well entrenched. The collapse will not be far away.

The decline and cessation of building activity will be the result of several factors. For one thing, fewer people will have the economic potential to commission structures that require costly materials and the efforts of many labourers. At the same time, there will be no one with the skills or the motivation to do the work. Finally, there will be concerted opposition to new construction anyway. In Britain, regulations have been introduced in favour of building on 'brown fields' sites, which implies that squatting within the walls established by previous generations is now a matter of government policy. It is fortunate that the inhabitants of, say, early Rome or medieval London neither inhibited building on green fields nor complained that their settlements were already too populous. However, they were living in ascendant times when people build all over the place with scarcely a thought.

Construction failure will be particularly evident in public architecture. There will be no grand monuments or illustrious public buildings erected this side of the coming dark age. The pyramids, the colosseum, and St Paul's cathedral could never get planning permission today. Instead, public bodies and large companies will continue to

sell off what decent buildings they have, in favour of a quick profit, while moving to more paltry accommodation. Their remaining workers will be packed into smaller, meaner offices, and the buildings themselves will be allowed to fall into disrepair.

Business failure

Small businesses come and go all the time, and they will continue to do so. However, one can also expect to see the eventual failure even of giant firms that supply momentum to the whole economy. During the descent, such really big names as General Motors, Nestlé and IBM will begin to fall, and at an accelerating rate.

People are likely to take up hoarding, as the economy of the high street becomes less reliable.²⁸³⁹ Barter may emerge as a more common feature of everyday life. This will be partly to avoid taxes, and partly because money becomes less useful when the economy is falling apart. People may participate in two economies. One will be the official money-based economy, in which dependency is rife and goods and services are difficult to obtain. The other will be an informal economy, in which the official currency is just one of several media of exchange. Here goods that are virtually unobtainable by other means may still be available. However, to operate successfully in this economy, one will need the right set of contacts as well as the right means of exchange.

The relation between different economic actors is like the relation between the keystone and the columns of an arch. If the keystone gives way, the columns will fall in. On the other hand, if the columns crumble, the keystone will drop. Either way, the keystone and the other bricks will end up in a heap of rubble, all reduced to the same level.

The collapse may therefore begin in the poor, peripheral countries, where institutions are weakest, but it will inevitably spread inwards to reach Japan, America and Europe. In the western Roman collapse, such an inrush of darkness took more than half a century. The future collapse, however, is likely to occur in a much shorter time, owing to the speed of contemporary communications. When south Asia or Africa experience such anarchy and comprehensive business failure that urban life is abandoned there, a similar fate for the west may be only a decade away.

Chapter 34 - The discohesion process

Less sociability

The futurologist John Naisbitt suggests that teleworking, i.e. working from home via computer links, is unlikely to be taken up on a large scale. He says that people will continue going to the office because they like being with other people.²⁸⁴⁰ In coming to this viewpoint, he seems to be thinking primarily of high achievers with interesting jobs. Most ordinary workers are only too glad to give up office politics and the stresses of rush hour travel. Teleworking may not take off, but it will mainly be for the practical reason of access to equipment, and because employers wish to monitor what their workers are doing.

The societies of the descent will be characterised by growing loneliness and isolation. Naisbitt is correct that humans are sociable creatures and that they will always desire to mingle and interact. Therefore, discohesion will not imply the disappearance of social relationships as such. Instead, it will involve the disappearance of *networks* of *interlocking* relationships. There will be a continuing breakdown of *communities*, the milieux that shape behaviour.

In cohesive societies, people's work is a significant and permanent aspect of their lives. In Japan, for instance, employees have traditionally had an almost family-like orientation to the company and supervisors have tended to look after their staff even in matters not necessarily connected with work.²⁸⁴¹ This kind of employment culture is able to locate people within a broader community and can inculcate standardised values, attitudes and beliefs. By contrast, in the future, individual careers will be highly volatile and egocentric. People will move easily from job to job, pursuing their own interests. Those that can do so certainly will work from home. More people will choose to go freelance, using internet brokering services to put them in touch with work opportunities. Notions of loyalty between a company and its employees will become wholly outmoded.

The growth of the team-building and motivational industry, which lays on corporate events ranging from casino evenings to abseiling from cliffs, reflects companies' rearguard effort to retrieve their lost cohesion. These artificial initiatives, however, cannot compare with the cohesive effects of working for the same company for decades, living side by side with one's colleagues in the same small town, sending one's children to the same local school, and meeting regularly for leisure activities. Yet western societies moved away from such a situation long ago, and even in Japan that era is fast disappearing.

Young people, raised on internet culture and computer games, are increasingly used to spending large amounts of time alone, and unused to suppressing their desires for the overall benefit of a

co-operative group. They will take readily to a highly individualised employment culture centred on electronic media. Some commentators have even predicted that the whole notion of a permanent job may disappear. People will assemble for particular tasks and then disperse again.

The changing nature of employment will be just part of a wider syndrome of declining sociability during the descent. It will become increasingly common, for example, for people to pursue friendships and romance by e-mail. Traditional contexts such as school, university and work are increasingly fraught as occasions for the formation of relationships, given the possibility of being accused of harassment. The dating agency and the on-line chat room will be much more attractive as venues in which people may meet.

While such electronic encounters certainly constitute social relationships, they are established outside any broader social context. The lovers who meet on the internet may come from different sides of the planet. In general, they will have no mutual associates, nor any previous shared experience. An encounter between such perfect strangers is rootless and therefore all the more likely to be transient. The partners have no one to please or to disappoint but themselves. This is an essentially selfish approach to sociality, devoid of obligations to a community of relatives and friends. It means that people's social lives will be fragmented and individualistic, and society itself will become a porous tracery of bonds, easily broken apart.

Rampant de-legitimation

Discohesion means de-legitimation. It means that fewer people will uphold familiar values, and more people will be ready to denounce these values as oppressive and unpleasant. Everything that serves to propagate a shared culture will have its faults systematically exposed and criticised. For example, the de-legitimised royal family may be excluded from public life and eventually removed from Buckingham Palace. Other traditional institutions will be attacked as incorrigibly racist and sexist.

Anything that suggests advocacy for characteristically British values and conduct will be excised from the school curriculum. It will be thought deplorable to suggest that western civilisation has anything positive to offer or deserves to be emulated by natives, let alone by recent immigrants and their children. The lessons of the future will be quite unfamiliar to anyone educated in the twentieth century. Children will not study French or German, say, but will be given a generalised course in the languages of the world, and they will be taught the importance of preserving traditional tongues in the face of western cultural imperialism.

Everyone who has been thought worthy of admiration will be revealed as unworthy. Alfred the Great, Florence Nightingale, Winston Churchill, and all such historical figures will be debunked and downgraded. Their names will become associated with ineffable turpitude. People will become embarrassed to speak them, and eventually they will be heard of no more.

Religious festivals like Christmas or Easter will come to seem shameful, and their original significance will be suppressed. The church is going to have an especially difficult time of it. It will be discovered that Judas has been much maligned and deserves admiration, while Jesus was deeply flawed and not a role model after all. Jesus's claim to be the initiator of the Christian message will be profoundly challenged and mainstream Christians may eventually disavow him. Deeply delegitimised, the church will attempt to re-define itself as non-Christian Christianity, but that will hasten its passage to oblivion.

Churches will start disappearing from rural communities in the same way that banks and post offices have. One can expect the disestablishment of the Church of England, possibly within the reign of the present monarch. The Act of Settlement will be repealed. Other religious leaders will be given the same right as Anglican bishops to sit in the House of Lords. Britain will actually have more Muslims than Anglicans by 2005, so this will seem only fair. There will eventually be Muslim prime ministers and perhaps a Muslim monarch. They may well be honourable people in their own right, but their election will be devastating for Britain's traditional identity.

As part of the de-legitimisation of their own culture, people will adopt the habits of other cultures. White people will adopt Asian dress and other customs. The current trend for nose jewellery, for example, can be understood in this light (it may be a mark of rebellion among western girls but is quite conventional for middle-aged Asian women). Anything associated with the underclass will also become immediately fashionable. There will be ever more tolerance of minority viewpoints and aspirations. This is in accordance with the erroneous view that behaviour which does not tangibly injure another is harmless to the social fabric and that permissiveness towards the behaviour is therefore more moral than forbidding it. The reality is that even what people do in private – if it is advertised and celebrated – will be corrosive of the moral order, since morality requires people to suppress their impulses and to recognise absolute standards.

Some have suggested that the twenty first century will actually see a reaction against sexual openness, just as the nineteenth century fin-de-siècle supposedly gave way to more sober times in the 1900s. There have already been movements

among American college students in favour of celibacy and self-restraint. However, this return swing of the pendulum will not amount to much. Taken as a whole, the twentieth century was far more permissive than the nineteenth. The twenty first century will be more permissive still. There will also be a hypocritical puritanism in some contexts. It will be unacceptable to make overtures to a work colleague, for instance, but quite acceptable to go on television or the internet and trawl for sexual liaisons in the most blatant way.

Sexual morals are only one area in which existing social codes will lose their force. Dishonesty of all kinds will increase and be thought barely reprehensible. Corruption will become an increasingly normal part of life. People will get used to the fact that government ministers grow rich by abusing the powers of their office, and that bribes are the best way to get things done. Narcotics will be decriminalised. The current generation of politicians and opinion-formers is already half-hearted in its condemnation of this supposed terror. One police organisation has suggested relaxing the penalties for possession of cannabis and ecstasy. The public largely shares that view.²⁸⁴² Recently a headmaster could not get excited about his pupils being caught with cannabis. He said it is now commonplace among young people.²⁸⁴³ There is no chance that such drugs will remain illegal as these youngsters grow up and become voters, journalists and legislators.

Having said this, dis cohesion means not the uniform deterioration of standards of behaviour but rather the proliferation of standards of behaviour. Not everyone will behave corruptly or promiscuously, but those who wish to do so will be quite obvious about it and oblivious to the disturbing effect it might have on others. Inevitably, some people will react against increasing licence. On the streets of the future one can expect to see people in Mennonite or Islamic dress, flaunting their purity of heart as ostentatiously as others flaunt their sexual assets. The streets of the future will be a riot of styles and demeanours. One will walk past a woman in scant clothing that boggles the eye, and immediately afterwards past one who is covered head to toe in black. People in business suits will jostle past naked ascetics proclaiming complete indifference to the material world.

Art in decline

In the world of creative activity, two trends will intensify as the descent proceeds. Firstly, styles will become increasingly diverse and fragmented. Secondly, the output will be increasingly unappealing, reflecting the unappealing values of the declining society, such as idleness, licentiousness and lack of respect for authority. On the whole, this is not prediction but actuality. Nevertheless, it will go further if it can.

Art will become not shocking but simply bad, which is to say, crude, unskilled, and cheaply executed from cheap materials. The cognoscenti will see it differently. They will find poetry and meaning in scribbles and piles of junk. However, future archaeologists will not share their view. They will regard this stuff, insofar as any of it survives, as the vulgar effluence of a descendant civilisation. Their feeling will not be admiration and is more likely to be one of repulsion. Meanwhile, art whose mission has become to insult the values of its social milieu will not be indefinitely supported by that milieu. Substantial works will no longer be commissioned. The fine art industry will disappear.

The same syndrome will apply to music, drama, literature and philosophy, as well as to popular culture, including fashion, television, popular fiction and popular music. Whatever is ugly and base will be extolled, not for any obvious purpose, but just for its own sake. Clothing will be designed not to improve people's appearance, but rather to assault the eye, being inherently hideous and accentuating the body's least attractive aspects. There will be an emphasis on the ordinarily unpleasant behaviour of ordinarily unpleasant people, rather than on the finer achievements and emotions of the human spirit. Writers, singers, dramatists and film-makers will be interested not in love but in deviant sex, not in the triumph of good over evil but in bad breath, defecation and self-destruction.

By proceeding down this route, cultural enterprises will run out of credibility. Before the descent is over, the fabulously rich fashion industry will lose its flamboyance. The popular music industry will go into decline, as it struggles to promote artists whose musical productions lack both form and substance. People will reject the mainstream and pursue their tastes in music or clothing within their own minute sub-cultures. Anything that attempts to appeal on a wide scale, to society as a whole, will find no audience.

There are likely to be revivals of classical styles, in an attempt to restore some semblance of skill, effort and high aspiration to creative activity. However, such revivals will have strictly limited appeal, given the general fragmentation of culture. They will also fall short of the standards that they intend to emulate. The skills have been lost and will not be revived this side of a dark age.

The classical canon will be rampantly de-legitimised. Given their role in perpetuating imperialist, misogynist, heterosexist western civilisation, the great painters and composers will be found completely inappropriate for recognition in polite company. One can expect to hear about the attrition of the west's cultural heritage through lack of care. Great paintings will be ruined when floods invade the basements of poverty-stricken

museums, or they will be damaged by the bombs of animal rights activists. Stealing from churches has become a major problem in Britain since the 1980s, and their great inheritance of antique chairs, chalices and lecterns is already being dissipated as up to ten churches a day are burgled, vandalised or subjected to arson. The missing items are usually replaced with cheap modern copies.²⁸⁴⁴ If these treasures are lost or buried, at least they may be protected from the destructive convulsion of the subsequent dark age.

International estrangement

The descent will see a breakdown in the concept of an international community that took shape during the nineteenth and twentieth centuries. The Islamic and Sinic worlds seem recently to have reached an accommodation with the west, but this is only a lull in their drive for self-realisation. Those countries with a large proportion of young people are especially likely to be affected by protest and revolution, and to intensify their rejection of western influence. In the coming decade, this applies to Egypt, Iran and Saudi Arabia, and in the decade after that to Malaysia, Pakistan and the Arabian Gulf states.²⁸⁴⁵

In future, the west's agenda will be increasingly unwelcome everywhere, leading to a transformation of global priorities. Western expectations concerning human rights or the status of women will be openly challenged and repudiated. In some countries, including perhaps Japan, traditional costume may come back into favour as a way of reaffirming cultural independence.²⁸⁴⁶ International boundaries that are the legacy of western imperialism will be re-drawn and a growing number of countries will become off-limits for western tourists, politicians and business executives.

The United Nations celebrated its fiftieth birthday in 1995, but it is most unlikely to reach its centenary. In the past, its role has been guaranteed by the prestige of the United States. As that prestige is eroded, the UN's own legitimacy as a force for social cohesion will vanish, and international treaties that it has brokered will be increasingly contested and ignored. While the UN repeated and improved upon the earlier experiment of the League of Nations, when it disappears with the outbreak of general war in the next decade or two, it will probably not be re-established. Future wars will lead to no settled peace or clear victor, and, like blood feuds, will accentuate rather than resolve their participants' hatred.

The European Union is similarly threatened by dis cohesion. Three hundred years after the original Act of Union between England and Scotland, Scotland's Parliament is being revived. A simple union between just two adjoining countries, with strong elements of shared culture, can fail despite three centuries of trying. In this light, and in the

current condition of the world, there can be little hope for the European Union, whose diverse countries have so much more to fall out about. Two German journalists argue that the whole project is fundamentally flawed. It will collapse eventually, they say, and no oracle is required to see that.²⁸⁴⁷

If the European Union starts to enlarge itself in the meantime, that will only make the collapse come more quickly. Neither Russia nor Turkey is likely to get in, as the one falls further into chaos and the other relinquishes secular values, but new members may be acquired in eastern Europe. Enlargement will force Germany to stop subsidising the EU, and Germans will probably be more interested in helping the development of new eastern members than in helping say Spain or Portugal. The resulting changes and re-negotiations will push tensions to the limit.²⁸⁴⁸

There will be a growing gap between governments, who accelerate European integration, and their populations, who are ever more opposed. Ordinary people will exhibit considerable bitterness about Europe and their place in it. Nationalistically inspired parties will achieve greater representation, both domestically and in the European parliament. Popular rhetoric and mood will reveal fundamental flaws beneath the perception of European unity, and will foreshadow the time when Europeans are again slaughtering each other as they have done since time immemorial.

Before the twenty first century is too old, one can expect to see the first secessions from the European Union. Sweden is a prime candidate for withdrawal, followed perhaps by Austria and Denmark. Such withdrawals will then make it harder for France, Germany and Britain to reconcile their differences, as each country reconsiders its own future. The arguments could become very bitter. The spectre of a politically resurgent Germany building an empire in eastern Europe and losing patience with its vexatious partners to the west is not a happy one. The break up of the EU may also be too much for Spain, Italy and perhaps the United Kingdom, and those countries will break up in its wake.²⁸⁴⁹

A similar situation applies to all other associations between nations. NAFTA, consisting of Mexico, Canada and the United States, could be one of the first trading blocs to break apart. In Mexico City, large numbers of people depend for their living on what they can glean from the city's rubbish dumps. Behind a veneer of modernity, Mexico is in a desperate situation and cannot be expected to maintain the fiction of equal economic partnership with the US for long. Tensions are also likely to rise along the multi-thousand-mile border between the US and Canada. One day, perhaps, tanks will be rolling across that border. It seems scarcely conceivable today, but it will become conceivable.

An important force for global cohesion over the last century has been international sport. The Olympic games have fostered common understanding among the countries of the world, just as they did among the Greek city states in classical times. Attendance at Olympic games has been almost universal and competition to stage future games remains strong. However, ongoing challenges to western ideals will corrode the legitimacy of the Olympic movement, especially given the revelations of widespread corruption in its ranks. Countries will cease wishing to stage the games or even to turn up. The most blighted African countries are likely to be among the first no-shows, alongside countries with strong non-western cultures. The Iranian team at recent Olympic games consisted exclusively of men and almost entirely of wrestlers. No Islamic country has ever hosted an Olympic games and, given the very scanty gear worn by modern female athletes, it is difficult to imagine that one would ever do so. As these countries grow more assertive, the Olympic games will shrink in significance and eventually be abandoned once again.

Nationalism and devolution

Discohesion makes people desire separateness, while disintegration means that it cannot be prevented. Over the coming decades, secessionist movements will multiply apace. Every successful independence movement has given encouragement to emulators. Before long, the twentieth century atlas of the world will be a collector's item.

The increasingly disunited United Kingdom is a case in point. When the central government gave Scotland and Wales their own parliaments it apparently hoped that this would assuage those regions' nationalist appetites. One commentator argued that the Scottish parliament made up for a kind of democratic deficit,²⁸⁵⁰ whereby Scottish interests could always be outvoted at Westminster by the numerically stronger English. He suggested that the Scottish parliament is about restoring a fair balance and does not mean that Scotland is on an unstoppable trajectory towards full independence. This argument is logical, but nationalism has little to do with logic. Parties whose primary *raison d'être* is the pursuit of autonomy ought to fade away now that the democratic deficit has been resolved, but this is not happening. On the contrary, Scottish and Welsh nationalist parties remain popular, showing that devolutionist sentiment has been not placated but rather whipped up. In the future, the most likely thing is that Wales will be pushing for the same amount of self-determination as has been granted to Scotland, and Scotland will want to see its powers extended.²⁸⁵¹

The process is now being fuelled by a growing English reaction. In the past, English people had little sense of a separate identity distinct from that of Britain, and they generally opposed devolution.

That is now changing. Around 1996, English football supporters stopped waving the Union Jack and started waving the Cross of St George instead.²⁸⁵² This English flag is seen more frequently everywhere. In the last five years, St George's day, previously a non-event, has become a conspicuous occasion for the celebration of Englishness. Its importance will increase with every year and it may eventually become an official holiday. Some people have pointed out that, divested of their subsidies to Scotland and Wales, the English would pay significantly less income tax. Hence English nationalism will continue to grow, with the result that, while Wales and Scotland are keen to break away, England becomes increasingly keen to see them go. Eventually and inevitably, the United Kingdom will split apart.

Even Englishness may prove too large a concept for the increasingly discohensive world of the descent. Regions like Yorkshire, Kent, and Cornwall have long had a better sense of their identity than England as a whole. As the Welsh and Scottish parliaments were being elected, the most vociferous cries in England were not for an English parliament, but for a Yorkshire parliament. One may also see further fragmentation elsewhere. The highland regions, for instance, are likely to become disgruntled with what is seen as the remote Edinburgh parliament, and north and south Wales will be at each other's throat.

The United Kingdom's experience will be reproduced in many other countries, most of which have not been united for nearly as long. In Africa, which is leading the world into the dark age, the tribal map bears no relation whatsoever to international boundaries.²⁸⁵³ It is amazing that African nations have retained their identities as well as they have. However, as memories of colonialism fade, and leaders emerge who were not even born at independence, a discohensive avalanche is likely to be unleashed. Many of the countries have already broken up in a *de facto* manner, although the rebel provinces will probably never be stable enough to be recognised by the United Nations. Nigeria is likely to come into the news at some stage, with a resurgent struggle for autonomy by the Ibo.²⁸⁵⁴ South Africa is also destined to erupt in a dramatic conflagration as its various peoples seek to carve out their own homelands, including a Boer homeland, and the country finally caves in to the intolerable illogic on which it is founded.²⁸⁵⁵

People everywhere are likely to hear growing claims about the advantage of independence for their particular country, region or province. In Germany, for example, one can expect the *Länder* to demonstrate greater independence from the Berlin government and there will be murmurings in favour of autonomy, probably beginning in Bavaria but spreading elsewhere. Russia is bound to fall

apart. It consists of a hundred different units spread across eleven time zones, with major cultural and economic differentials between them.²⁸⁵⁶ Its situation is untenable. Ukraine is highly polarised, with its eastern half being friendly to Russia and its western half being hostile. Romania faces the danger of civil war in Transylvania. This region was formerly part of Hungary and has a large Hungarian minority whose aspirations are being suppressed by local leaders.²⁸⁵⁷ India is another early candidate for break up, under the aspirations of Sikh and Muslim separatists, while the Muslims of China's western provinces will also break away. These are only some of the more obvious examples.

Perhaps the most surprising break-up will be in the United States. Here, a long-standing suspicion of federalism has been suppressed by economic success and the enjoyment of international superpower status. As the US withdraws into itself, its internal enmities will grow in significance. Power is already shifting back from the federal government to the individual states. One can expect them to start adopting their own foreign policies, involving independent negotiations with external powers, even though this is supposedly forbidden by the constitution.²⁸⁵⁸ The melting pot has cooled, and ethnic minorities are re-discovering and reinforcing their sense of separate identity.²⁸⁵⁹ Over the coming decades, American cohesion will come under further attack, with controversies over social transfers in the federal budget, for example, and attempts to limit migration into the most favoured states. Americans may also start preferring more narrow definitions of themselves, perhaps as Ohians and Pacific Rimmers, or as Mexicans and Africans (while remaining US citizens).

The Stars and Stripes will lose its grip on the American imagination. The federal government is already having to legislate against burning of the flag. This shows that something is terribly wrong for such legislation would hardly have been thought necessary fifty years ago. The old Confederate flag is reappearing in the southern states, and state flags will gain popularity. Media articles exploring what it means to be a New Englander or a Californian will constitute a growth industry, and some states will eventually start agitating to secede. The most avid clamouring will probably come from the poorer states, which are frustrated at the existing order, and from regions with emerging non-English-speaking majorities. In these regions, the commitment of Hispanics to the wider nation is very weak, as illustrated by their recent habit of waving Mexican flags during public demonstrations.²⁸⁶⁰ When one hears about the rise of the Midwest Independence Party, or some such, it will be clear that the United States will not be united for very much longer.

The culture of rights

The descent will see whole nations dissolve into collections of interest groups, each selfishly seeking its own advantage, and oblivious to the effect of its demands on people in general. The ideology of rights, disadvantage and compensation, which will intensify, will give encouragement to these groups and validate their demands for special consideration. One will hear more about disabled rights, for example, and about the need to overcome racism, sexism, ageism and homophobia. Yet the perception of disadvantage will persist, in spite of all efforts to eliminate it. Forms of discrimination that have not yet been dreamed of are likely to be discovered, and new groups will emerge whose goals are held to be at odds with those of everyone else. In England, regional peoples, such as Geordies or Scousers, may start to complain about being victims of discrimination.

Attempts to conciliate minority groups will delegitimise some of the crucial mechanisms holding society together. Institutions like the police will be subject to denunciation and interdiction to the point that they can no longer function. It may well be true that the police are racist and that there are significant injustices against ethnic and other minorities. However, efforts to right these injustices will not create a sense of shared participation in a common culture but will rather increase mutual suspicions and resentment. They will actually disrupt the understanding between people.

The fragmentation of western societies will be exacerbated by some areas falling under the control of immigrant peoples. In France, Genoa and Grasse could soon have Muslim majorities.²⁸⁶¹ In Britain, Leicester is expected to have a predominantly non-white population by 2010,²⁸⁶² while Bradford already does so.²⁸⁶³ These cities will have a strong justification for rejecting wholesale the prevailing French or British civic cultures.

The relations between ethnic groups will become particularly fraught. To be sure, the majority of people, having lost their sense of moral absolutism, will get along quite happily and unselfconsciously with their neighbours of whatever race or culture. Nevertheless, they will be subject to a continual barrage of public commentary suggesting that relations between groups are intolerably poisonous and need to be improved. In reaction to all this, a few chauvinistic individuals will be stirred into campaigns of hate-driven opposition. One should expect to hear that the membership of right-wing organisations is growing and see attacks on minority communities become a chronic, background problem. This violence is likely to be viciously reciprocated.

France is an ethnic time bomb in which the far right has a strength and credibility that British fascists can only dream of. In Germany, neo-Nazis

have torched immigrant hostels, and the movement is, if anything, growing. As the most economically successful country in Europe, Germany has had a particular attraction for immigrants, whom it largely welcomed when economic growth was creating a demand for labour. Recently, it has received large numbers of refugees from eastern Europe and Yugoslavia, including many Albanians. This is emerging as a very dangerous situation. Ethnic tensions in Germany may not produce another Nazi-style holocaust, but there will still be some considerable unpleasantness and ugly scenes.

In poorer parts of the world, with weak governments, inter-ethnic hostility will foment armed conflict. Much of sub-Saharan Africa is already afflicted. In South Africa, the whites are in a very precarious position, and are obvious scapegoats should better conditions go on failing to materialise. Indonesia, encompassing some 250 ethnic groups, is veering rapidly towards self-destruction, and will certainly not exist for much longer.

As hostility towards outsiders becomes more open, people will be forced to take sides whether they like it or not. Those who attempt to build bridges will be rebuffed, and their tolerant sensibilities will be increasingly challenged by outrages inflicted on their own communities. Previously moderate people will find themselves attracted into their respective camps and will feel steadily less sympathetic to those whose values blatantly contradict their own. Rising ethnic tensions will influence public policy to the extent that governments redouble their efforts to eliminate prejudice and disadvantage. This will involve significant intrusions into the way that people live and think, with a proliferation of new laws and offences. Again, instead of achieving interethnic peace and harmony, it will be more likely to foster rancour and belligerence. Overall, society will become increasingly polarised. People will be divided from each other and social relations will seem to be inevitably conflictual and competitive.

Women

Discohesion will reach right into the basic structures of society, i.e. into the family itself. Primarily, this means a division of interests between men and women, and a growing perception that their goals within a marriage and family are no longer shared. Within a decade there will be more unmarried adults than married ones.

Given its emphasis on self-realisation, the descent will seem to be a time of tremendous liberation for women. In this regard, Japan has much ground to make up. Here the pill was only legalised in 1996 and male responsibility to women is still recognised as an ideal.²⁸⁶⁴ In the west too, there are still many ingrained differences in attitudes towards men and women that have yet to be recognised and overcome. The distinction

between 'Miss' and 'Mrs', for example, must eventually disappear as the institution of marriage decays.

The media tycoon Rupert Murdoch is outwardly an extremely powerful man. Yet at the instigation of his wife he agreed to remove page 3 girls from his tabloid newspapers in New York, because she did not want their daughters to be exposed to such salacious material. This was a family-oriented matter, on which he allowed himself to be ruled by her. This illustrates the traditional distinction between male and female roles. Men have influence over the public side of life, whereas women have influence over its private side. If a woman's life brings satisfaction, it is a quiet, personal, unacknowledged satisfaction, but if a man's life brings satisfaction, it is a dramatic and obvious satisfaction, involving visible success against visible challenges. Although most men do not actually achieve prominence in traditional male roles, the few who do tend to enjoy great prestige. In the future, self-realisation will be available to men too. They will be freed from their traditional obligations towards women, and will be able to take on women's roles. However, this will not be seen as a great breakthrough, since women's roles have not generally been regarded as prestigious.

In books with titles like *The Coming Matriarchy*, feminists have depicted women reshaping the future world in their own image. According to Warren Wagar, some of these visions involve 'aggressive goal-oriented women ... apparently behaving much like their male counterparts'. Others assert that 'women are more nurturing, more intuitive and spiritually aware, more attuned to other people's needs and feelings, and more protective of life and the environment' and will create a 'harmonious future' for humanity 'grounded...in women's values'.²⁸⁶⁵ It might be wondered, if women have so much to offer, why it is that they have kept silent for so long, or why they should be any more likely to impose their values on society from now on. The reality is that it is not a question of men having prevailed in the past and women prevailing in the future. The society of the past was created by both men and women, with their different capacities and aspirations, and the society of the future will also be created by both men and women.

It is true that women will increasingly realise prestigious public roles in the time to come. They will deal with the world on their own terms. They will have independent incomes. They will arrange their relationships with men to suit themselves. However, this will not in any way represent a triumph of desirable feminine values over undesirable masculine ones. The notion that women are all superior human beings, nurturing, supportive and so forth, is absurd and has been exploded in numerous studies. Margaret Thatcher,

for instance, was hardly noted for her nurturing leadership style. Of course, Mrs Thatcher is not a typical woman, but then becoming prime minister is not a typical experience for men either. There is no reason to suppose that the qualities of female leaders and business tycoons will be any different from those of male ones. Quite simply, some leaders are supportive while some are not, and this applies to men and women equally.²⁸⁶⁶

Women are also perfectly capable of anger, hatred and violence. The last time that one MP physically assaulted another in the House of Commons, the assailant was a woman (Bernadette Devlin struck the home secretary Reginald Maudling over the Bloody Sunday shootings).²⁸⁶⁷ There have been many women terrorists. More than half the original founders of the Baader-Meinhof gang were women, as were a third of the Japanese Red Army.²⁸⁶⁸ Female members of Hezbollah have recently campaigned for the right to serve as suicide bombers (several did so before it was banned by the party's leader).²⁸⁶⁹ When Hungary was invaded in 1849, women clamoured alongside men to come to their country's defence.²⁸⁷⁰ During the British conquest of India, one young princess fought at the head of 2500 men to retain her property, when many male counterparts were ready to reach a peaceful accommodation with the invaders.²⁸⁷¹ Of course, not all women relish fighting and bloodshed, but then neither do all men. During the second world war some American GIs bitterly resented it when women replaced them in easy stateside jobs so that they could go into combat. Recruiting posters urged women to 'release a man to fight'.²⁸⁷² The men were as much victims of stereotyping as the women – perhaps more so, given that their lives were on the line.

The expansion of women's horizons in the coming decades, if that is what it should be called, is a triumph only of the selfishness that comes with dis cohesion. It will not make women any happier, as the feminists suppose. Most women, like most men, will not reach the pinnacle of great success. To be at an employer's premises day after day for forty years, performing tasks assigned by someone else, is no less drudgery than keeping house. Various surveys suggest that most women would happily give up work if they could and that they actually resent the apparent devaluing of motherhood.²⁸⁷³ An officer of the Institute of Directors notes that many women eventually decide not to go back to full time work after having children. She says she has been attacked, though, for suggesting that this is exasperating for employers when maternity legislation has forced them to keep a job open for months, disrupting other staff.²⁸⁷⁴

Dis cohesion brings the advantage of self-determination, but lacks the advantages of a moral community. There is not much self-determination

in a cohesive community like an Amish town, but neither is there any unemployment or sleeping rough under cardboard boxes. Neither cohesion nor dis cohesion can be said to satisfy human needs. Neither feminism nor its antithesis can be said to ensure women's fulfilment. While a minority of talented women will benefit from the opportunities provided by the dis cohesive times ahead, the majority will find that their notional liberation fails to live up to its promise. Indeed, as women succeed in ousting men from the work-place, they will only end up supporting the now jobless males out of their income taxes. Similarly, as they gain further access to traditional male roles, women troops will be deployed on the front line. In other words, among the people being killed and mutilated on the battlefields of the twenty first century there will be contingents of teenage girls. This is at best an equivocal sort of emancipation.

Since dis cohesion involves the proliferation of all possible moral ways, there will be significant numbers of women who react against the deconfinement of female roles. Free to choose any career, some women will choose domesticity, motherhood and a relationship with a man that is one of essentially mutual dependency. Free to behave brazenly, some women will choose reserve and modesty. This accounts for the high proportion of women among converts to Islam and the fact that an increasing number of Muslim women are voluntarily taking up wearing their traditional veils.²⁸⁷⁵ In explaining their decision to convert, some young women speak of the triviality and aimlessness of their previous life, with its emphasis on fashion, boyfriends and pop music. They contrast it with their pride and satisfaction at finding a place and purpose in life as a Muslim woman. 'I know who I am,' said one, 'and where I am going.'

As the descent proceeds, one will see women making good in the public arena. There will be more women politicians, more women entrepreneurs, and more women criminals. However, one should not expect to see a new golden age of mythical feminine values – just an ever more selfish world, in which, male or female, the individual always comes first.

Cults

One young Muslim convert described asking her father what the Church of England was about. 'King Arthur,' he replied. This young woman had a need for belief and meaning, which her upbringing had evidently not supplied. When she went looking for them, her father's understanding of his own cultural heritage was so inadequate that it is almost unspeakable. Eventually, she found Islam and with that people who knew what they believed, had confidence in it, and could give her the certainty she craved.

This illustrates the paradox of cohesion. Humans yearn to be free, but that leaves them insecure and yearning to be told 'who they are' and 'where they are going'. Society may have become secular but people in general have not. The demise of traditional religion has left a gap in their lives, though many may be unaware of it. Finding themselves alone in confronting the mysteries of life, people feel unaccountably dissatisfied. This results in social pathologies like drug addiction, which only leave people more desperate than before. With nothing to push against, people's pleasures come to seem transient and valueless.

Hence, there is a huge innate need for spiritual sustenance. As dis cohesion continues and the spiritual and moral foundations of society become increasingly fluid, this need will swell to huge proportions. In the coming decades, spiritual issues will loom much larger in people's lives. However, the spirituality of the descent will be immensely diversified. Some of it will be an attempt to recapture old legitimacies and the traditional religion. Many people, though, having thoroughly accepted the de-legitimation of their own traditions, will embrace alternative ones wholesale. At the same time, there will be a mass of people who continue to follow the secular life, self-indulgent, heedless of spiritual questions, sated in all material wants, but by no means contented.

The Roman Catholic church might meet a spectacular downfall, perhaps even confirming the twelfth century prophecy of St Malachy who foresaw only two more popes after the present one. However, though Christianity perishes, new sects will grow like grass on its grave. These will reinvent the Christian message, transforming it into something almost unrecognisable, but possessing new vigour. The old faiths will fade away, but some new cults will mature into stable traditions and may eventually spawn genuine religions.

The fragmented spirituality of the descent will not be successful in satisfying people's desire for moral certainty, for they will be surrounded by a jumble of alternative belief systems, all of which challenge their own. It may be some comfort to share values, attitudes and beliefs with the members of a local cult, but it is far better when one is in the company of millions – how proud and how certain one can be then. A meeting of the local Conservative party is not a Nuremburg rally. The touch-line of a Sunday football match is not Wembley stadium. In the same way, cult membership is not the same as belonging to a universal church. For all the religious revival of the coming decades, therefore, people will be left wanting. Spiritual experience will ring hollow. No moral way will be restored. Troubled by an ache they barely understand, these people will readily rejoice as their godless and goal-less civilisation is finally consumed by the flames.

Chapter 35 - The disintegrated world

All against all

When fuel shortages occurred in America in 1973, slogans such as 'more gas now' were daubed on walls, and angry rioters burned petrol stations and cars. During the French revolution, peasants stormed the Bastille and the royal palace, though shortly before they had been meekly tending their fields and for all the world seemed as harmless as can be. It is extraordinary how easily violence can break out when problems arise and threaten people's normal conditions of existence. Frustrations are vented by mindless destructiveness. If there is no effective authority to restore order, things can soon get out of hand and people simply go on the rampage.²⁸⁷⁶

During the final stages of the descent, police will be losing the battle against criminality and civil revolt. People will have to start taking the initiative to protect themselves, their families, and their belongings. Properties will be more heavily fortified and there will be a proliferation of gated communities patrolled by private security guards. Whole towns and villages may start to defend their borders, perhaps with manned checkpoints across the roads leading in and out. In the cities, vigilantism is likely to emerge.²⁸⁷⁷ People will acquire arms and take it on themselves to administer the roughest forms of justice. They will put barricades across the streets controlling entry and exit to particular neighbourhoods. Boundaries will begin to emerge everywhere and people will become increasingly aware of their no-go areas.

As the dark age begins, all overarching governmental structures will be swept away. The world and every part of it will no longer be under anyone's control. In principle, this implies terrific freedom. No one will be collecting any taxes, for example. There will be no driving tests, no double yellow lines, no speed cameras. Nor will there be any licensing hours or drink-drive limits. No one will be required to attend school or do jury service. It will not be necessary to get planning permission to knock the walls around in listed buildings, nor to build a new home on the greenest of green fields. People will be able to buy and sell whatever drugs that they please.

Unfortunately, most of these new freedoms will be purely theoretical. Lawlessness will also mean a free hand for everybody who wants to rob or assault others. The fact that there are no licensing hours will not be much to celebrate when the pub has no beer because all its supplies have been hijacked en route. The non-availability of petrol for similar reasons may make it difficult to take advantage of the freedom to speed and park where one likes. During the dark age any kind of complex activity will become effectively impossible. Even the drugs trade, ironically, may

be difficult to conduct in the absence of law and order.

Given such anarchy, it may be possible to conduct a limited form of barter with one's neighbours, assuming that they are not violent bullies who just take what they want without asking. However, money will no longer be usable. Its acceptability depends upon the guarantee of a political authority and there will not be any. Gold and silver coins may be exchangeable, for their intrinsic value, but no one will want to accumulate too much of these. They will only make one a target for bandits. In any case, one cannot wear, eat or shelter under coins – and those will be people's main concerns. They will be likely to hide or bury their hoards of valuables, preferring to live simply and to keep themselves to themselves.

During the dark age, people will be able to go wherever they like within the country, or indeed within the world. They will be able to take what they like, and behave however they like. Nevertheless, they will need to be able to stand up for themselves as they do so. Every kind of bandit and ruffian will be ready to prey upon them or push them about. This will be a dangerous time to be alive. One can expect frequent disturbances and vicious squabbles. Today, when neighbours argue about the height of a hedge, they take each other to court. In the dark age, the aggrieved party may burn the hedge down. People may return to the institution of the feud. There will be no sanctions against murderers. For the victim's family, the only redress and the only deterrence will be killing in retaliation.

In general, the dark age will mean a state of chronic and general war. This will not be war between massed armies. It will be micro war, fought over local issues by tiny groups, using individual weapons. In the parts of the world where disintegration is proceeding fastest, traditional armies are already encountering such renegade, slippery opponents. The Pentagon is revising its military modus operandi to cope with more small-scale struggles as malcontents of all kinds take advantage of the vulnerabilities of technological civilisation.²⁸⁷⁸

The disputes of the dark age will be highly convoluted and changeable. People will not recognise the principle of a fair fight. Their war-making will be vicious and unrestrained. Every available weapon will be used, for it will be a desperate matter of kill or be killed. The Geneva conventions will be quite irrelevant in a world in which all political structures have disappeared. The future lies with guerrillas, i.e. with anonymous part-time warriors, whose scruples are few and whose tactics are fluid. This type of warfare makes it easy for anyone to participate, and it rewards the inventive.²⁸⁷⁹

On the other hand, these warriors will still need to eat, and that will be difficult in a highly disorganised world. They might prey on more peaceable people, but there will be little surplus for them to seize. They will also have to fight for whatever they take, and if they meet any resistance it may not be worth the effort. Hence, warfare during the dark age is likely to be intermittent, the warriors having to tend their farms or their fishing nets between military expeditions. Conversely, farmers and fishermen will have to take up arms to defend themselves, with offence sometimes being the best form of defence. In effect, everyone will be a warrior.

A relative few will take it upon themselves to harry the rest. Most will want to hide themselves away, mind their own business and stay out of trouble. Furthermore, the bandits will be used to a hostile reception, as well as poor returns from an impoverished population, and that is likely to reduce their enthusiasm. If one is discreet and alert, it should be possible to see out a quiet existence, punctuated at irregular intervals perhaps by some more unpleasant episodes. One will be free, but fearful. Those people who prefer a predictable, risk-free existence, in return for giving up their self-respect and subordinating themselves to others, will find the dark age difficult. Those who are naturally proud, confident, and insubordinate may find that dark age conditions offer more than they take away.

Overall, the dark age will be a time of freedom but it will be a rather drastic kind of freedom. The opportunities will be totally equal for everyone, meaning that what one makes out of life will be entirely dependent on one's own aptitudes and abilities. The outcomes will be extremely unequal, but not necessarily unfair, insofar as birth and privilege will count for nothing.

New dynasties

In those places where the dark age is deepest, and disintegration proceeds to the family level, individual households will fight each other. More generally, groups of families will probably join together. Insofar as these bands reflect the prevailing disintegration, their decision making structures will be democratic. Democracy is normal for societies functioning at the band level. One or more individuals may emerge as leaders on account of recognised qualities such as intelligence, emotional maturity and decisiveness. However, their leadership will be situational rather than absolute. During peaceful interludes, the band will typically govern itself through a council rather than submit to the will of a ruler. The council will provide a forum for the resolution of disputes by negotiation, but it will not coerce its members.

The dark age world will be dissolved into a multitude of such little local bands, each with its own rules and procedures. However, this condition

will not last for long in its original form. There will inevitably arise adventurers who are keen to go out and knit all the bands back together into an integrated polity. Some types of personality are driven to manipulate and dominate others. They have a superior understanding of other people's thoughts but a poor understanding of their feelings. They can control people effectively and are not inhibited by fears of hurting them emotionally. Studies show that such people tend to be bullies at school, but can go on to achieve powerful positions in adult life.²⁸⁸⁰ In more settled times, they might become successful politicians or industrialists. In the dark age, they will take charge of their local communities to pursue whatever prestige is then available.

At first such adventurers will find the going difficult, for obvious reasons – the lack of a surplus, and the heavy resistance from other bands. However, over time, particularly forceful individuals are likely to achieve some success in leading their groups to plunder those who surround them. They will help their band to prosperity while enjoying permanently elevated prestige within it. By attaching oneself to one of these war lords and bandit companies, one will share in its combined strength and enjoy its protection in return for submitting oneself to its discipline. Successful warlords will therefore attract followers. If they manage to stay on top of what will continue to be a very dangerous world, their bands will grow in size and along with it their bands' and their own reputations.

The dark age will therefore present the domineering type of personality with considerable opportunity. It will see the founding of great new dynasties. In today's relatively integrated world order, the top strata of society, the royals and aristocrats, are quite secure in the hands of certain ancient families who laid the ground work for this position long ago in obscure times close to the last dark age. No matter how bullying and manipulative a person might be, it is very difficult to breach these patrician ranks – though some dynasties manage it. In the political meltdown of the dark age, everyone will start from the same level. This will be the chance for those who want their descendants to be the royal families of five hundred years hence.

As assertive personalities contend for ascendancy in what is essentially a free for all, the resulting power structures will be very realistic. There will be no illusions, and no scope for perception to deviate from reality. Today, rulers can be out of touch, slow to change their opinions, and responsible for poor decisions.²⁸⁸¹ During the dark age, only the most forceful individuals with consummate judgement will prevail. Therefore, the peace and order that eventually emerge from the chaos will be unusually sound and stable. For one

thing, this means that parts of the world that are today plagued by chronic conflict will, when left to their own devices, be finally able to sort themselves out. This has already been observed, for example, in the guerrilla wars of Nicaragua, Guatemala and El Salvador, all of which began to move towards resolution after the Soviet Union withdrew from the scene.²⁸⁸² The referee-less struggles of the dark age will see this happen more thoroughly and on a much wider scale.

It will not be clear during the dark age that new dynasties are emerging. There will be many contenders. Countless individuals who have extremely powerful personalities and achieve greatness in their own time will leave no impact on subsequent history simply because their successors fail to capitalise on their achievements. Their names and their deeds will be forgotten in the obscurity and tumult of the dark age – or at least the memories of them will be so distorted and fanciful that, as far as future historians are concerned, they might as well be fairy stories.

Nevertheless, slowly but surely, some lineages will achieve a kind of momentum. They will displace their rivals, spreading their authority over ever wider areas. It will be a confused process, with waxing and waning, advances and setbacks. The long run trend will see integration increasing again, and order being made anew. As the mists of the dark age dissipate, it will be seen with increasing clarity that a number of families have established themselves and entrenched their power. They will still be only petty chiefs, and personal qualities will be as important as family position in deciding how the leadership is handed down. Yet it will be mostly these lineages that provide the barons, dukes and kings of the new era. As the discontinuity of the dark age recedes into history, social status will rapidly become once again a matter of ascription more than achievement. Those who have failed to seize the chances afforded by the dark age will have forfeited the opportunity for another millennium or so, until the darkness comes again. That may be thought a long time to wait, a long time to be an underling.

De-urbanisation

Virtually everything that a modern city needs to survive must be imported by train, truck and ship or brought in by pipe and cable.²⁸⁸³ The city depends on the constant arrival of trucks and ships bringing in food and the equally constant departure of trucks and ships carrying away the rubbish. All this relies on political order, guaranteeing safe conduct and regulating people so that they take care of their shared environment. When the political order has broken down, cities will be in trouble. Brigands will make the roads unsafe, choking off the city's lifeline. Municipal refuse collection and street lighting will disappear, to leave the city dirty and dangerous. Who will pay the bills for these

services when all forms of government have been swept away in the collapse? With its inflows and outflows interrupted, the city may become non-viable almost overnight.

Cities also have the highest concentrations of the underclass. Consequently, they contain the mechanism of their own disruption, in the form of a huge reservoir of potential violence and criminality. Already, in some areas, shops must be protected with thick metal shutters, and it is sensible to have alarms on one's house and one's car. When government is a thing of the past, and the police have disappeared from the street, nowhere in the city will be safe from the unchecked wants of the dispossessed. The city will be a magnet for all the wandering criminal bands and plunderers who will be given carte blanche by the total disintegration of the early dark age. They will converge on urban concentrations to seize and fight over whatever remaining luxuries the corpse of the old civilisation still has to offer up.

A neighbourhood in which the electricity has been cut off, the sewers are no longer maintained, the hospitals are closed, the shops are bare and looters roam the streets will eventually not be a neighbourhood that is worth staying in or defending. Clearly, there is going to be a huge efflux from the cities around the time of the collapse. The richest people are likely to go first, for they will have the resources to do so. They will retreat into country residences, which they may start to fortify.²⁸⁸⁴ Even those who are not rich would be well advised to join this exodus at the earliest opportunity. As one detects that the collapse is close at hand, one should look for the remotest and quietest place to live in that one can find. Somewhere mountainous and inaccessible will be ideal, although one must be prepared for self-sufficiency. Any retreat cannot be too barren.

The poor, who have neither the resources nor perhaps the initiative to flee the city, will face a desperate time. Eventually they will have to get out, but only when conditions have become wholly intolerable. Unable to anticipate the appalling consequences of political collapse, they will be forced to experience them at first hand. In the first few decades of the dark age, some dreadful scenes will be enacted in the richest countries and especially in their rich urban centres. In many past instances of collapse, there is evidence of burning and of bodies left unburied in the streets where they have fallen. One cannot be optimistic about the level of violence with which today's cities will be evacuated. Apart from anything else, their gas and electricity mains and the contents of petrol stations will make possible a huge conflagration.

When the dark age reaches its nadir, it will not be good even for those who have earlier ensconced themselves in their rural estates. Out of the cities there will come a monstrous tide of brutalised

humanity with no apparent means of feeding itself or clothing its children. Places like London and Birmingham are likely to be abandoned first, but in time every remaining pocket of order and civilisation will be threatened. Only the most remote safe havens have any chance of escaping unscathed (though their very remoteness will ensure a rude existence). As they flee from each other, people will spread across the globe to form an almost uniform layer.

Ruins

All over the world, there are the ruins of ancient buildings, the debris of once glorious civilisations. During the coming dark age, the infrastructure of today's technological civilisation will be reduced to ruins in its turn. Only fragments of it will survive to remind the people of the dawn what their ancestors achieved.

The collapse of the built environment is already well under way in some parts of the world. In Russia, the ugly, utilitarian buildings that were shoddily thrown up during the soviet era are now falling down with a vengeance.²⁸⁸⁵ All across the country, urban areas are crumbling to oblivion, as Russia accelerates headlong into the dark age. In western countries, modern buildings may not be as badly constructed, but they are not particularly durable. It will take only decades for the buildings to become uninhabitable and possibly to be reduced to piles of rubble.

Roads and bridges, which are public goods, are largely provided and maintained by a political authority. In Europe, it was only as societies became more ordered from the seventeenth century onward that roads began to be built again on any scale. With political disintegration, the situation will go backward, and roads will fall into disrepair, perhaps lasting less well than those of the Romans. In the United States, nearly half of all highway bridges are noticeably ailing. Every year, one or two hundred spans suffer partial or complete collapse, sometimes with disastrous consequences. The most dangerous are not necessarily the oldest, or even the most heavily used. Almost always, the culprit is deferred inspection and maintenance, which is in turn attributable to lack of funds.²⁸⁸⁶ Already, the US government cannot afford to keep up the legacy of more confident times. When it has disappeared altogether, America's bridges will fall down and stay fallen.

The main reason why future archaeologists will find contemporary civilisation in ruins is because of the orgy of devastation that will follow the collapse of the political order. Today's motorways will end up looking ravaged, not because of their exposure to the elements, but because people rip up the barriers and the cat's eyes for use in building or in jewellery, or to sell off to people in other places. Some of the destruction will be quite mindless. The

disadvantaged majority will work out its resentment by smashing and burning the symbols of ancient privilege. How satisfying it will be to rampage through Buckingham Palace say, breaking glass, soiling the carpets and chopping up priceless antique furniture to use as firewood. Insofar as any structures survive the mob, during a dark age that could last two centuries or more, it will be because to break them up requires too much effort.

The latest buildings, which have been and will continue to be constructed cheaply, are the most likely to be destroyed. Only the most durable artefacts, and even relatively few of those, will survive beyond the horizon of the dark age. St Paul's cathedral might be known to tourists a thousand years from now, as a jumble of stone blocks, but Coventry's concrete will have crumbled into formless oblivion. The Louvre may continue to exist, as a shell, but the glass pyramid that now sits in its courtyard certainly will not. Future historians will therefore picture contemporary civilisation not by its high-rise blocks and housing estates, but by the cathedrals and castles that were constructed hundreds of years ago.

Humanity's latest achievements, the technologies of the information age, will be particularly vulnerable to the disorder that accompanies the collapse and dark age. The infrastructure that supports today's railways, banks, power stations and air traffic control systems will be increasingly abused as disorder grows. Some British banks are already believed to have handed over millions of pounds to various electronic extortionists. Mere malice will eventually turn into real damage. Hackers and computer virus creators may rampage through this electronic infrastructure just as ruinously as the Visigoths once rampaged through Rome.²⁸⁸⁷ Electromagnetic pulse weapons may also be used by gangsters to wipe out each other's computer chips.

After the collapse, it will be pointless getting involved in any undertaking that depends upon high technology. One will simply be too vulnerable. People could conceivably be reduced to iron age levels. There will be no internet, no telephones, nothing of this kind whatsoever. All these so characteristic products of contemporary civilisation will either be deliberately attacked and ruined or they will be scrapped and abandoned as being too much trouble. Just as previous civilisations have left behind shattered pottery, so contemporary civilisation will leave behind broken computer equipment. Future historians will have only the haziest understanding of what people actually achieved during the twentieth and twenty first centuries. Their best insights are likely to be found not on earth but in orbit around it. Geostationary satellites at least will reveal that before the dark age people once enjoyed rich and comfortable lifestyles. For the most part, though,

today's technical accomplishments will be ruined and forgotten

The destruction of today's infrastructure will continue even as the world emerges the other side of the dark age. In a similar way, great Roman buildings were converted into Christian churches or treated like quarries.²⁸⁸⁸ Many ancient roads and even Stonehenge would be in better condition today if bits of them had not been dragged away to build farmhouses. As the dark age dissipates, people will know very little of what has gone before, and given their more pressing concerns they will have little desire to preserve its legacy. That will be something for historians and archaeologists to reconstruct, when, centuries later, some people have leisure again. Being a newly vigorous society, the post-dark age people will be more interested in fashioning the future than in safeguarding the past. Today, England's Saxon churches are few and far between because people tended to knock them down in order to build something bigger and better. Those parishes that now boast very early churches are drawing attention not to their conservation-mindedness but rather to their chronic poverty through the ages. Similarly, the people of the dawn will with equanimity break up their ancestors' buildings, melt down their cars, and cast their computers into the lake, so that they may more easily plough the fields. Long after the world has recovered from the dark age, latter day archaeologists will deplore such vandalism.

Barbarian invasion

Rome's collapse is popularly attributed to the invasion of German barbarians. Although this is only a shorthand for something much more complex, it remains a compelling vision – the uncivilised hordes sweeping down, to rape, pillage and lay waste the civilised but effete urbanites. Rude poverty meets cultured wealth and overcomes it. Ignorance meets learning and burns its books. Violence meets peace and order, and destroys them. One might ask whether the collapse that ends the current descent could similarly see barbarian hordes overrunning western cities, murdering their inhabitants and leaving everything in ruins. The answer is surely yes. Some kind of barbarian invasion is almost certain to occur.

The west faces a growing demographic challenge from the rest of the world, just as the population of the Roman empire declined while that of the Asian and Germanic tribes underwent a surge. The poorer nations have time on their side. In most parts of the developed world, total fertility is now below the replacement level.²⁸⁸⁹ The west no longer has the vigour to be expansionist and offensively oriented. By contrast, Africa, South America, and the middle and far east are teeming with eager youths. In 1989, nearly half of Mozambique's population was under 15, when in Germany it was less than a sixth. These young

people are crowding into a world of space age communications, far more aware than their ancestors were of the planet and its possibilities. They have dreams and expectations, and they do not see the world through western eyes.

While the ingress of Odoacer's army in 476 put the final punctuation mark to the western Roman empire, the invasion really began centuries before, when people from barbarian nations began infiltrating the imperial demesne. They came to trade and to work. The citizens of the empire even welcomed them in, for they were prepared to do the things that the original Romans were too idle or conceited to do for themselves. Western countries have been experiencing exactly this kind of silent invasion for some decades. Like Rome, they have a huge draw for people from poor, turbulent parts of the world. No one should be fooled by the menial jobs that immigrants take on. These are the go-getters who make their way to the west. They are more intelligent and enterprising, on average, than the people among whom they sojourn, and they have ambitions. They do not intend to prop up pampered western lifestyles for ever. Growing numbers of foreign workers are moving into the professional occupations.

As western political disintegration continues, immigrants will arrive in increasing numbers, and will exploit very well the opportunities that are on offer. The ageing of western populations creates a continuing need for new arrivals to support the growing number of pensioners. While indigenous populations waste their lives on the dole, these latter-day barbarians (a term that should not be regarded as pejorative) will be building their power and influence as they infiltrate every corner of the west's civic life. The latest arrivals will be the least easily assimilated and the most cynical in their exploitation of what the west has to offer.

Today's peaceful invasion of economic migrants will prepare the ground for their kinfolk back in the homeland. When the west has become terminally feeble and defenceless, the only citizens who retain any vigour and sense of purpose will be those who have no allegiance to anything it stands for. Yet the western countries will still be laden with riches. This combination seems bound to be irresistible. The final days of the present world order are very likely to be marked by mass movements of people out of the impoverished lands. They will come from Africa to Spain, Italy and Greece, thence northward; from the middle east, across eastern Europe and perhaps Russia, to Germany; from Mexico and across the Caribbean from Brazil into North America. Moreover, these people will not come peacefully. They will have consulted no immigration official. They will bring no passports. They will not be coming to work. They will be seeking booty, and revenge for half a millennium of humiliation.

The western nations have spread an enormous amount of bad blood around the world in the present era, interfering everywhere and imposing their values with a degree of insensitivity that future historians will truly wonder at. The dark age may see the opportunity for old scores to be settled and to be paid back not once but three times over, as centuries of resentment are relieved in a few intense years. When the plunderers arrive, they will head first for the big cities, where the pickings are richest and thickest on the ground. They will be looking for everything from petrol to slaves and precious metals.

Unplanned migration is already a problem in the west. The number of people seeking political asylum has increased dramatically in the last few years. Between a third and a half have their applications refused, but in Britain that still means thousands being admitted every year.²⁸⁹⁰ In an increasingly disordered world, one might expect that the proportion of admissions should rise, since claims of fleeing oppression will seem increasingly just. Besides which, large numbers of asylum seekers lose patience with the bureaucratic process and go underground as illegal immigrants. In Britain, at least 60,000 have thus evaded the authorities in the past decade. Smuggling third worlders into the rich countries is now a multi-billion dollar criminal business.²⁸⁹¹ Fishing vessels carry them across the Mediterranean and truckers speed them overland.²⁸⁹² Bangladeshis, Iraqis and Indians were recently found to be riding in to Britain on freight trains going through the Channel tunnel.²⁸⁹³ New laws, tougher rules and more vigilant border controls may slow this tide, but they will not halt it. The would-be immigrants are extraordinarily determined. Five Ukrainian men were recently intercepted trying to row across the English Channel in a child's inflatable dinghy.²⁸⁹⁴

Today, third worlders come surreptitiously rather than bearing down on the rich countries in their hordes because they perceive that the latter, who not so long ago directly ruled the third world, are well able to defend themselves. Today, they are probably correct. However, with every decade, the reality is changing and so eventually will the perception. In Sierra Leone's recent civil war, teenage soldiers, both girls and boys, were required to eat the organs and drink the blood of their victims as a military initiation rite.²⁸⁹⁵ By contrast, trainees at Britain's school of naval gunnery were being asked to shout 'bang' rather than fire real

ammunition, in a bid to contain costs.²⁸⁹⁶ It is increasingly doubtful whether these western youths, whose only taste of violence is in computer games, will really be any match for the blood-drinking, machete-wielding Africans in a serious, face-to-face fight.

The Sierra Leone teenagers conduct military actions that they call Operation No Living Thing and Operation Pay Yourself (i.e. looting). How long can it be before they start bringing these 'operations' to feebler and far more lucrative Europe? Although they are seldom in western thoughts, today's underprivileged peoples are well-informed of the richness of northern lands, of the vulnerabilities of those lands, and of the existence of others dissatisfied like themselves. They are fully engaged in the world and they show an astute understanding of how to operate within it. Ugandan conmen posing as underprivileged schoolchildren were recently found to be raking it in with begging letters sent to prominent Britons.²⁸⁹⁷ Other scams have originated in Nigeria. In 1999, refugees in Tanzania were rioting because fleeing Kosovans seemed to be receiving better rations than they were.²⁸⁹⁸ Clearly these people know exactly what is going on elsewhere – and they are not happy about it.

In August 1998, Moroccan and Tunisian asylum seekers who were being held on the Italian island of Lampedusa destroyed their detention centre in a night-long orgy of violence. For fifteen days they had watched through barbed wire fencing as western tourists sunned themselves on a nearby beach, laughing and joking, enjoying good food and copious quantities of wine and beer. Eventually they could take no more and, with temperatures touching 40 degrees, erupted in a spasm of riot and arson.²⁸⁹⁹ This is a microcosm and a warning of what the future holds in a world where large numbers of hungry, brutalised, third world youths are daily being televised the image of fat, spoilt white people living it up at a party from which they have been thoroughly excluded. The west's present insouciance may be thought breathtaking.

The neo-barbarian invaders of 2050 will leave little clear record of their activity, for they will destroy as they go. Future archaeologists will have to guess at the horrors that might have occurred. They will have to judge from the rubble, the signs of burning, the apparent changes in racial mix of local populations, and the abrupt silencing of a once articulate and exuberant civilisation.

Chapter 36 - The disorganised world

Impoverishment

People's lifestyles have become highly dependent on goods they can only obtain from abroad. No country produces all the metals and minerals used by its industry. Europe and Japan rely critically upon overseas oil. As trade is cut back during the collapse, it will not just mean a few exotic items disappearing from the shops. The industrial world's whole way of life will fall apart. Today, ordinary people rely on extensive and unbelievably convoluted exchange networks in order to have things like refrigerators and washing machines, which they could never manufacture for themselves. These devices are now usually classed as necessities.²⁹⁰⁰ Yet they will suddenly become unavailable and that will cause much pain.

Lawlessness and an absolute loss of confidence will ensure that all types of commercial activity come to a grinding halt. There will be no such thing as a job or a shop. People will withdraw from the whole pass-the-parcel activity of the economy and will be forced to return to a simpler, cruder lifestyle. They will eat and wear only what they can produce for themselves. As tools left over from the time before the collapse become broken and worn out, people will have to replace them with home-made equivalents – or go without. For the most part, this is likely to mean going without. In contrast to the situation a century ago, many everyday appliances are quite beyond the capacity of ordinary people to fix. Few people could repair a microwave oven or even an electric razor.²⁹⁰¹

People may be able to barter some goods and services directly amongst themselves. However, it is impossible to run, say, an electricity grid or an airline by simple barter. These require the flexibility of credit. They will be completely non-viable in the disorganised dark age. Many other things depend upon these services and will also have to be given up. Even if one keeps one's old refrigerator or washing machine, there will be nothing to power it, unless one has the skills to put up and maintain a generator (wind-driven, given the lack of petrol).

In response to the neglect of the dark age, let alone deliberate vandalism, the world's technological infrastructure will fall apart at a rapid rate. The numerous services on which contemporary lifestyles depend will certainly not keep working by themselves. A nuclear power station or a telephone network requires continual monitoring and maintenance in order to avert its potential for catastrophic failure.²⁹⁰² These services are also characterised by intricate and massive interdependencies, so that problems in one area can have drastic consequences elsewhere. In 1998, the failure of a single geostationary satellite meant that across America forty million pagers were disabled, self-service petrol pumps would not take credit

cards, and hundreds of radio and television stations were knocked off the air.²⁹⁰³ Collapse is therefore likely to be very comprehensive, and it will be difficult for people even to cobble together local solutions.

In short, the self-sufficiency of the dark age means that things people take for granted as the background to their lives – telephones, motor vehicles, recorded sound, television – will fall out of use. Instead, people will be making and mending only the simplest utensils with whatever is to hand for raw materials. John Pilger has described how people in the town of Butterworth in South Africa are so poor that they recycle scrap metal from wrecked cars into a variety of implements on hundreds of tiny braziers. This might stand as a vision for the kind of industry that will typify the dark age. At dusk, Pilger says, it looks like a scene from Dante's inferno.²⁹⁰⁴

With brigandage and violence making urban life unbearable, people will be decanting from the cities at a prodigious rate. Before long, the countryside will re-invade and cover everything in greenery, just as wild flowers rapidly colonised areas cleared by bombing in the second world war.²⁹⁰⁵ After today's urban centres have been abandoned for a century or more, they may become engulfed by trees, as at Angkor or Chichen Itza.

Today, people only put up with the city's noise, haste and frantic activity because it offers economic opportunities.²⁹⁰⁶ There is a trade-off between the forces of attraction and repulsion. A healthy economy therefore encourages people to congregate in one place, so that they come to be distributed in a very patchy manner across the landscape. With the economy's collapse, by contrast, they will spread out again. Apart perhaps from the intrinsic fertility of some areas, there will be no reason to be in one place rather than another.

In Britain, the dark age will see the end of the north-south divide. London and its environs will have nothing more to offer than any other part of the country. Elsewhere, similar forms of regional preference will disappear and, in the world as a whole, the self-reinforcing advantages of the developed countries will be eradicated. When the world emerges from the dark age, people will be free to devise some entirely new pattern of urbanism.

Having said this, the positions of towns and cities are often dictated by the distribution of topographic features like rivers and hills. Therefore, when people start coalescing again during the dawn, some towns may move slightly, others may disappear, and some new ones may be created. However, in many cases, the urban landscape will probably fall into the same general form as today. There will almost certainly be a new London, Birmingham and Liverpool in the next

era, although their names are likely to change, and the old buildings will be buried as people clear away the trees.

During the dark age, the problems of highway robbery and uncertain fuel supplies will mean that people do not travel around in cars, boats and aeroplanes. Movement will be very difficult. The skies, sea-lanes and roads will be all but empty of traffic, and people's horizons will narrow drastically. One will no longer drive fifty miles merely to go shopping. It will be a day's expedition just to go five miles. Given the demise of the world's media industry, people will also lose touch with what is going on in the rest of the country, let alone on other continents. Clearly, life in general will be very impoverished. This is going to be a world of meagre existence, low expectations, and considerable ignorance. It will be a very dark world.

Uncomfortable times

There will be no welfare state during the dark age. Nor will there be a legal system awarding compensation for personal injury. If people trip over the pavement or drop scalding coffee on their laps, that will be hard luck. They will have to live with the consequences of their own lack of care. Other than their own close relatives, no one is going to have any sympathy. Still less is anyone going to go out of the way to provide for them, even if their injuries are genuine and prevent them from providing for themselves. This is going to be a very tough and uncomfortable world indeed.

Those people who are today supported by social security payments will find themselves thrown on their own devices. A cold wind is going to blow through their lives. They will discover that the income that has always seemed to come like manna from heaven, meagre though it is, no longer arrives. Perhaps for the first time in their lives, they are going to have to feed and clothe themselves by their own efforts – either that or starve and go naked.

This is going to inject an unfamiliar shot of harsh reality into millions of people's existences. Those who 'cannot find a job' or are 'suffering from stress', will discover that such concepts have lost all meaning. No one will be able to find a job in the dark age. Everyone will be suffering from stress. Yet one way or another, everyone will have to procure the essentials of existence. All excuses and special pleading will be pointless, for there will be no welfare benefits officer to hear them. People may cry out in anger and frustration, but their anguished complaints will disappear into the void and will leave them behind to get on with it as best they can.

It is not only certain malingerers who are going to lose out. Almost everyone derives some benefit from the system of social security, and almost everyone will therefore be a loser. How are people

going to educate their children when there are no state schools? What are they going to do when the pensions that they have been looking forward to fail to materialise? Having a private pension is not an alternative. In the totally disorganised world of the dark age, the logic on which such pensions are based will break down altogether. Any funds one may have accumulated will be quite worthless. If one's retirement date lies on the other side of the coming collapse, then it will never come at all. No one retires in a dark age. People will have to go on procuring food and patching up their shelter as long as they are able. They may be fortunate and have caring children to help them, but they will never experience the carefree and affluent leisure that once was promised them in retirement.

Those young women who allow themselves to become pregnant by a man who shows no interest in subsequently providing for the child will be on their own. There will be no free housing or living expenses. There will be no government agency to enforce the father's responsibilities. If a woman really cannot look after herself and her child, she will face starvation in the gutter. Evidently, this prospect is likely to make young women somewhat unwilling to engage in casual sex. There will be a rapid return to the idea that sex is something women make available to men only after the latter have made a substantive commitment to stay around and help deal with the consequences. Similarly, a young woman's relatives, insofar as they care for her, will be keen to steer her away from yielding to her sexual desires, and they will wish to punish or pin down any man who breaches these defences. Men may also have good reason to be watchful of their partners. Today, it is estimated that up to 5 percent of children are not the offspring of the man who believes himself to be their father.²⁹⁰⁷ From a genetic point of view, these cuckolds have been tricked into expending their economic resources for the benefit of another man. This is presumably the logic behind male jealousy. When times are hard it will make even more sense than it does today.

In this way, the disorganised state of the dark age will sharply point people's values in a more sober and responsible direction. The excesses of the descent will be extinguished in the face of such new realities. This does not just apply to sexual mores. In every area, people will need to become more responsible and hard working, if they are to survive. This will soon be reflected in their outlook on the world. Disorganisation will bolster the re-emergence of a strong moral way, emphasising such qualities as sexual continence and self-reliance.

Many people who today seem unemployable and destined for chronic dependency, such as drug addicts, may turn out to be capable of using their time far more productively when the dark age

forces them to do so. However, certain people really cannot help themselves. They may be too stupid or too disturbed to fend for themselves in a newly unforgiving world. In that case, they are likely to die and rather quickly. They may starve, die of exposure, be poisoned by bad drugs, or be murdered by those from whom they unwisely attempt to steal.

The hardest time in the dark age will be for those who are physically incompetent. Paralysed armed robbers will not survive beyond the collapse. In a world without even electricity, let alone round-the-clock nursing care, those who cannot breathe or eat for themselves will not last long. In the case of those whose disabilities stem from their criminal exploits, few tears may be shed. However, the same applies to many others, who have simply been unfortunate – premature babies, those with congenital defects, people who suffer accidents, and so on. Anyone whose life is today being saved or at least prolonged by heroic medical interventions, will not be so fortunate in the dark age. Highly developed medical systems, which use sophisticated technology and employ many specialists, rely on a complex economy, just like an electricity company or an airline.

Doctors and nurses may continue trying to treat the sick as the world disorganises around them, but they will eventually be forced to abandon their patients, however great their altruism, just to concentrate on the difficult business of feeding their families. Following the collapse, people will be in a world without hospitals or drugs, and in which it will be extremely dangerous to become seriously sick. Some doctors may be able to go on bartering their medical knowledge in return for the means of subsistence, but on the whole specialised health care will be non-existent.

Having said this, even the earliest humans looked after some members of their bands who were unable to fend for themselves. Stone age skeletons have been discovered which show that the owner suffered from severe disability, through trauma or disease, but still lived for many years. Similarly, the dark age may force people to be very realistic, but it will not necessarily make them heartless and uncaring. It is just that all succour will have to come from within the small family group rather than from the community at large. It will therefore be necessarily restricted in comparison to that of today, and the sickest people will be unlikely to do well on it.

Back to the land

The self-sufficient people of the dark age will have to fend for themselves by living off the land. At first, it will be a particularly rude form of existence. Most people do not have the skills even to build a decent barn or construct a horse-drawn wagon. Nor, in most cases, do they have the faintest idea how to grow crops or hunt game.

People have lost elementary agricultural knowledge, and their farming efforts will be inefficient and likely to damage the soil. If anything, they will be worse off than their medieval forebears. Some painful lessons are on the cards.

Eventually, however, people will attain some sort of equilibrium as subsistence farmers. They will tend their crops during the day, and whittle wood or perform other crafts in their spare time. In the evening, they will eat home grown produce around the log fire, and tell stories to their children to while away the hours until bed time. When they retire, they will go to sleep knowing that they have done an honest day's work.

Such a return to a rude and rustic lifestyle may seem almost appealing. People will soon discover that the reality falls short of the romantic idyll. It will involve back-breaking work and perennial uncertainty about the future. In many regions, it will also become clear that there simply is not enough space for everyone to live a life of back-to-the-land subsistence.²⁹⁰⁸ Contemporary farming can support so many people in the developed countries only because it is mechanised and energy intensive. Centuries ago, when agricultural methods were simpler, the population was much lower. The population has grown because of the gains of the industrial revolution. When those gains are reversed, human numbers will turn out to be far in excess of what the land alone has the capacity to support.

Today, more than a quarter of the world's countries are in an extremely marginal situation as far as their agricultural self-sufficiency is concerned. Some of these, like Kuwait, Singapore and Egypt, are simply incapable.²⁹⁰⁹ Only North America and Australasia currently produce all the grain that they need. Everywhere else – western and eastern Europe, Russia, Africa, Asia – is an importer to some extent.²⁹¹⁰ The dependency on imported grain has been growing world-wide for decades. Even with an all out food-producing effort, the present population of Britain could not be fed at its current standards purely from domestic resources. Simple calculations of plant metabolism reveal that Britons are living at a level beyond what their own countryside can sustain. The amount of phosphate alone going in to the nation's food exceeds what Britain can supply, and so the loss of imported fertiliser will inevitably be devastating.

On the other hand, not all the logic is unfavourable. Small farms are more efficient in their use of land than huge agribusinesses, often by a wide margin.²⁹¹¹ Intelligent human care is more important than fertiliser and farm machinery. Chemical weed-killer is a mediocre substitute for nimble fingers. In the United States, 75 percent of the population is currently crowded into 3 percent of the land.²⁹¹² There is a lot of space out there and

people will be able to migrate towards the emptier lands. In Europe and Japan, the situation is not so favourable but it is still far from the case that every last acre of the countryside is today being put to productive use.

Agriculture in the developed world is much more profligate in its use of the land than it need be. Five acres can only support one person for a year if it is used as beef pasture, but it can support a dozen people if it is used for wheat, and thirty five if it is used for soya beans.²⁹¹³ Pressure on land during the dark age will therefore force people to switch from their current diet, high in animal products, to one based more on grains and pulses. One consequence of this switch is likely to be a less robust population. This will imply the reverse of trends that have seen gains in stature and body weight with every generation in those countries, like Japan, that have recently adopted more western-style diets. The effects may not be wholly negative, however. High meat diets are believed to be associated with various health problems, including cancer and heart disease, which are among the west's biggest killers.

Keeping well on an everyday basis does not require doctors and advanced drugs.²⁹¹⁴ The two biggest factors behind the dramatic gains in health and life expectancy that western countries have seen over the last few centuries were a regular supply of nutritious, uncontaminated food and better sanitation and water facilities. These reduced people's exposure to disease-causing agents and simultaneously improved their ability to fight infection. In the case of almost every disease, including malaria, tuberculosis, typhoid, and pneumonia, mortality rates were declining strongly before any medical therapies or drugs came along. For example, deaths from measles fell by a factor of more than forty over the first half of the twentieth century, before the measles vaccine was even licensed.²⁹¹⁵

It follows that, despite the collapse of the health care system, it will be possible to remain well in the dark age so long as one eats sensibly and drinks only water that is free from excess pathogens. It will also be necessary to maintain good psychological health – a positive attitude – for that is linked to immunological fitness. However, there is the problem. After the collapse, the entire disorganised world will come to resemble the worst kind of refugee camp. Public goods like sanitation systems and clean water will quickly deteriorate in the face of neglect. A demoralised population, using unpractised farming methods, will not only be unable to ensure for itself a balanced and consistent diet, but will also have a reduced will to live. Even today, even in the developed world, poverty is invariably associated with higher rates of ill health.²⁹¹⁶

There is also a link to the loss of knowledge that will take place in the dark age. Improvements in sanitation have arisen partly from gains in scientific knowledge that were made during the nineteenth and early twentieth century. These brought to people's attention the importance of maintaining an unpolluted environment. This knowledge is apt to be forgotten in the difficult circumstances ahead. People's dark age descendants will live in squalor because, among other reasons, they do not know any better.

General health, then, is likely to be substantially worse. The medical problems of the dark age will be infections rather than heart disease and cancer. Ailments that seem to have been conquered, like measles, will become significant again, while new ones could arise and sweep like wildfire through a virgin population. Diseases will fall most heavily on children. Infant mortality in the west is likely to rise by a factor of ten or more, to reach third world levels. Those that survive birth and its immediate aftermath will be further whittled down by disease, famine and war. At the nadir of the dark age, the chances of surviving to adulthood might fall to as low as 1 in 2 – compared to near certainty as they are in the west today. To the dark ages, death will be an ever present reality.

In principle, Britain and Europe could perhaps just about survive at present population levels, though practically every man, woman and child would need to work on the land, and they would be reduced to a very simple lifestyle and a simple diet. In practice, however, the ideal conditions which that implies will not arise. There will be an over-correction and crash, as world population – especially the western population, which has benefited most from peace and industrialisation – plummets well below the theoretically achievable level. Before people learn to look after themselves again many will have died from starvation, disease and armed conflict.

The landscape of the developed regions, which has been almost totally designed by humans and is carefully managed by them, will go to ruin. As people stream out of the cities to descend in desperation on the countryside, the broad, even checkerboard of today's agricultural lands will be transformed into a mess of allotments with declining fertility. The forests and the moorlands will be allowed to run wild. Large tracts of fertile land may be abandoned, the fields going through an ecological succession, reverting first to weeds then to woodland. Even the plants themselves may become degraded when today's careful husbandry disappears. Wheat, for instance, reverts to a wild plant within four years, when left to seed itself.²⁹¹⁷

Loss of knowledge

The dark age will be a time of forgetting. This is a good thing. The problems that take the world into a dark age in the first place comprise a series

of impasses involving existing institutions. In the dark age, people will lose not only those institutions, but also the memory of them. There will be no schools or universities. The teachers will be too busy struggling to survive like everyone else. The chain by which knowledge has been accumulated and handed down over the centuries will be broken. Doctors will fail to pass on their craft. The demise of every form of economic specialisation will mean that there is no point in training new generations of specialists. Within decades, knowledge will have been lost wholesale. The entire population will be reduced to the same crude survival skills of obtaining food and shelter and defending what they have.

Academic knowledge will fare worse than practical knowledge. Scholarship is a pure luxury that will be quite unaffordable. History, chemistry and similar subjects will be irrelevant to the basic and immediate problems of day-to-day survival. When Rome fell, a thousand years of medical knowledge was largely wiped out and it took another thousand years for it to be recovered.²⁹¹⁸ The people of the post-dark age world will similarly experience a legacy of ignorance in every area. They will need to re-build a complex economy from the bottom up. That will be a slow business.

The world may even forget its own writing, as has happened so many times before. Certainly, illiteracy and innumeracy will be the norm. Literacy survived the sub-Roman dark age, somewhat against the odds, because of the efforts of a tenuous community of churchmen who hid away in obscure places far from the barbarian horde. Something similar may happen in the coming dark age, though one cannot count on it. In any case, it is not only ordinary writing that may be lost. Information is now recorded on videotape and computer disk. People are almost certain to forget how to decode these messages.

Once they have attained some leisure again, those who come after the dark age may crack today's codes as people once cracked the hieroglyphs. (Though that is not a foregone conclusion. Many ancient scripts remain undeciphered.) However, that will not be enough. Today's knowledge will not just be forgotten in the dark age. Even the physical records will be irretrievably lost. The British Library already has a significant problem with disintegrating books and is desperately short of the money needed to preserve them.²⁹¹⁹ Its collections will not survive the dark age intact. Much knowledge will simply be destroyed by vandals, in the same way that the Library at Alexandria went up in flames, and the learning of the classical world was dissipated in smoke. Recently, one has seen Sinhalese security forces burning the Jaffna public library, and destroying 'irreplaceable literary and historical

documents' related to the Tamil culture.²⁹²⁰ In Kosovo, Serbian security forces destroyed the documents of ethnic Albanians, in what a NATO spokesman described as an Orwellian attempt to eradicate the historical record of an entire people. This is not to mention the bomb damage inflicted by NATO on Serbia's museums and art treasures. As Samuel Huntington puts it, in wars between cultures, culture loses. In the dark age, this kind of thing will become commonplace.

Many people imagine that another dark age is impossible because everything is being recorded on videotape for the nightly news. They could not be more mistaken. Sumerian clay tablets and medieval vellum manuscripts may be as readable as the day they were written, but remarkably little of what was produced in more recent centuries has the durability to escape history's dustbin. Photographs taken as recently as thirty years ago are already starting to degrade. They are faring less well than the black and white photographs of the nineteenth century, with the colours changing to yield purple lawns and red skies. Eventually the image is just going to fade away. Hollywood films are suffering the same colour shift, while earlier movies are spontaneously combusting as chemical changes in the film make them explosively unstable.

Vinyl records have a life expectancy of about fifty years before the material begins to break down. Acetate recordings, made before the invention of magnetic tape, have already passed their play-by date. Thermal fax paper lasts barely six months before the image is lost. Books printed as recently as the 1980s are turning brown and shedding pages. All this is only what one expects from a descendant society: a passion for cheapness, convenience, disposability, and an obsession with the quotidian articles of the common person. Only ascendant societies are concerned with monumental expressions of the community spirit and create things to last throughout the existence of an entire people rather than for the lifetime of an individual owner.

The arrival of the electronic camera and the videotape makes matters no better. The electronic snap, taken casually (the cost of film is not an issue) and left to languish on the computer hard disk, is likely to prove even more ephemeral than the colour print, which was at least lovingly pasted into a photograph album. Magnetic recordings on audio and video cassettes are relatively stable but can wear out quickly when they are played. A computer floppy disk in constant use may last as little as a year. Disks that are more than five years old are likely to be already corrupted, and the data or programs on them will be impossible to extract without specialist equipment. Even CDs will eventually delaminate after a few decades, destroying the information they contain.²⁹²¹

Physical durability is not the only issue. Possibly even more serious is the obsolescence of recording formats for digital media. Computer punch cards and data tapes, for example, are long out of fashion. Floppy disks, CD-ROMs and other digital media will not be the best ways to record information for posterity. Changes in hardware and software technology may make digital documents unreadable within less than a decade, even before the physical media wear out.²⁹²² It is possible that one's descendants, fifty or a hundred years from now, may turn up a stack of one's floppy disks in the attic, and it may well be that the magnetic signal is largely intact. However, the chance that they have access to the computer programs needed to make sense of the files is non-existent. Furthermore, in comparison to interpreting ancient texts, decoding digitally recorded information will prove to be on a higher plane of difficulty. Interpreting a bit stream correctly is impossible without contextual information. Does a byte represent an integer, a real number, part of an image, a logical bit map, a musical note, or a character? The answer is almost impossible to deduce.²⁹²³

A number of specialised museums and retro-computing clubs are attempting to maintain computers in working condition after they become obsolete. However, the cost of repairing or replacing worn out components will eventually be prohibitive. In any case, if preserving digital documents is already a problem today, when the incentives for preserving digital documents are high and the skills are readily available, the prospects of anything surviving the ignorance and violence of the benighted times ahead are slim indeed.

To be set against the unlikelihood of survival is the sheer quantity of electronic data generated by today's information civilisation. The tiny chance of preservation multiplied by the vast amount there is to be preserved means that some sort of legacy will remain for the people of the dawn, just as there are many fossils even though fossilisation is an extremely rare occurrence. Those people that come after the dark age will certainly know much of present times. However, it will only be a minuscule portion of all there is to know.

In the final days of the Roman empire, a Suffolk family buried its valuables to keep them from Saxon barbarians and pirates. Presumably, the owners hoped to recover their property when peace was restored, but that did not happen. Britain descended into a long dark age, and the Mildenhall treasure was left to be discovered 1500 years later. It is by such flukes that the history of the present era will also be preserved. Some people have buried time capsules in order to give their descendants an insight into today's world. However, for the most part, the memories of

contemporary world civilisation will be selected capriciously. Some of the names, events and ideas that now seem extremely important may fail to make it through the choke-point of the dark age. Others that are quite insignificant may by chance be remembered. For sure, people would scarcely recognise the notions that future generations will entertain with respect to the way they live today. If one could only know it, one would be amazed at the future's condescending view of today's social arrangements and scientific achievements. One would be amazed at how easily a proud and magnificent civilisation can be enveloped by the once-descending-never-shifting mists of time.

Inventiveness

A dark age is a highly creative period. When all the old certainties have been swept away, new forms can emerge, like green shoots poking through the ash after the forest fire has passed. The coming dark age will see many fundamental innovations – not with the kind of big science that exists today, but in a highly individualised manner. Across the planet there will be tens or hundreds of millions of tiny communities, isolated from each other, but all deeply concerned with the business of survival through difficult times. These are ideal conditions for the generation of novelty and diversity. Human beings are always more prepared to take risks when the status quo is uncomfortable and undesirable. In the dark age, people will be very open to new ideas.

Today, scientific papers are peer-reviewed before they can appear in the prestigious journals where they have some chance of influencing other people. The refereeing process ensures that the dross is sifted out and saves the scientific community from having to read theories that are ill-conceived and perhaps repetitious of or contradicted by other work. The result, however, is that minute additions to knowledge are made relatively easily, but truly fresh ideas have a very difficult time getting an audience. The whole industry of contemporary science, in which scientists are carving out careers as much as seeking objectively after truth, favours attempts to proceed further down the well-trodden path instead of branching out in new directions. Yet in some disciplines, as one author has put it, it is increasingly less clear precisely what one is trying to find out.²⁹²⁴ The dark age will allow people to rediscover their ignorance. They will forget things that everyone now takes for granted. They will be able to look anew at the world and conceive of it in novel ways.

Science and technology will not be the only beneficiaries. During the dark age, one can expect the emergence of new languages, new philosophies, and new literatures. There will not be the homogeneous, globalised culture of today. With the chain of cultural transmission abruptly broken

by the collapse, people will have to elaborate their own forms. In this highly fragmented world, the results will be extraordinarily varied. For as long as the world remains in the grip of the darkness, this creative ferment will continue, each region developing independently.

Many of the innovations of the dark age will no doubt turn out to be duds. The revolutionary

implications of others will not be noticed at the time. None will have any particular impact during the dark age itself. However, when more settled times return, the novel ideas will have a chance to spread. They will compete with each other or combine to produce improved syntheses. Eventually, the best of the best will come to characterise the new age.

Chapter 37 - The discohesive world

Privacy and obscurity

The dark age will make all forms of association defunct, ranging from the United Nations to the boy scouts and girl guides. Everything that has traditionally brought people together and given them a reason to co-operate will be no more. The opportunities simply will not arise in a world plagued by bandits, whose economy has collapsed. People will not socialise at school or at work. There will be no occasions for people to meet others outside their immediate circle, and no clubs, societies, political parties, or anything else to promote a sense of common interest. There will not even be any television to act as a locus of shared experience.

Today, organised sport is a significant force for social cohesion. Football, for instance, gives large numbers of people in many countries a sense of shared enjoyment that binds them together in fellowship with other fans. They may support rival teams, but they have something to talk about and they enjoy a common understanding of what is important in at least this one area of life. This applies on a global scale, insofar as teams participate in international competitions. It also applies on a local scale, as people participate in amateur sport. Those who play in Sunday leagues are bound in social relationships to their team mates and to people across the region, perhaps even across the country, who share their enthusiasm. They perceive themselves to be part of a wider community, which deserves their loyalty and is worth defending.

In the dark age, however, both professional sport and organised amateur sport will degenerate rapidly. If games are held at all they will be a sorry affair – impoverished, poorly attended, marred by violence, and apt to break up before the appointed time. Before long, they will have become entirely inconceivable. Attending sporting competitions will simply be too dangerous in a disintegrated world, where today's friendly rivalry will have become distinctly less friendly. The same will apply to every other institution through which people and nations socialise with each other. Indiscipline and lack of funds will have rendered them non-viable. People will avoid large gatherings out of necessity, and they will keep themselves to themselves.

The result is that everyone outside a person's immediate circle will become an absolute stranger. People will mistrust each other by default. There will be no way to know what other people think or whether they share values with oneself. Everyone's life will be intensely private and isolated.

One of the casualties of this situation will be the concept of the millions-strong nation. All the things that reinforce a nation's awareness of itself will have passed into oblivion, including

international sport, wars, national holidays, passports, and school history lessons. Even a shared language may disappear as poor communications allow local dialects to diverge. Without such reminders and reinforcers, the idea of nationhood will lose meaning. The very failure of today's nations will positively discourage people from continuing to identify with them. No one will be proud to be English, for example, when England's government and economy have collapsed in chaos.

With the demise of all forms of associative behaviour beyond the level of the family, human social productions will be on a uniformly petty scale. The dark agers will certainly raise no cathedrals and found no great institutions. Even on the negative side of life, people will not achieve anything noteworthy. There will be no epic battles in this highly fragmented world. Anything that requires more than a few individuals to co-operate with a shared purpose will be out of the question. From the perspective of future historians, the dark age will seem like a century or two of non-achievement. It will contain no history, insofar as history consists of events whose significance extends beyond the family circle. History remembers who won the tennis final at Wimbledon, since that event is legitimised and given significance by the participation of millions. However, history does not remember the result when private individuals play a match for their own pleasure. That has no import for anyone other than the individuals concerned. Given that the dark age will provide no mechanisms to legitimise activity through mass participation, it will be a period of private obscurity, composed entirely of events that are unmemorable and unremembered.

The demise of social institutions will also remove the mechanisms that promulgate standardised attitudes and thereby distinguish between valid and invalid behaviour. Today, support for a particular football club or citizenship of a particular nation anchors people to their existence. It gives them a sense of who they are and how they should behave. In the discohesive world of the dark age, people will be left adrift, with nothing to satisfy their search for significance or to constrain their behaviour. In every area of activity, there will be no notion of conventionality, whether to follow or to react against. People will be free to define their own standards of conduct. There may come out of the dark age radically new styles of dress for men and women, for example, or new forms of sport and entertainment.

The feverish social innovation of this period will all go unnoticed. The exploits of the dark agers will be like seeds scattered in the woods, unremarked as they fall. One day, as the dark age is at last being dissipated, some new trees will be

seen to be on their way to the skies. By then, any inquiry into their origins will be too late. Those who live in the dark age must give up any hope of leaving their names to posterity. They may found a new royal line, or invent a musical genre that gives pleasure for a thousand years, but their accomplishments will be anonymous. With no public to approve their efforts, such creative individuals may never themselves appreciate what they have done.

Narrow horizons

The sundering of social relationships means that people's horizons will narrow dramatically. They will only be sure that they share values and concerns with their families and perhaps with their near neighbours, engaged alongside them in the daily work of subsistence. In England, say, it will not matter that people a hundred miles away share features of what used to be English culture. The old cultural institutions will have been thoroughly delegitimised in the collapse, and they will no longer be able to excite feelings of loyalty and fellowship. The legitimacies that matter in the dark age will be private, local legitimacies. The dark agers will be quite sanguine about famine, armed struggle or disaster in communities just a short distance away – assuming they even hear about it.

Beyond this, people will exhibit an extreme lack of altruism and a strong instinct for self-preservation. It will seem quite rational and acceptable to go out and plunder from other people, if necessary slaughtering them in the process. The lives of strangers will be essentially valueless in comparison to one's own desperate needs. Life will be a competitive struggle for survival. Later, when people again begin to perceive that by co-operating and exchanging they can produce something that is more than the sum of its parts, the dark age will be giving way to the dawn.

Humans will, of course, never become lone wolves. However, in this world of everyone for him or herself, the social circle will be drawn very tight. The family or perhaps the tiny local community will be the largest social unit in existence. In some cases, such communities might be derived from associations existing before the dark age. As civilisation collapses around them, the members of a local rugby team, say, might choose to co-operate away from the pitch in the general struggle for subsistence. In an increasingly violent world, they might band together to defend themselves and their families. The group's original nature could then be forgotten within a generation. In such a manner the tribes of the tribal dark age might arise.

Within the narrow compass of the local community, social relationships will typically be far stronger than they are today. Shared experience creates emotional bonds, and the more intense the experience, the stronger the resulting bonds. The travails of the dark age will engender deep mutual

understanding in those who face danger together. Today, families may dwell in the same house but barely know each other. Television and computer games, or external clubs and social activities, allow them to live on top of each other without ever making contact. In the unforgiving times ahead, families will interact far more intensely. They will be raised to a life of co-operation, and a brother or sister, say, will be a lifelong companion to be cherished and protected.

Whereas today cohesion is diffuse but extends far and wide, in the dark age it will be intense and highly focused. The solidarity of the local group – the extended family or perhaps a handful of families – will be immense. Its strong social bonds will compensate for the surrounding darkness. There will be no public welfare system, but people will be able to rely on their circle of intimates to help them through any difficulties. The key social institutions will be those of the foraging band, with their emphasis on egalitarianism and mutual aid.

Some larger associations might also be able to maintain a precarious existence during the dark age, just as the Christian church survived after the Roman collapse. Not only religions but also international charities or trans-national companies could provide a continuing focus for their members or employees during the dark age. If the leaders are sufficiently resourceful and charismatic, they could keep these associations alive through the darkness. However, they will need to broaden their scope to encompass co-operation in every aspect of life's struggle.

Bloodbaths

During their years of ascendancy, the rich countries have attracted migrants from all over the world. Their populations are quite ethnically diverse and will become more so as the descent continues. At the same time, a growing ideological emphasis on toleration is encouraging minority groups to preserve their distinctive identities and to gain in self-assertion. While this approach may seem only humane and civilised during a time of strong government, it will be increasingly revealed as disastrous the more that political authority diminishes.

In 1968, Enoch Powell said controversially that Britain must be mad to encourage immigration, and he foresaw 'the River Tiber foaming with much blood'.²⁹²⁵ Since he spoke, there has been little sign of the predicted river of blood, and it may be thought that Powell was mistaken and being too dramatic. However, these things take time. According to social psychologists, it is only when the proportion of strangers in the population goes above 20 percent that fear and aggression really begin to break out. Britain and other European countries are barely half way there. The ethnic balance continues to shift, however, and one can expect that Powell will be vindicated. He was,

after all, a classical scholar who well understood the forces that pitched the Greek and Roman civilisations into the abyss.

Jared Diamond, in discussing his fears about humanity's future genocidal acts, has mentioned some optimistic signs, including the fact that people are living peacefully together in the United States and that television fosters empathy for people a long way away.²⁹²⁶ These grounds for optimism are rather tenuous. Racial tensions remain problematic in the United States, and there is little evidence that people in general are much moved by the unreal images of suffering they see on their television screens. In any case, feeling sorry for a pot-bellied child in an African refugee camp is not the same as learning to love one's ethnically different neighbours with their strange customs and language. If ethnic diversity is not currently a significant cause of conflict in the rich countries, it is also because these societies continue to be held together by reasonably strong political and economic bonds. Most people are adequately provided for and have a substantial interest in maintaining the peace and the status quo. As the high tide of integration and organisation recedes, underlying cleavages of interest will be revealed, and the frictions between different groups will become more obvious and more explosive.

The consequences of this have recently been demonstrated in the Balkans (not for the first time). Following the collapse of communism, combined economic and political difficulties led the Yugoslav federation to break apart in a welter of ethnic hostility. This is an exemplar of what will happen in every part of the world where communities are intermingled and disintegration is taking place. At the final collapse, every nation will dissolve into incomprehensible feuding between different groups. The groups will be attempting to create areas of territory entirely clear of each other, around which a border can be drawn. The worst clashes will occur when the distinct communities have equal claims to be natives. These are conflicts of right against right, in which every side is prepared to fight to the death. In the United States, for example, the black population is no more an immigrant community than is the white population. However, white militias there are on the increase and openly declare their readiness for the wars that are to come. This will not be a matter of expelling the latecomer, or of driving people back towards their heartland. It will necessarily involve a total strife of neighbour against neighbour.

In the dark age, nothing will keep in check feelings of ethnic hatred. There are likely to be some terrific massacres, even in places where ethnic groups seem to be co-existing today in a state of mutual respect. This will be a bloody period as well as a dark one. One result will be significant population movements, as people drive

away minorities by means of repeated atrocities. When the refugees arrive elsewhere, they are likely to cause trouble for the people already living there, since they will have no means of subsistence and few supplies. They will be hungry and angry. Either the inhabitants must successfully defend themselves, forcing the refugees to move on, or they are likely to be killed or driven out in their turn.

Ethnic cleansing, which might less provocatively be called population displacement, will be a solution to ethnic conflict. Of course it is vile to drive people from their homes over cultural differences, but it does have the effect of eliminating the source of tension. While achieving universal tolerance and love might be another solution, in five thousand years of history there has been little evidence of that.

A compensating feature of the dark age will be that ethnic conflict proves largely uncoordinated and unsystematic. It will be just one more poisonous element in the war of all against all. If disintegration is very rapid, ethnic cleansing may never have a chance to get off the ground. People may be reduced to self defence at the household level before their tribal allegiances can produce much of an effect. Rather than a clear demarcation between ethnically similar and ethnically divergent people, there will more likely be degrees of enmity. White family may butcher black family and vice versa, but whites or blacks will not come together in large numbers explicitly to destroy the other.

During more ordered times, the victims of ethnic outrages preserve the account of where they have come from and of the wrongs that have been done to them. Feuds smoulder and the desire for revenge is handed down through the generations, until eventually conflict flares up again. The dark age, by contrast, has the capacity to obliterate social memory and therefore to dull the aching for revenge. What happens in the dark age will happen, in effect, under the cover of night, to a world that is sleeping. When the dawn comes, and people wake to some new identity, they will accept their situation as the simple reality. In the absence of a sense of history, there will be no status quo ante to which they long to return. It is the literate and educated who usually do most to foster ethnic resentment, and the dark agers will be illiterate, ignorant people, concerned with practical matters of everyday survival rather than abstract issues of ancient injustice. If the people of the dawn remember anything of their origins, it will be as legends that do not rouse them to murderous fury.

In this respect, the dark age may resolve ethnic hostility by actually erasing the awareness of inter-ethnic difference. A dark age is a melting pot, and today's divergent cultures will be thrown into it, allowing a new, homogeneous culture to be forged from their various elements. In effect, fighting

might become so general and so desperate that no coherent sense of ethnic identity is able to survive. Afterwards, the exhausted population might come together to build a new identity because every former identity will have been drowned in blood.

Having said this, the physiological differences between human populations could hinder the obliteration of ethnic consciousness and may continue to be taken as a marker for cultural difference, which then becomes a self-fulfilling prophecy. However, in many cases, such as the republican-unionist conflict in Northern Ireland, the physical differences are actually slight or non-existent. One may reasonably hope that those hatreds will be eradicated during the dark age (though the intervening process will be far from benign). On an optimistic view, even where obvious differences do exist, these could be rendered immaterial by people's returning desire to escape from universal savagery. After all a Swede does not look like an Italian, yet the two are relatively unaware of their physiological differences as they participate in a shared western Christian civilisation. In a similar way, the dark age may allow new cultural realities to emerge and to transcend much grosser differences of appearance.

The consolation of faith

Religion, as everyone knows, has been responsible for a veritable flood of blood over the ages. Clearly, people's creeds are at least as powerful as racial differences in governing their loyalties and enmities. This supports the notion that, after the dark age, a newly forged culture might overcome and subdue ethnic consciousness. In effect, religion could overcome race.

During the dark age itself, there will be no shared religion. Yet religious sensibility is an essential component of human sociality. Many people desire the consolations of conventional thinking. They seek authoritative answers to the mysteries and difficulties of existence. The failure to supply such answers leaves people unfulfilled and adrift. According to the philosopher José Ortega y Gasset, the problem of today's youth with no religion is that having become free it feels itself empty. Before long, he predicted, there will be heard throughout the planet a formidable cry, rising like the howling of innumerable dogs to the stars, asking for someone to take command, and to impose an occupation or duty.²⁹²⁷

This howling will be heard throughout the collapse, and it will stimulate a new enthusiasm for explicit religious faith. The people of the dark age will be uneducated. Most of them will know nothing of the scientific advances of the last century or so. The natural world will be enigmatic and its ways unintelligible. These people will know little of history and geography, other than some rumours and tall tales. At the same time, they will experience much suffering. Their children will die

before them. Their property will be plundered. Their spouses will be murdered in some senseless attack. They will be ready for the solace of religion and its offer of certainty in an extremely uncertain world.

The resurgent religion will be highly fragmented among numerous, localised communities. Each group will have its own particular interpretation binding it together as a cohesive unit. Nevertheless, within this motley picture, a selection process will be taking place that will eventually establish the great religion or religions of the subsequent era. The dark age will present a particularly stringent proving ground. Only those faiths that successfully inspire their adherents to prevail over natural and social adversity will thrive and spread. With the arrival of the dawn, a widely shared religion, at society's heart, will once again become a common part of experience. In the same way, Christianity emerged from the Roman collapse as the victor of a competition between many quite similar mystery religions, some of them having once been serious rivals.²⁹²⁸

One of the religions coming through the dark age may be a derivative of Christianity. It will not be mainstream Christianity, for that is associated with the old civilisation, which will have long been de-legitimised, and will be to all intents and purposes defunct by the time of the collapse. However, some version of the Orthodox church may survive in Russia, where it is associated with a counter-movement reacting against that country's twentieth century experience. In the western countries and in Africa, the most likely thing is that some form of Islam will replace Christianity. Islam may also prevail in east Asia, but Christianity perhaps has an equal chance, given its growing popularity there, especially among overseas Chinese. Alternatively, new cults like Aum Shinrikyo or Falun Gong could flourish through the dark age and eventually become the orthodox faiths of Japan and China.

Islam is a prime candidate to be the religion that emerges from the dark age because it presents the most vocal challenge to the values of western civilisation, which are in effect the values of the present world order. Islam is not tainted by association with the corrupt and failed institutions that will be swept away in the collapse. On the contrary, it has tremendous credibility because of its sustained critique of those institutions. Radical Muslim leaders are the first to point out the depravity of western countries.

In its present incarnation, Islam is also an ideal religion for appealing to the oppressed and those who are experiencing hardship, just as Christianity once was. It demands self-discipline and sobriety. It is egalitarian. It is forceful in its beliefs. It provides its adherents with a sense of rightness and

dignity, whatever the troubles and insults that come their way. Furthermore, Islam explicitly promotes social cohesion. It is uncompromising in its treatment of apostates and criminals. It emphasises alms-giving and hence Muslims' obligations towards their co-religionists. Islam also continues to be a martial religion, and one that still believes in making conversions at the point of a sword. This tradition will be of obvious value in the violent world of the future. Thus, Islam has significant assets when it comes to finding a religion that can overcome the social atomisation of the dark age. Its self-assured followers will certainly pass through these difficult times more easily and more intact than self-de-legitimised Christians.

In consequence, the achievements of the next era are likely to be Islamic achievements. The next people to set foot on the moon, say, or the first explorers on Mars are very likely to be Muslims. Yet during the dark age, the Muslim faith will experience its own fragmentation, and there will be experimentation with new ideas and interpretations as in every other area of cultural activity. Islam will be imbued with the potential for continued evolution during the dawn. Thus, Islam will gain as the world cries out for cohesion, following the bitter experiences of the darkness. However, as the pendulum swings back again towards dis cohesion, after one or two thousand years of the new era, it too will eventually become secular and latitudinarian.

Moral restoral

The harsh realities of the dark age are bound to re-orient values, attitudes and beliefs in the direction of sobriety and prudence. People usually make a virtue out of necessity. Flamboyance will be replaced with asceticism, for flamboyance is nonsensical when one has nothing. Similarly, the dependent grab-it mentality will give way to stoicism and self-restraint, for there will be no one to grab from. Cheating the community will now imply cheating one's own family and close friends. Freeloaders will stand out and will be unlikely to get away with it. Their associates will soon put them right. Standards of behaviour will be actively imposed, although beyond the tightly cohesive, local community there will be complete amorality. Rape, murder and theft will hardly even seem reprehensible so long as they are practised against strangers.

Since dark age communities will be small, the pressures they put on their recalcitrant members will be relatively limited. Those who are prepared to put up with continual harassment as black sheep can probably behave much as they like. People will also have the option of getting out altogether, since each community will be a tiny island of cohesion in a dis cohesive sea. The more adventurous and free-spirited will be able to leave their families and try their luck, albeit in a world of considerable danger.

In this respect, the dark agers will be more fortunate than those who come afterwards. The societies of the dawn will retain the same sober values but will have effective political structures to reinforce moral suasion. Reprobates are then likely to get more than just their neighbour's sharp tongue.

Sexual mores in the dark age will tend to re-emphasise female chastity and men's obligation to women, primarily for the latter's benefit even though it may not always seem like that. In many ways, women may find themselves particularly free during the dark age. In tiny, private communities with no formal politics to speak of, their roles will loom large. They will certainly have no difficulty asserting themselves. To the dark agers, any notion of women as an inferior or weaker sex may be quite alien. However, this will not necessarily be an advantage. In Africa, as it veers towards the dark age, women play a vital role in keeping the economy going while their men are off fighting.²⁹²⁹ They are responsible for their own lives, but in an environment where suffering and hardship are the norm. In a similar way, the women of the dark age may bear the brunt of sustaining their families through difficult times. They will be tough and their status will be high, but they are still likely to feel themselves put upon and disadvantaged.

Though women will have every freedom and opportunity in principle, in practice their options will be severely limited. Most people in the dark age will probably prefer the security of their local group to the dangers beyond it, albeit that that means subjugating their will to the community. Both men and women are likely to fall back on a stereotypical division of labour. Women, whose lower reproductive potential makes them more precious than men, will generally stay within the settlement taking the lead in childcare and home making. Men will venture beyond it to take part in dangerous activities like plundering and feuding with other groups. While women will be free to join the raiding parties, few will choose to do so. The dark age will be an uncomfortable time for everyone, and a time when people curtail their own desires for the greater benefit of the group. Relative to the women of the descent, those of the dark age will probably enjoy fewer choices, work far harder and settle for more traditional roles.

Moral renewal will also be reflected in art and philosophy. Very little will actually be produced during the dark age itself, since people will have more pressing concerns. However, the dark age will set the scene for what comes after. It will establish a new simplicity and directness that replaces the self-regarding cleverness of the descent.

During the dark age, artists will not be specialists but ordinary people with some spare moments and a creative urge. There will be no

critics and no public market for whatever they produce. Art will be created purely for personal satisfaction, and not to impress others. Today, artists strive for dazzling metaphors, for originality, and for fame. Such striving will be pointless in a world of ignorance and chaos. The dark age will wipe away the notion of signature, i.e. the attribution of artwork so that its creator can receive appropriate plaudits. The artists of the dark age will be untrained and lacking in leisure, so their artistic productions are also bound to be crude and ephemeral. They will gain satisfaction simply from releasing their pent-up creativity and not from cherishing the result. This kind of art will not leave much impact in the archaeological record.

When the dawn arrives, and people have more leisure, artists will begin to refine and eventually take to heights of extreme virtuosity the styles pioneered by the dark agers. The dark agers may themselves leave nothing to posterity, but theirs will be the time of greatest creativity when, having broken with the past, people take the first steps to produce radically new styles. Those first steps are the hardest and, for all their skill, the artists of the new era will really only be building on the invisible achievements of their predecessors.

While philosophy is perhaps too grand a word for the dark age, there will certainly come into existence new ways of looking at the universe. People will return strongly to the notion of life as a struggle against an implacable natural world. Conquering and subduing that world will seem to be a right if not a duty. Making things better for oneself and one's close associates will be thought entirely proper, regardless of any effects there might be on people far away or on the environment in general. All kinds of sentimentality that have accumulated during the descent will be swept away. There will be a new receptivity to technologies that are today objects of fear and

suspicion. In a time when death from disease and general savagery is an everyday reality, the remote risks posed by nuclear radiation and genetic engineering will be thought quite irrelevant. Anything that offers relief from the daily hand-to-mouth struggle of the subsistence farmer will seem worth a try.

These ideas will really come to fruition during the dawn, when humans go out to build a new world rather than conserve the old one, with renewed confidence in the legitimacy of their activities. The dark age will introduce the framework of ideas that allows people to build nuclear power plants in their backyard, or to tinker extensively with the genes of their crops. Things that seem unacceptable to today's societies will be rendered acceptable due to the dark age's legacy of realism and boldness. Humans will then be able to realise long term benefits despite any short term difficulties that may stand in the way. They will, for example, be able to explore space aggressively despite the inevitable accidents, in which large numbers of people are bound to die, and despite the fact that the pristine moon will necessarily be polluted with human waste.

Overall, the dark age will eliminate the bloatedness and self-centred vanity of the descent. People will have learned to bear hardship and to delay gratification. They will also have become somewhat indifferent to the hardships borne by others and will be prepared to sacrifice the individual for the benefit of the greater whole. These are precisely the qualities needed to achieve great things. The dark age itself will be an inglorious time, but within its shadowy horizon the seeds of glory will be sown. Just as today's moon-conquering civilisation has exceeded in brilliance all those that have gone before, so it will be eclipsed in turn by that marvellous civilisation which begins to unfold with the coming dawn.

Chapter 38 - The political recovery

Re-urbanisation

Even historians, who traditionally think in terms of events and turning points, will find it impossible to pinpoint the moment at which the dark age ends and recovery begins. The mists will lift only gradually, no doubt with frequent reversals and not everywhere simultaneously. There will be no specific point at which opacity becomes transparency. There will merely be strengthening trends and a growing sense of continuity in the historical record.

One clear sign that the world is moving from darkness towards light will be the return of urbanism. This will be on a small scale at first, with settlements of between a few hundred and a few thousand people. They will be heavily defended, and with good reason – fighting will still be endemic. This fighting of the early dawn will distinguish itself from that of the dark age by being better co-ordinated. It will deserve to be called warfare as opposed to sporadic skirmishing. Its practitioners will be armies, albeit small ones, rather than mere raiding parties.

Some of the earliest technological activity of the new era will involve re-inventing and elaborating the most vicious of today's armaments, especially nuclear weapons. Under the extreme competitive pressures of that time, people will probably soon surpass today's military know-how. One of the areas where competition will be fiercest will be in developing defences against nuclear weapons. Town walls will obviously not be enough. The development of anti-nuclear technologies or missile shields may be regarded as a *sine qua non* of the world's emergence from the dark age.

The shift from darkness to dawn will mean a shift from private feuding to the carving out of new nations. The warriors of the dawn will not just rob, kill, burn and then return to camp. They will seek to subdue the settlements they attack and secure regular tribute from them. There will be a great contest for territory played out over centuries. In due course, often with leaps forward as some grand figure charges through history, the world's future boundaries will be laid down. These boundaries will be just ones, defined in a fair fight by the peoples they separate. It will only be by chance or topographic necessity that they resemble the boundaries of the present era. This need to redraw the map of the world is a factor affecting the length of the dark age. The world will only begin to recover once the contradictions and injustices inherent in today's geography have been thoroughly forgotten and resolved.

The return of urbanism will also mean the return of electricity, of the internal combustion engine, and of other technologies that prove impossible in the tiny self-sufficient communities

of the dark age. The political and economic recoveries will go hand in hand. Money will be reintroduced under the patronage of the new authorities. As the town walls come down and ever larger areas are pacified, trade will accelerate. During the dark age, all humans will have been equally abject. As the dawn proceeds, they will soon be differentiating themselves again into rich and poor, powerful and weak.

Autocracy and achievement

The military leaders who restore political integration during the dawn will not be democrats. When they take power, it will be for themselves and to exercise it for their own advantage. The dawn will see the return of executive kingship throughout the world. Beneath these kings and queens will be their former henchmen, who will become counts and barons. The latter will have their own arbitrary power over people living on the lands that have been given to them.

The political leaders of the dawn will be charismatic and ruthless. Some may be kind to those that they rule. Others may be cruel. As decades turn to centuries and supreme power passes to the children, grandchildren and great-grandchildren of the dynasty's original founder, political authority will become institutionalised and bound around by convention. Tempering it in this way will also serve to legitimise and hence perpetuate absolutist power. It could be a thousand years before the people succeed again in governing themselves.

For much of the new era, there will be no such thing as the universal franchise. The world will be the better for that. Democracy shoulders much of the blame for the overheads that are conveying western countries towards the dark age, as people vote themselves ever larger subsidies and ever less work. When these plebeian interests are disempowered, societies will recover a sense of sublime purpose, and wonderful things might be accomplished.

The time of greatest ascendancy will be perhaps some five hundred to a thousand years into the dawn, when law and order have been re-instituted over most of the globe but governments are still in the hands of a relatively few people. The political authorities will command tremendous resources, which they will be able to exercise without opposition. This will result in an age of monumental achievements reflecting the huge ambition and vision of those authorities. They will be able to pursue grand projects, such as launching human civilisation onto the moon and Mars, unperturbed by the tribulations and sacrifice of the ordinary people who bring these projects to fruition. Later generations, when the new era is itself becoming old, will take those projects forward but in a degraded manner. As life becomes

precious again and the commoner calls the tune, it will be impossible to reproduce the vaulting grandeur of those few exceptional centuries.

For ordinary people, the dawn means a kind of slavery. They will be subjected involuntarily to the rule of another. They will be subordinate to a government in which they have no representation. There may be a return to essentially feudal institutions, i.e. the manors and latifundia. The commoners will experience the personal control of a local authority. Their work will be in large part dictated to them. They will be forbidden to travel at will. Yet there will be compensations for their relative lack of liberty. There will be no unemployment. Everyone will be given a role and a place in the community. Inadequate people will not be allowed to fall through the cracks into utter desolation as they are today. They will not be given the dole and allowed to fritter it away on lottery tickets. Those who cannot govern and discipline themselves will benefit from the government and discipline of some local lord.

Even in this less free society, there will still be openings for those with talent and ambition, just as there have been in every period of history. An expanding, dynamic and vigorous world will continually be throwing up opportunities. Talent must always contend with prejudice and ignorance. In one era, it is the prejudice and ignorance of the enfranchised masses, in another, that of an entrenched nobility. In neither case, is such opposition insuperable. Every era has its special difficulties and its peculiar rewards.

The winners under today's order may look with distaste on the prospect of a world with much less equality and freedom than they have now. However, today's losers, for whom that freedom and equality are purely nominal, may think that the authoritarian societies of the dawn offer things that are even more important – certainty, harmony, justice.

A new world order

The Great Seal of the United States promises in its inscription a 'new order of the ages'. In fact, the founding of the United States and its rise to superpower status did not usher in a new order of the ages. Rather it perpetuated the ascendancy of western civilisation, which has continued to shape the world for its own benefit. Today, the west's dominance in every sphere is so ingrained that westerners can hardly conceive of the injustices that it represents. It seems only natural that they should be well fed while millions are starving and have only filthy water to drink. After all, it cannot be the west's fault – can it? Similarly, though it may be saddening, westerners find it quite usual that many backward countries are embroiled in frequent conflict. Again, it cannot be the west's fault – can it?

In fact, there are good grounds for thinking that the west is indeed culpable to a considerable degree for the problems of the more disadvantaged nations. To establish this does not even require going back fifty or a hundred years, to the time when western countries quite unjustifiably made large numbers of people around the world second class citizens in their own countries. Even today, right now, western businesses and intelligence agencies are deliberately or incidentally undermining third world governments and economies, in pursuit of strategic goals.

Over the last decade, for instance, Iraq has been under siege by an American-led coalition. At some periods, scarcely a day has gone by in which Iraqi citizens were not killed by allied bombing. Sanctions imposed by the western-dominated United Nations have denied Iraq all sorts of medicines and other supplies, resulting in a shocking mortality rate especially among children. The west argues that the true blame for this situation lies with the Iraqi regime. It accuses the regime of maldistributing the resources available. Yet this is disingenuous, since if the sanctions did not inherently cause hardship there would be no point in them. The west also notes that the regime could lift the sanctions at any time merely by complying with allied demands. However, this is effectively admitting a preparedness to cause the deaths of many innocent Iraqis (children are certainly innocent), in order to undermine the lawful ruler of their country.

The west presents its conflict with Iraq as one of good against evil. To be sure, Iraq violated the sovereignty of its southern neighbour Kuwait and behaved brutally while it was in charge there. However, the west came to Kuwait's aid not for moral reasons but because a non-compliant state like Iraq could not be allowed to be in charge of so much of the world's most precious commodity. Until oil was discovered there, British foreign policy was to regard Kuwait as disposable and not worth fighting over. The west still turns a blind eye in parts of the world, notably Tibet, where the same scenario is being played out but the strategic issues are unimportant. Furthermore, Kuwait was itself an arbitrary creation of western imperialism, and contradicted a centuries-long tradition of Iraqi influence over what might be called Greater Basra.

The west disciplines Iraq, in a fashion that one author has termed genocidal, because Iraq's attempts to shape the world for its own convenience are unacceptable in a western-dominated world. The west cannot allow Iraq to acquire the weapons of mass destruction that it has itself introduced to humankind. It deplores the invasion of Kuwait, even though the west has itself engaged in this kind of behaviour. The heyday of western imperialism may be one or two centuries ago, but that is not so long in the eyes of the people

who were on the receiving end. It is all very well to say that it is all in the past and other countries should grow up and forget about it, but as the winners the west would say that. Understandably, the losers take a different view. Westerners may think that they have now seen the light and are therefore justified in preventing others from repeating their former wicked mistakes, but that is pure effrontery. A century ago westerners believed it to be justifiable to slaughter the un-Christian and benighted American Indians on a massive scale. Now, one hopes, people think differently. Perhaps a hundred years from now it will be discovered that the west's current behaviour is also not as enlightened as people presently think and that contributing to the deaths of half a million Iraqi children was not so morally auspicious after all.

Iraq is just one example of many. The west continues to punish Libya in much the same way. The United States has maintained sanctions against Cuba for forty years, essentially because it disapproves of the ideology of Cuba's leaders. In 1999, the US fined two British models tens of thousands of dollars just for meeting with Fidel Castro. In these disputes between the west and so-called rogue states, it is largely a matter of western might being right. For half a millennium the west has acquitted itself around the world in a frequently corrupt and always arrogant manner. It has never stood for the world interest, but only for its own interest. As hegemon, the west has supplied the public good of peace and order and, from that perspective, can be said to have benefited the world as a whole. However, to many people in other countries, such dominance is hateful and its end is to be hastened as far as possible.

The point is that there is nothing especially good or especially necessary about the present world order, in which the west holds all the advantages. There is no reason why it should be re-established after the dark age. On the contrary, when the political recovery takes place, there is likely to be a genuinely new order of the ages. This may mean that the west is not only unable to prevent Iraq invading Kuwait (or their future equivalents) but also cannot avoid being invaded itself and perhaps incorporated into some empire or other. The world recently celebrated the end of the second millennium, which was essentially a western milestone. It did not know to celebrate the first. It is extremely unlikely that the world will ever celebrate the third millennium. By then some other kind of dating system, belonging to a quite different civilisation, will probably have taken over.

Until the late 1990s, Japan appeared to be the world's hegemon-elect. East Asia's fin-de-siècle economic woes have taken some of the shine off that apparent promise, but the descent could still see some significant shifts in world power, to Japan

or elsewhere. However, the dark age will wipe the slate truly clean. Japan could emerge as world leader in the new era, but so could any other region. Even a resurgence of the west is possible. In the long run, the dawn will see several power centres vying for supremacy, just as in every other era.

Colonel Gaddafi, apparently, notes that the world was dominated first by the yellow races and then by the white races. On this basis, he believes that the black races will be next.²⁹³⁰ Nevertheless, few commentators today are hopeful about the prospects for peaceful improvement in sub-Saharan Africa.²⁹³¹ They are surely right. Africa is not going to turn around quickly. This side of a dark age, its situation is hopeless and will become more hopeless. The coming catastrophe, however, will yield the things that Africa now so desperately lacks – just borders and strong governments. During the dawn, Africa will be starting from scratch like everywhere else around the world. It will be a fair competition.

To many people, sub-Saharan Africa seems a place of utter despair. Yet it is not intrinsically backward. That is just a recent western assumption.²⁹³² The view that Africa's present prostration is an inevitable consequence of poor climates or insufficient resources does not stand up to examination. Still less convincing is the idea that black people are condemned to an inferior position because of some intellectual deficiency. Even if the researches that show racial variations in intelligence are assumed to be valid and meaningful, these refer only to marginal differences in average scores. There are still many highly intelligent black people. It is also not clear that performance on intelligence tests has anything to do with a people's achievements. Otherwise, why would white races now dominate the world, rather than Asians who consistently do better on these very same tests?

Africa's problems are not intellectual or geographical. They are historical and sociological. Angola, for instance, has oil and is relatively wealthy by African standards, but it has long been deeply divided by civil war. That is what holds back the country's development. Angola has not really been at peace since rebel activity encouraged the Portuguese to withdraw in the 1970s. Since then Cubans and South Africans have fought each other on Angolan territory, favouring different factions in pursuit of geopolitical or ideological interests. The United States has also interfered, as have Russia and China, often without clear or consistent aims.²⁹³³ In these circumstances, Angola has never really stood a chance of achieving stability. Similar stories can be told for most of its neighbours.

The longer and deeper the dark age, the greater the chances of resolving Africa's horrendous

predicament. It could therefore be considered fortunate that the continent is in the vanguard of the world's current movement towards chaos. Africa may well have the time that it needs. Once its many contradictions have been resolved, it will then contain the promise of great things. Its people are certainly no less competent than any other. When the dawn arrives, the world may at last see what Africans are capable of.

In fact, the Africans are likely to have made the world their own during the dark age, for they will have swarmed all over the rich lands as the new barbarians. When the smoke of the dark age lifts, they may well be found to be in control of key parts of the planet. They will be the new aristocracy in regions far from their (now forgotten) homelands. The formerly ascendant Europeans will cringe before these haughty paragons. A bold but reasonable prediction is that the next era will be the African era. That will be sweet revenge. The most despised basket cases of the present day, the people that the world writes off, will soon lord it over the planet. It could be only a dark age away.

China, in contrast with Africa, is one of the longest civilised areas on earth. It surpasses even pharaonic Egypt in continuity. This might make it seem an unlikely candidate for dominance in the next era. However, China retains a robust sense of its fundamental superiority. Its failings in the present world order have been due not so much to a lack of talent as to a lack of challenge. It has reaped a bitter harvest because of its complacency of four or five hundred years ago. In the twentieth century, the Chinese people were still thrashing around as though looking for the quick fix that would propel them to their proper position.

The Chinese may have learned their lesson from these experiences. A dark age could provide them with the breakthrough that they have recently been denied. They will certainly be formidable opponents when the dark age has equalised advantages somewhat. The formerly ascendant west is likely to emerge into the new era in a state of shock, but China could prove more resilient thanks to its twentieth century anguish and privations. Chinese people certainly have a more realistic view of the world than cosseted westerners and this will be to their advantage when it comes to exploiting opportunities in the turbulent times to come. The worse the predicament that China gets into before the dark age, the better its chances on the other side. If the country gets involved in devastating nuclear wars with its neighbours, while cracking up internally, then the next era could well be a Chinese era. If, on the other hand, China undergoes a late flowering while much of the rest of the globe is slipping into darkness, then somewhere else will probably be seizing the initiative thereafter.

Russia resembles China in these respects. It is making less of a success of things today, but Russia will not necessarily continue to collapse the way it has been doing. It may actually turn itself around in the near term, and begin to realise some of its huge latent potential.²⁹³⁴ However, the most probable thing is that Russia's progress will be generally downwards in the short to medium term. That will mean it enters the dark age sooner and emerges better refreshed than most places. It must then be considered a prime candidate for greatness in the time that comes afterwards.

Other possible candidates for world hegemony during the dawn include Oceania, Latin America and the middle east. These regions are more or less culturally homogeneous while being politically divided. General fighting during the dark age might perpetuate this condition. At the dawn, they may find themselves with the strengths of unity in diversity,²⁹³⁵ i.e. purpose, vigour and inventiveness – the qualities that supposedly allowed Europe to flourish over the last few centuries. Typically, these regions are likely to find themselves engaged in chronic internecine conflict as new nations are created during the dawn. Subsequently, as their regional polities mature, they may burst forth into an unsuspecting world – if, that is, the Africans, Chinese or Russians have not beaten them to it.

Europe is unlikely to be in the ascendant again during the political recovery. Nevertheless, Europeans have shown themselves to be extremely energetic and resourceful for a thousand years. They should not be written off. A short sharp shock of a dark age would provide the best chances of Europe reprising its hegemonic achievements in the next era. This might wipe away the bloated welfare states and big government, while leaving intact the continent's advantages in capital and know-how. European civilisation would be renewed and still in front of its competitors as the race for political recovery begins. A dark age lasting no more than twenty five years (like Egypt's intermediate periods) would be good news for Germany and Switzerland, say, and bad news for Thailand and Somalia.

The journalist David Smith has explored five possible scenarios for Europe's future.²⁹³⁶ 'The renaissance' would see Europe becoming peaceful, politically integrated and economically vibrant in a world where predictions of Asian dominance have proved fundamentally misplaced. 'Plus ça change' would see continued economic growth but no political union, and a gradual loss of market share to Asia. 'Les étrangers' would mean a core of states becoming united in economic union while the outsiders, including Britain, drift to the fringes and even leave the union. 'The dark ages' would involve economic decline and high unemployment with Europe failing even to survive as a free trade area. Finally, 'the apocalypse' would see Europe

dissolve into tribalism and economic devastation, coming eventually to a major war. (What Smith calls 'the apocalypse' is in fact closer to the notion of a dark age as defined in this book.) Smith regards 'plus ça change' as the most likely scenario, at 35 percent, but he also considers 'the dark ages' and 'the apocalypse' to have probabilities of 20 percent and 10 percent respectively.

Smith is really talking about fluctuations taking place over the next few decades, i.e. the period of the descent. However, these scenarios could also be regarded as possibilities for Europe's recovery from the dark age. The more optimistic scenarios would follow on from a violent but abbreviated episode, the more pessimistic ones from a protracted dark age of deep forgetting and institutional destruction. The latter are surely the most likely, given that the coming dark age follows an unprecedented elaboration of human society, and will probably be the biggest retrenchment the world has ever seen. In all likelihood, as the dawn unfolds, Europe will increasingly be seen to be the new third world.

One might make the same comments for North America as for Europe. However, there are differences. The United States has climbed the highest of all, and the catastrophe that is brewing there puts Europe's problems in the shade. It is ethnically more heterogeneous, and there is more stored up resentment. There are also fifty states that the dark age will release from their federal bondage. A divided United States may emerge from this catastrophe far weaker than it is today. On the other hand, its success in this era has not been uniform, and its failure in the next era may not be uniform either. Some parts of the United States could emerge with a new vitality. After the upside down experiences to come, those regions that have been falling behind, and those groups within the American population that have failed and are already in darkness, may return a reinvigorated country to the forefront of world affairs.

Eventually, the dawn might yield some more just and equitable way of conducting international relations, as an alternative to conquest and imperialism. After all, not everything is forgotten in dark ages and people do learn from their predecessors, primarily in technology, but to some extent in human institutions as well. The United Nations was a terrific innovation of the twentieth century. Though the idea had been around for a long time, it first came to fruition then. The UN (and associated international institutions) will be exterminated in the dark age, and will play no role during the early part of the dawn, but some such world forum may be reconstituted quite soon during the political recovery. The first truly powerful political authorities of the next era may

seek to wrap themselves in the legitimacy of the old UN, just as Frankish kings of the early middle ages declared their territories to represent a revived Roman empire. The new UN will not be anything like the old UN, but it will have considerable evolutionary potential. The human race learns slowly, with much backsliding, but the world will surely be more civilised a thousand years hence, and a world forum with legislative powers and effective mechanisms of conflict resolution may play an important part in this.

World integration

H G Wells, as one futurist notes, predicted many things quite accurately. In 1901, he foresaw that the twentieth century would produce urban sprawl and roads full of trucks and cars, that air travel would be a commonplace, and that chemicals and labour saving devices would remove the need for servants. He also predicted that wars in the twentieth century would be total wars, including the use of atomic bombs, long before the latter had been invented. Other predictions included spaceflight in 1898, worldwide television broadcasting and x-rated video cassettes in 1899, lunar landings and moon-earth radio communications in 1901, atomic energy in 1913, a postwar 'peace league' in 1914, the failure of the League of Nations in 1921, the downfall of Italian fascism in 1927, a new world order run by transnational corporations in 1928, and intercontinental ballistic missiles in 1932. In his book *The Shape of Things to Come*, published six years before the second world war, Wells wrote presciently of the outbreak of a war in 1940, beginning as a conflict between Nazi Germany and Poland and then spreading to the whole world. When Hitler later invaded the Soviet Union in 1941, Wells realised immediately that the eventual defeat of the Nazis had become inevitable.²⁹³⁷

This is an impressive record. Nevertheless, the prophecy that Wells made most often and most consistently remains unfulfilled. This is that a world government will be established in the aftermath of a system-wide catastrophe. To be sure, he made other forecasts that proved unreliable, and this could be one of them. However, Wells was obviously possessed of rare insight, and no one should write him off yet. A system-wide catastrophe is certainly the natural outcome of the present phase of the human story. Perhaps Wells is right, and the political recovery that follows the catastrophe will see world-wide integration – a planetary government.

One of the contradictions leading towards the coming dark age is a mismatch between the world's scale and its characteristic level of political integration. People can now communicate almost as effectively with someone half way round the planet as with someone in the next village, but they are still subject to quite localised jurisdictions. One

consequence of this mismatch is the undermining of political authorities' ability to sponsor economic activity, i.e. ensure that trading is fair, enforce contracts, and prevent various kinds of exploitation. Another consequence is that the global promotion of human welfare is making respect for national sovereignty seem increasingly obsolete, as Kofi Annan and Javier Perez de Cuellar have both pointed out.²⁹³⁸

There is therefore an underlying logic in favour of a world government. This would restore political control over the market and might also enjoy legitimacy in the eyes of the world's people if it were to impose a just peace everywhere. The fact that institutions regulating the inter-state system have grown dramatically over the last hundred years certainly seems to indicate a felt need in this direction. However, the United Nations has so far failed as a world integrator because it is configured as a voluntary association of equals, and its law is not genuinely universal or compulsory. If a successful world government is to be set up, it cannot be by peaceful and consensual means. It will need to be imposed by force.

It is inconceivable that the existing United Nations could evolve smoothly into a world government based on reasoned consent and voluntary submission. If it applied the principle of one person, one vote, it would be dominated by Chinese and Indians. If it applied one state, one vote, it would be dominated by Latin America, Asia and Africa.²⁹³⁹ The west, as the world's most powerful bloc, is not going to find either of these acceptable. Yet something satisfying the west would seem to other nations to be quite distorted, and to perpetuate the very injustices which it is supposed to be eliminating. A formula satisfying everyone seems to be impossible. The squabbles involved in setting up a world government by negotiation would be more likely to start wars than end them.

On the other hand, after the world has passed through the crucible of a dark age, society will need to rebuild itself from scratch. In those realistic times, a would-be world authority will have no compunction about vanquishing and subordinating the entire planet, using whatever brutal means are necessary and sustaining as well as inflicting many casualties. There will be no existing internationally recognised borders to deal with. The old political structures will have been broken into fragments, and that will make it possible to reassemble them into a larger whole. Undoubtedly, the wars that are fought on the way to world integration will be hard won. Yet the existence of a strong logic in its favour makes it likely that some ambitious conqueror will eventually succeed.

Humans, who are already living at a world-scale, will certainly do so in the new era. Global political union, or something approaching it, is

therefore a distinct possibility. Wells's projection of a world government will make sense as the latest twist in the long term development of human sociality. Yet as Wells appreciated, it requires a general cataclysm before the required metamorphosis can occur. Arguably, it is the very straining of this 'new world waiting to be born' that will pitch today's civilisation into the dark age.

Enlightened coercion

Imposing political order has some unpleasant characteristics. Even the long civilised western countries use quite blunt instruments to maintain discipline. Prison is a crudely degrading treatment for miscreants. It serves some purpose as a deterrent, but as a correction to those who are not deterred to begin with it is probably worse than useless and may reinforce criminal behaviour. It certainly does not change anyone very much. A significant proportion of the prison population is there because of involvement in drugs. These people are likely to continue taking drugs when they are in prison, let alone when they get out again. Across the world, there is little correlation between the crime rate and the number of people in prison. Texas, for example, with its draconian criminal justice system, which includes the death penalty, experiences more murder, rape and robbery than Holland, with its relaxed prison regimes and toleration of soft drugs.²⁹⁴⁰

The Archbishop of Canterbury said in 1986 that the state takes crime both too seriously (with tough sentences) and not seriously enough (by not really tackling the problem)²⁹⁴¹ – an anomaly that was also noted in the latter days of ancient Rome. The people of the future will surely look back on today's clumsy and ineffective forms of punishment and wonder how people could have been so brutish and ignorant – exactly as people today look back and wonder at the brutishness of their ancestors.

The political integrators of the dawn are likely to achieve a greater degree of law and order than today, and to do so by more civilised means. This is not merely a matter of ameliorating prison conditions. Nor is it a matter of making them far worse. Instead, a critical factor will be greater probability of detection, so that crime is more obviously not worthwhile. Increasing the chance of getting caught is generally a far better means of inhibiting criminality than is tinkering with the mechanisms of punishment. Technologies like DNA fingerprinting and video surveillance are therefore likely to be widespread in the new era. The restrictions that are currently placed on their use, in the name of preserving civil liberties, will be entirely disregarded. As for those who do still offend, future authorities may make a more positive effort to change their behaviour than they do at present.

Future criminal justice may mean treating people more rationally when they fall into the system of correction, and preventing them from ending up there in the first place. Such a world of comprehensive surveillance and who-knows-what mind-altering techniques of correction may have a nightmarish or Orwellian sound. Certainly, it will be a very unfree world. Nevertheless, it need not be totalitarian. Some may consider that a sacrifice of *freedom to* (do certain things) is worth it for the *freedom from* assault and violation. As the world emerges from the violent dark age, most people are likely to take the former view, accepting subjection in return for protection, or giving up liberty and anonymity in return for order and contentment. As

the new era matures, and people become accustomed to peace, they will no doubt begin to chafe again under the discipline of an integrated polity.

This is the perennial paradox of political integration, i.e. the conflict of security and constraint versus autonomy and vulnerability. Those who know one desire the other, and vice versa. Such paradoxes drive history and make it always interesting. They mean that the new era of the world's political recovery will itself become weary and finally change into something else. That, however, is another story, and the subject of another book – one that will be written a thousand years from now.

Chapter 39 - The economic recovery

New economic order

The countries of Africa are stuffed with riches. Yet many of them have also been the scene of long and depressing crises. Places like the Sudan and the Congo, despite their enormous potential, are associated with the most grinding poverty on the planet. In the years surrounding 1960, these former colonies were given over more or less abruptly to local leaders who had previously been regarded as terrorists and to electorates that had never before been entrusted with the vote. Not surprisingly, they tended to dissolve into insurgency and civil war. The west contributed to their instability by intervening covertly to ensure favourable regimes.²⁹⁴² Meanwhile, the countries' leaders were allowed to run up a huge debt with western financial institutions, taking out loans that they then either stole or spent on arms.

In effect, the present world order has denied the people of Africa the opportunity to develop autonomously and to find their own equilibrium. They have suffered because of their inadequate institutions and general lack of experience. Propelled into nation state politics, they sank into turmoil. Entrapped in a sophisticated international economy, they were exploited and pauperised. Political and economic weakness have been self-perpetuating and mutually reinforcing. These countries have suffered from being late developers in the world system.

Even those third world nations that are stable and able to exploit their resources often remain poor because exporting raw commodities attracts little profit. The riches accrue instead to western firms that convert such materials into useful products like ships, cars and computers. This situation is not necessarily unfair, since without western know-how the third world's ores would be just so much worthless rock. It seems reasonable enough that the rewards for producing say a computer should go to those who have the ingenuity to build it, rather than to those who own the original materials through blind luck. However, the unfairness is in the self-perpetuating nature of the western economic advantage. Know-how begets know-how. The third world lacks bargaining power and is perennially wrong-footed and dependent. The west is unwilling to loan it money for developing competitive industries, and closely guards its technical secrets.

The dark age will release countries from this vicious circle. It will sweep away the self-sustaining differentials of wealth and power. There will be no more CIA operatives propping up weak dictators who cannot restore order. Nor will there be officials from the World Bank throwing money at grandiose but inappropriate schemes that undermine local entrepreneurs. Instead, today's disadvantaged peoples will be able to resolve their

internal differences on their own terms, and may create industries that suit their capacities and aspirations.

In the new era, Jamaicans, Zimbabweans and other third worlders will end up on essentially the same footing as everyone else. Since they are on top of some vital minerals, their chances in the new era may well be better than most. The region stretching southwards from the River Congo has the world's largest concentration of chromium and manganese, both of which are critical to modern technological civilisation and not found in the major industrial countries. Some parts of Africa also have major reserves of nickel, which plays an increasing role in aerospace technology.²⁹⁴³ The principal source today is the Sudbury Basin in Canada, but its mines are being exhausted.

Despite their reputation for famine, many African nations are actually in better shape than Europe as far as *potential* agricultural productivity is concerned.²⁹⁴⁴ Agriculture is not inherently a constraint on their development. Even if it were, however, Africa could still become rich and populous during the dawn because wealth is a function of involvement in trade and not of the possession or lack of raw materials. Africans could set up a sophisticated space-going industry, for example, supplying the rest of the world with satellite services, space-manufactured exotic alloys and so forth. They would then just need to import food in return. With sufficient initiative, even the most under-resourced country could achieve wealth as a commercial entrepôt.

The dawn is therefore likely to see a new economic order, in which the often unproductive landscapes of today's third world countries will be radically transformed. Where there are now desiccated fields of scant crops and scattered villages, there will one day be high technology factories and lavish cities full of plenty. Some of today's poorest countries may then end up among the richer nations of the world. As they take a more vigorous role in international trade, it will benefit not only themselves but also their trading partners. Their present destitution brings the whole world down. When the third world has become wealthy, other regions will experience stronger demand for their own goods and will at the same time be able to share in the now unlocked bounty of places like the Congo. After the dark age has removed today's economic impasses, commerce should move on to a higher plane everywhere, and the entire world will enjoy a better standard of living.

Having said this, while the world as a whole may be wealthier, income differentials will inevitably emerge and widen as the dawn unfolds. However, development will now take place in what is from the start a more or less global economy. This is unlikely to generate the huge disparities of

the present era, in which some regions maintained stone age lifestyles while others were experiencing industrial revolutions. There will be poorer and richer areas, but there should be no real duds. The west may find itself less privileged in the new era, but it should at least be spared the humiliations and wrongs that certain countries experience today. Overall, one can expect the dawn to produce a more equitable and certainly a more complete use of the planet's natural resources and human potential.

Resources

During the present era, humans have found metals, oil, coal and gas readily available in the ground to support an expanding technological civilisation. They have come upon a more or less virgin world and plundered it with aplomb. The people of the dawn, however, will not have it so easy. The remaining ores of many vital minerals are approaching the limits of workability, and the world's oil wells could be past their peak by the time of the collapse. When it comes to rebuilding industry in the new era, people will find that the richest pickings have already been taken. This might seem to preclude any kind of economic recovery. The nascent industries will find that they have nothing to work with.

However, for one thing, the people of the dawn will be able to scavenge among the wreckage of the old civilisation. They may knock down old skyscrapers to extract steel girders and convert them into spacecraft or electric cars. Scavenging on its own will not be enough, but fortunately the world still has significant reserves in unstable regions where western mining concerns are today reluctant to get involved. Africa's prospective area for oil, for instance, is roughly one and a half times as large as that of the United States, though comparatively speaking there has been scarcely any drilling there.²⁹⁴⁵ People could also delve into the earth much more deeply than they do today. At more than five kilometres down, there are thought to be extremely large deposits of iron, manganese, chromium, cobalt, nickel, uranium, copper and gold.²⁹⁴⁶ The technical problems in mining at these depths are huge but surely not insoluble.

Perhaps the most obvious opportunity for people to exploit after the dark age consists of the oceans. Today, gold is profitably mined off the Alaska coast. Diamonds have been recovered on a small scale from the waters of south west Africa. Japan has extracted iron from sea gravel. There is a possibility of harvesting phosphates for fertiliser off the coasts of the United States, and of getting silver and zinc from the Red Sea.²⁹⁴⁷ Yet in spite of this activity, the ocean's resources remain all but untapped. It is believed, for instance, that the world's offshore oil fields are several times larger than the onshore areas, which have so far supplied almost all the world's oil needs.²⁹⁴⁸ The same is no

doubt true of other minerals. In one region of the Pacific, nodules containing manganese, nickel, copper and cobalt are just lying around on the ocean floor ready to be picked up.²⁹⁴⁹

The current difficulties surrounding UNCLOS and the development of marine resources will probably mean that the oceans present an almost virgin opportunity in the new era. Once people have started mining there, costs will fall and markets will expand. The oceans may also provide food to support a new round of growth in the human population. The total organic potential of the seas is thought to be at least as great as that of the land. While some whale and fish stocks have been seriously depleted, the general bounty remains relatively untouched.²⁹⁵⁰ At the same time, the oceans represent possibly a new habitat for the human species. There have already been proposals to construct giant, partially submerged industrial complexes. Such structures can be highly cost effective, as well as invulnerable to earthquakes and high winds.²⁹⁵¹ The new era may be expected to see humans moving on to the oceans in vast floating cities.

The vigorous, uncompromising and ambitious people of the dawn are likely to rise to the challenge of depleted ores and exhausted oil fields with all kinds of technological innovation, even moving out into space to satisfy their thirst for minerals. As they learn to drill deep into the earth's crust or to quarry other bodies in the solar system, practically any level of resource consumption might easily be met. After all, just one asteroid a couple of kilometres across contains more metal than humans have excavated in their entire history to date.

People will also come up with superior technologies that allow them to make more of a given quantity of energy or raw materials. They may succeed in exploiting high-temperature superconductivity, for example, thus drastically raising the efficiency of electrical power systems. At the same time, worries about long term oil supply will become quite irrelevant as people invent currently unsuspected forms of propulsion and power generation. Some developments will not need raw materials at all. They will consist of pure abstract ingenuity expressed in computer software, including discoveries in artificial intelligence. In the new era, therefore, vital resources will seem abundant once more and their supply will be completely unproblematic.

Innovations

Innovation today is increasingly stalled. However, the dawn will see it become a torrent again. This future, ocean-dwelling, space-going, asteroid-mining civilisation will eventually make today's industry seem puny and the contemporary world quiet and undeveloped. Fantastic new technologies will facilitate a tremendous expansion

of the human population and extraordinary improvements in standards of living.

In the current era, internet commerce has been largely parasitic on existing economic activity, diverting retail trade from existing outlets towards a more sophisticated form of catalogue shopping. Existing companies are interested in using it more to cut jobs than to create them. One firm has sold industrial chemicals over an internet auction site, bypassing its usual sales staff. There is also an obsession with branding issues. The Pacific island of Tuvalu was paid fifty million dollars for the right to license its internet extension, '.tv', to television companies around the world.²⁹⁵² The business plan of one company that has purchased a '.tv' name involves giving people free televisions in return for an undertaking to watch so many hours of advertisements per week. With this kind of flimsy concept, it is not surprising that most internet businesses have ended in failure.²⁹⁵³ The dawn, by contrast, will see real web-entrepreneurship. Electronic media will be used to offer wholly new kinds of service that are beyond the imagination of people today. The businesses of the dawn will turn the internet into a real source of jobs and wealth, and will make it the vital backbone of a new global economy.

Genetic engineering is another crucial technology that has been much extolled, like the internet, but is finding it increasingly difficult to make headway. Its application to crop plants is sinking in a quicksand of public hysteria. There is no rational debate involved. Genetically modified crops have simply been labelled 'Frankenstein foods' and that is enough. People are in dread of them, though the explanation of precisely what harm they may do, insofar as this has been clarified at all, is based on large amounts of pessimistic supposition. If used wisely, the ability to exert fine control over the characteristics of economically important plants offers signal benefits. Yet there is a growing moral objection to it and an apparent preference for remaining ignorant rather than play with Promethean fire.

One can of course choose ignorance as the least risky course and argue in favour of it. However, after the privations of a dark age, people will prefer to take a chance and investigate what genetic technology has to offer. With no ethical committees or other regulatory paraphernalia to stop them, people will be free to experiment with genetic engineering in all sorts of areas, including the treatment of disease or even the cosmetic alteration of human characteristics. Today, a proposal to create gill-breathing humans by experimenting on embryos would be greeted with horror, and such research is out of the question. During the economic recovery, though, some genetic engineers might well choose to go down this route, and they may create a novel form of

economic specialisation that eventually brings benefits to everybody.

In general, innovation after the dark age will be judged with pragmatic realism. Nuclear power is likely to be an important beneficiary. It is being abandoned today because contemporary attitudes to power generation are based on delusions and fantasies, rather than on straightforward economics and technical merit. Solar, wind and wave power suffer from the inherent constraint of a low energy density, which means that electric plants based on these sources must occupy large areas of real estate.²⁹⁵⁴ In 1998, Greenpeace demonstrated a solar powered office outside a meeting of European Union energy ministers. It was successful, but there is simply not enough surface area in a city for every office to be solar powered, so long as one still wants room for roads and parks.²⁹⁵⁵ Nevertheless, 'environmentally conscious' pressure groups would rather see numerous green fields go under concrete to make a solar power station than accept a nuclear power station taking up a fraction of the area. Even when they admit the disadvantages, campaigners urge the adoption of solar and wind power primarily on moral grounds.²⁹⁵⁶

People cannot afford to adopt technologies for moral reasons but only because they are economically viable and good at satisfying human needs. After the dark age, the moral arguments, which are spurious anyway, will be long forgotten. The measure of any technology will be its ability to improve people's standard living and not romantic ideas about the purity of sunshine. In fact, nuclear power is probably an ideal technology for adoption during the early dawn. It does not require an ongoing supply chain and is compatible with a high degree of self-sufficiency.²⁹⁵⁷

One of today's worries about nuclear power is disposal of the wastes, which nobody wants in their backyard. It is true that nuclear waste compacts a lot of nastiness into a small volume. However, the slag heap from a coal-fired power station spreads an equivalent amount of nastiness through a very large volume, and that might be thought even less desirable. It is just that the tradition of building slag heaps was started at a time when pollution and human safety were not significant considerations. The nuclear industry, by contrast, was born into a world where these were becoming neurotic obsessions. It is required to show that its waste will not leak out for at least ten thousand years. Proving this is very difficult. Yet even if radioactive waste were to breach its containment, it is absurd to suppose that people in future could not detect the problem and do something about it.²⁹⁵⁸

During the dawn, the concerns that are expressed in current nuclear safety rules will no longer exist. Life will be cheap again. Making things better in the here and now will far outweigh

any concerns about possible harm to future generations. People will assume that their descendants can look after themselves. Worries about the health problems of nuclear technology will also be minimal. Today, these problems are at the limits of detectability anyway. If there is an impact on the health of the general population, it pales into insignificance in comparison with factors such as smoking.²⁹⁵⁹ The people of the dawn, with their realistic approach to life, will not be bothered by such subtle fears.

Even the Chernobyl accident, a worst case scenario, has been shown to be eminently survivable. Nature is flourishing in the evacuated zone despite predictions that nothing would grow there for centuries. The forests are encroaching on the abandoned towns, while boar, goats, rabbits and wolves roam freely in great numbers. Humans are returning to the area, in defiance of the authorities – to loot, to grow opium poppies, and just to live in the area where they grew up.²⁹⁶⁰ In 1999, the first baby born in Chernobyl since the disaster turned out to be a healthy girl.²⁹⁶¹ No doubt, the fallout from the accident is likely to result in tens of thousands of extra cancer cases over fifty years, yet this figure is tiny in relation to the total deaths from cancer over that period. It was a catastrophe and real people continue to suffer. Nevertheless, if viewed in perspective, it will be seen to be a pinprick in comparison with the injuries and insults that the human race experiences every day.

If this seems heartless and complacent, one should recognise that such heartlessness and complacency will be typical of the economic recovery. They were also typical of the industrial revolution, when many people lost their lives in the toxic and hazardous environments of the factories. Clearly, that sacrifice has led to a more comfortable and safer world. Humans learn from their mistakes. During the dawn, it will become acceptable to make mistakes once again, and hence to make unconstrained technological progress.

Objectively, nuclear power is arguably the most efficient and least polluting generating technology that humans know of. Subjectively, it is fearsome, mysterious, and unnatural. The dark age will change all this. Since the Chernobyl disaster, the Russian and Ukrainian public has actually become more accepting of nuclear power than before.²⁹⁶² It has seen the worst and realised that it is tolerable. It has moved away from irrational fear towards a realistic estimate of the risks, and it now sees them in the perspective of often greater risks that people readily accept, such as car accidents. A journalist visiting the ruined plant asked one guide why she did not bother to don protective gear like the visitors. “I am not a radiophobe, personally,” she replied.²⁹⁶³ Many of Russia’s nuclear power plants remain dangerous, being poorly designed, poorly maintained and poorly operated, but there

are no plans to decommission them.²⁹⁶⁴ Russians have more pressing concerns, such as maintaining any form of civilised lifestyle at all.

In a similar way, during the economically vigorous dawn, people will construct nuclear reactors without hindrance. These will be unregulated and sometimes mismanaged, and one can expect a number of further Chernobyls. Paradoxically, these nuclear disasters will make the technology less feared rather than more. In any case, as engineers continue to gain experience, nuclear power plants will become safer and eventually utterly commonplace. The anti-nuclear dread of today will seem like superstitious Ludditism. After the dark age, the word ‘nuclear’ may become all the rage – to be nuclear will be to be good.

The dawn is also likely to see people developing nuclear fusion. This is widely regarded as ‘good’ nuclear power, for it does not generate lethal waste products, and is potentially extraordinarily efficient in its consumption of resources. Through nuclear fusion, a bathtub of water could yield enough energy to supply the needs of a whole village for a year.²⁹⁶⁵ Unfortunately, researchers currently have difficulty containing and controlling the nuclear reaction (not because it causes a runaway explosion but because it fizzles out within microseconds). They predict that success is still several decades away. As the descent continues, in an impoverished world where this kind of activity is thoroughly de-legitimised anyway, they will surely lose their chance. However, under the demand generated by industries of the new era, engineers are likely to crack the numerous problems involved. Necessity, after all, is the mother of invention.

Once the nuclear industry becomes mundane and above all free to experiment, people can be expected to extend it in other novel ways, such as blasting into space atop nuclear rockets. The potential value of nuclear technology in the new era may therefore be summarised as abundant energy and a whole new vista of innovation. With an expanding and economically vigorous population to take advantage of it, the world will experience major leaps forward in wealth. Just as the humblest people today live like kings of former times, so the humblest people in the next era will live like the sultans, sheikhs and business moguls of this one.

Spacefarers

Humanity’s outward push into space has long been dreamed of and predicted. Today, it seems as though the dream might be being realised. However, space-borne activity is not yet financially self-sustaining, and the human presence in space will remain negligible until it is. Private companies are springing up with plans for everything from space tourism to asteroid mining. Yet they will

soon be running into the same problems as the current advocates of nuclear power and genetic engineering.

Plans for space tourism are threatened by the fact that getting into space is not only expensive but also dangerous. One private British enthusiast has spoken of launching a piloted rocket within years, but this was after one successful test and when the preceding one had risen only two hundred feet before going off course and crashing into a hill.²⁹⁶⁶ In the nine months to mid-1999, six military and private rockets blew up shortly after take off.²⁹⁶⁷ This technology is still far from routine. Apart from the risk of a catastrophic failure, astronauts receive very high radiation doses. A Russian doctor who flew on Mir has described the whole experience as a very unpleasant one and says 'never again'. He had problems with nausea, loss of calcium from the bones (which passes through the kidneys, causing stones) and general loss of cardiovascular condition. It took him two years to recover.²⁹⁶⁸

Following the Challenger disaster, the United States space shuttle fleet was grounded for some five years. The French and British Concorde fleets were also grounded following the supersonic aircraft's first major accident. If space tourism companies ever get off the ground, they will soon be facing bankruptcy, as the newspapers brand their product the carcinogenic trip of a lifetime or some accident forces them to halt their operation and undergo a lengthy investigation.

Space travel will not become orders of magnitude safer until it is an everyday undertaking. To get to that point, people will need to launch very many flights, some of which will inevitably end in disaster. In a compensation-claiming culture, where human life is regarded as priceless, that kind of sacrifice is intolerable. Space flight cannot be a common experience until it is almost perfectly safe, but it cannot be perfectly safe until it is a common experience. This impasse stymies progress. In the dawn, people will take a more robust attitude and the impasse will disappear.

The exploitation of space resources is currently governed by a number of United Nations compacts.²⁹⁶⁹ These emphasise that exploration should be for the benefit of all countries, and that celestial bodies should be used exclusively for peaceful purposes. They also assert that outer space must be the province of all humankind, and not subject to national appropriation. However, the idea that chronically bellicose humans will colonise and make use of space in an entirely peaceful manner is not even worthy of consideration. In any case, making space the property of all humankind only encourages a tragedy of the commons. Someone who owns a piece of the moon is likely to exploit it sensibly, not polluting it and realising its maximum potential. On the other hand, if the moon is owned

by everybody and by nobody, then people might as well dig mines by casually exploding nuclear weapons, take the easy pickings, and move on, leaving a horrible mess behind them.

The values enshrined in UN agreements make sense when the exploration of space is seen as a largely academic and governmental exercise. However, they will break down when space is explored as an everyday business activity and, in particular, when bits of it turn out to have enormous economic significance. By the time the dark age ends, these treaties will have long been destroyed anyway and the UN headquarters will have been burned to the ground. The private entrepreneurs who then open up space will certainly not do so on behalf of all humanity. If they find a copper mine on the moon, they will keep it for themselves. One entrepreneur planning to land a spacecraft on an asteroid in 2002 has already said "If I take the risk to go there, by God I'm going to claim it."²⁹⁷⁰

Professor Nikolai Kardashev once proposed a classification scheme for technological civilisations.²⁹⁷¹ A Kardashev-1 civilisation controls the resources of an entire planet, a Kardashev-2 civilisation controls the resources of an entire solar system, and a Kardashev-3 civilisation controls the resources of an entire galaxy. Today, humans are variously supposed to be at the level of Kardashev-0.3 to Kardashev-0.7 (the lower figure is probably more reasonable). However, they can be expected to break through the Kardashev-1 barrier some time in the next era.

To reach Kardashev-1, humans will have to take to space on a grand scale. This means, for instance, tapping a large part of the solar energy reaching the earth. In orbit, where surface area is not a serious constraint, solar power stations may come into their own. People may also be expected to use the moon's resources as freely as the earth's. It will be a messy and polluting business. The sky at night will be teeming with artificial satellites. In winter, huge orbiting mirrors will beam sunlight on to northern cities. The moon will be turned into a building site. Nuclear rockets will be shuttling to and fro, occasionally going wrong and exploding with spectacular effect. Terrific wars will be fought in order to gain control over the great prizes to be had on other celestial bodies. It will require the brashness and ardour of the post-dark age world to make such things happen.

On the other hand, some commentators suggest that people will never construct a space-based civilisation. They note that other planets in the solar system seem to lack the minimum requirements for human sustenance, while even the nearest star could not be reached in under a hundred thousand years, and that has no planets anyway.²⁹⁷² Such reasoning, is based on a classically static view of the world. An eminent

astronomer said in the nineteenth century ‘one thing we shall never know – the chemical composition of distant stars’. He was proved wrong by the advent of spectroscopy. Humans have always been pushing onwards and outwards, doing things that would have been inconceivable a hundred years before. They long ago reached the most remote and inhospitable regions of the earth, just to get away from each other and from governments. There is no doubt that people will eventually move off the one little planet they now inhabit, albeit that the technologies involved may be difficult to imagine.

This is not even a matter of choice. People will need to move into space just to continue developing on earth. By cultivating the seas, for instance, rather than merely foraging in them as today, they will genuinely begin to strain the global environment. Until now, humans have probably only got away with some large pollution events, as well as chronic insults to the atmosphere, because the oceans have acted as a huge stabilising influence. If people actually start interfering in this safety system, their luck may well run out. They are likely to disrupt important chemical cycles, with the effect, for example, of increasing the levels of certain carcinogens in the atmosphere.²⁹⁷³

In this case, if humanity is to survive, people will need to pay far greater attention to the earth’s dynamic systems. Instead of taking atmospheric and ocean chemistries for granted, they will need to monitor and maintain them in a quite active manner. In other words, they will need to exhibit a level of ingenuity and technology that amounts to taking control over the entire planet and becoming a Kardashev-1 civilisation. At the same time, as people clamber into orbit and on to the moon, taking industry with them, many environmentalist concerns will be invalidated. Outer space is vast and already populated with far more nastiness than human activity can conceivably throw at it. In the long run, human beings will do better by extending their mastery over nature than by reverting to some mythical, Eden-like state of perfect accommodation with it.

It is true that, besides earth, no other planets or their satellites are promising habitats for humans. However, there is nothing that technology cannot in principle overcome. The judicious release of CFCs, for instance, those despised greenhouse gases, might warm up Mars and increase the density of its atmosphere.²⁹⁷⁴ Some calculations suggest that within just a few hundred years humans would not need to wear space suits there, although they would still need to carry an oxygen supply. Meanwhile, people could live quite happily in suitably pressurised and heated enclosures anywhere within the solar system. This would only be an extension of the long-standing process whereby humans have overcome local environments – for example, with

clothing and with fire – in order to extend their habitat beyond the tropical climes where they originated. Planetary surfaces may not even be the best places for an expanding technological civilisation,²⁹⁷⁵ and the new era could well see people taking up residence in orbit.

In due course, space settlers will be seeking self-government, for that is a natural aspiration of colonists after they have been in situ for more than a few generations. When they are controlling vital assets, such as lunar mines or orbital factories, they will soon begin to question the justice of paying taxes to some earth-bound political authority. Given the economic issues at stake, such independence movements will probably result in some violent wars of secession.

The movement of economic activity into space during the next era will be but the beginning of a new human adventure. Subsequent cycles of dark age and renewal may see humans making the entire solar system their own and then moving beyond it – with technologies as unimaginable today as the jumbo jet would have been to the ancient Romans. Eventually, humans may even achieve Kardashev-3 status. However, that is not thousands but, one might guess, hundreds of thousands of years away.

Scientific discovery

In 1997, science writer John Horgan brought out a book entitled *The end of science*. In this, he argued that most of the great scientific discoveries have already been made, and, on this point, many people might agree with him. Such a thesis, however, shows a large failure of imagination. Horgan has been accused of precisely that, as well as of pandering to a millennial sense of doom, and of narcissism for claiming that this is a special era of culminations. The truth is that in every age some people believe that everything worthwhile has already been discovered. At the end of the nineteenth century, just before physics was revolutionised with quantum theory and the theory of relativity, Lord Kelvin said that future discoveries were to be looked for ‘in the sixth place of decimals’.

Against such criticism, Horgan points out that most great discoveries were made before the advent of state sponsorship, when the scientific enterprise was a fraction of its present size. He says it seems unlikely that the scientists who made these discoveries were brighter than those of today, and it is more plausible that fundamental science has already entered a period of diminishing returns. While he acknowledges that there are still important things to be discovered – such as a cure for cancer – he says that they will fall within the framework of understanding that scientists already have.²⁹⁷⁶

In the short term, Horgan will prove to be correct. This is because his failure of imagination is in tune with the failure of imagination of today’s

descendant civilisation. There is indeed a slow-down in fundamental discoveries, and this is due to the waning creativity of the scientific community. In the long term, Horgan's view will be revealed as utterly and completely wrong. Future generations will regard those who now hold such a view as intellectually primitive indeed – not just ignorant but ignorant of their ignorance. Of course one's theory of the universe seems, at all times, to be nearly complete and consistent, whether it explains the stars as human souls or as balls of burning gas. Of course one cannot imagine what scientific discoveries might be made in the future, or one would have practically made them already. Yet to conclude from this that one knows virtually everything is complacent in the extreme.

The recent failure to make fundamental breakthroughs is actually linked to the fact that science has become a state-sponsored enterprise. When it was done by amateurs paying their own way, science was the domain of perfectly free thinkers who could pursue their interests as they pleased. In consequence, it was always generating new ideas in unconventional areas. By contrast, science is now a well ordered and responsibly managed profession, and its practitioners have become the guardians of a huge orthodoxy. Discoveries are made within the framework of existing knowledge precisely because scientists must work that way to succeed in a scientific career. Those who go off at a tangent or challenge received wisdom find their ideas denounced as preposterous. Their research proposals are unlikely to get past the grant-making committees. In many cases, the ideas may well be preposterous, but without a willingness to explore the preposterous people are unlikely to make fundamentally new discoveries. A recent *Scientific American* article said it all. Describing new particle detectors at CERN, it stated that lengthy computer simulations have shown they 'are capable of detecting whatever new phenomena nature may exhibit'.²⁹⁷⁷ In other words, nature may only exhibit new phenomena that these instruments are capable of detecting.

Horgan's acknowledgement that there are few signs of progress in obtaining cures for cancer or mental disease illustrates the problem. Thirty years ago, President Richard Nixon committed the United States to a war on cancer, which has involved billions of dollars and tens of thousands of researchers. Yet while a few rare cancers have much better survival chances, overall mortality has changed by a few percentage points at best.²⁹⁷⁸ This 'qualified failure'²⁹⁷⁹ of cancer research suggests that further tinkering within the existing framework is precisely what is *not* needed. Doctors' whole mindset is quite possibly wrong and, if cancer is to become as trivial as measles, some radical new thinking is required.

It should also be recalled that much of contemporary medicine is probably quite flawed, with one expert estimating that 20 percent of medical care is useless and some is potentially dangerous.²⁹⁸⁰ Future generations will be amazed at how doctors could so crudely hack people about and dose them with poisons. Medical procedures that now seem highly sophisticated will eventually be thought perfectly barbarous. One day, people will look back on them as they now look back on witchdoctors and bloodletting. After all, recent investigations suggest that these folk remedies had a logical basis and could produce useful effects. They seemed efficacious in their own contexts, though they failed many people, just as today's medicine seems efficacious but still fails many people. With respect to some illnesses, the whole paraphernalia of the health care system is an elaborate side show, giving the illusion of control over something that people do not control at all. It is just that ever since the first shamans shook their rattles at evil spirits, humans have been unable to admit to the sick that they are ignorant and impotent to relieve their suffering.

Much of what purports to be scientific today is not science at all. For example, the discovery of genes 'for' libido, homosexuality and so forth is a quack practice that operates very much in the existing framework but provides virtually no insight into the complex behavioural phenomena it purports to explain. In general, there is an enormous gap between the practice of science and the claims that are made of it. Even the extremely bright Stephen Hawking has declared absurdly that scientists nearly understand the universe. They do not. It is as mysterious as it ever was. People have come a long way since their stone age ancestors wondered at the world around them. They often know much better what is happening. Yet they still have scarcely an inkling as to why. Even something as simple as a stone falling to the ground, when studied deeply, reveals riddles and inconsistencies in scientific theory. The idea that these inconsistencies can be resolved by minor adjustments to existing ways of thinking is misguidedly optimistic. Picking at these little threads will eventually cause the whole fabric to unravel.

Herman Kahn and his associates have suggested that future discoveries 'may even seem to contradict the laws of physics'.²⁹⁸¹ They are surely right. The view that science is reaching its limit rests on an interpretation of the scientific enterprise as analogous to the exploration of the land surface of the globe. Even if that is correct, there is little good reason to suppose that the regions yet to be explored are small and uninteresting. As Newton saw, there is an ocean of truth beyond the beach where scientists have been picking up pebbles. It may even be that knowledge

has no finite geography at all, and the scientific enterprise is facing limitless horizons and infinite surprises.²⁹⁸²

Today people are tethered by their presuppositions, like donkeys in a field. The dark age will release them from this bondage. In the dawn, people will be free to make astounding

discoveries as they roam far beyond their current horizons. Combine this intellectual leap forward with the new resources, new challenges and unrestrained power sources of the next era and one has the ingredients for an extraordinary phase of human achievement – one even more extraordinary than the phase that is now coming to an end.

Chapter 40 - The social recovery

Multicoloured civilisations

Norman Tebbit once pointed out that, in international sport, many British Asians support Asian teams rather than British teams. He suggested that this indicates where their true loyalties lie, and it is not with Britain. In this case, he implied, British Asians should not be surprised when their neighbours do not wholeheartedly accept them as compatriots. It is only natural and sensible that people should not be completely trusting or generous with those who act as though their interests lie elsewhere. If British Asians do support British teams, though, then they should be accepted as being fully British and absolutely entitled to the loyalty of other Britons.

Tebbit's remarks proved controversial, although they reflect the straightforward principles of social cohesion. A successful society requires its members to show commitment to its values and goals. Since these are acquired not by biological inheritance but by social learning, there is no reason in principle why Asians (or other ethnic groups) should not become fully British in outlook and allegiance. Of course, no society can realistically expect its members to be completely in agreement on every issue. Some degree of cultural diversity is inevitable and even healthy. Nevertheless, support of one's national team in international competition might reasonably be thought to be a minimum requirement for genuine commitment to a particular society. On the other hand, British Asians may not be wholly loyal to Britain because they are alienated by the suspicion and hostility of the white British majority. It works both ways. In this case, it is wrong to blame immigrants for their non-acceptance in British society. The attitudes of the natives are at least equally responsible.

The dark age should resolve these self-perpetuating problems of disloyalty and non-acceptance. It should eradicate the memory of both Asians and white people concerning their separate origins. By the time of the dawn, everybody living in Britain will be simply British. This will result in a multicoloured but cohesive society. It will be quite different from the multicultural societies that people are trying to create during the descent. It will not emphasise the tolerance of cultural diversity. Rather, it will insist that a single, common culture be adopted by all, regardless of physiological differences. This does not mean that the recent immigrants will have wholly accepted the pre-existing culture of each country – far from it. All the old cultures will have been destroyed and something new will have been created in their place. In Britain, white people may have come to accept Asian customs as much as the other way around.

In America and Australia, the European-derived populations will forget their origins just as Asian-derived populations do in Europe. The 'west' will surely not exist in the new era. There will instead be new civilisations, composed of alternative complexes of societies. By the time the dark age lifts, the national language of Australia is more likely to be some derivative of Japanese than English. Social logic will evolve to reflect geographical logic. These new civilisations will have new cultures, and they will be multilayered, as today for example English culture and French culture are different from each other but part of a broader European culture.

One can expect the social units of the next era to be larger than those of the present one. Today, American television and American products have spread a veneer of shared cultural assumptions around the world. However, this global culture is superficial and not very effective at binding people together. It has encountered strongly entrenched national cultures that it cannot displace. In the dawn of the new era, though, ideas propagated rapidly around the world by internet or jet airliner will encounter almost a cultural vacuum – undeveloped national identities, and civilisations that are still taking shape. Common values can therefore be expected to spread over a wide area at a time when societies remain fluid and malleable. Places which are today struggling for unity of purpose, like Europe or Indonesia,²⁹⁸³ are particularly likely to benefit and will re-emerge as robust and monolithic entities.

World identity

The dawn may eventually see the entire world integrated as a political unit. One might ask whether the entire world could also become a socially cohesive cultural unit. Recent history has certainly demonstrated that people aspire to such a goal. This lies behind the formation of the United Nations, and the existence of numerous charities and other organisations that attempt to do good around the globe. For all the ethnic hatred of today and despite the fact that people's attempts to help each other are often desperately flawed, human beings in general appear to have their hearts in the right place.

Various thinkers have pointed out that it will be difficult to develop global loyalties, i.e. a 'Terran patriotism', because of the fact that the world as a whole has no external enemies.²⁹⁸⁴ Yet while it is true that a common enemy is good for cohesion, this is not absolutely necessary. The survivors of an aeroplane crash in the jungle might be expected to behave as a cohesive group simply because they face common risks and hazards, and without an enemy as such. In a similar way, the human race faces a hostile universe, in which co-operation is helpful for survival, and this creates

some basis for global cohesion. Besides which, if the new era sees humans moving beyond earth's boundaries, political othernesses may emerge in orbit or on other planets, and a nascent world state will be able to measure itself against these.

Cohesion is the product of goal interdependence and shared experience. Today's extremely tenuous and patchy sense of world-wide cohesion may be partly due to the belated realisation that humanity has a common interest in preserving the world, and partly due to the fact that news media can now report major happenings instantaneously around the planet.²⁹⁸⁵ In the high scale society of the dawn, these influences on cohesion will be even stronger. Achievement of Kardashev-1 will particularly emphasise humanity's common interests. People will have to think about actively maintaining the earth and its borderless dynamic systems. They will recognise it as something they are all responsible for and that affects them all. Such common concerns and duties should bring the different nations closer together. The chances of creating a global identity in the next era may be high.

The total wars of the twentieth century led to the setting up of the League of Nations, the United Nations and the European Union. Those who witnessed the carnage evidently hankered for a better way of resolving their differences. The nuclear-level conflicts of the next era are likely to stimulate equivalent sentiments. When the mushroom clouds dissipate, people will feel more strongly than ever the need for unity. Indeed, the experience of a centuries long dark age may have the same effect on a broader scale. After much blood has been freely shed, a large part of the world's cultural heritage destroyed, and every continent reduced to a subsistence lifestyle, there may arise a huge determination to foster mutual understanding between the world's peoples.

All the same, a cohesive world will not be as unified as a contemporary nation. People will surely not be Terrans in the way that they are now English or French. Though that may eventually come, it will probably not be in the coming dawn. There must be one step at a time. Today, local groups are relatively strongly cohesive, whereas global cohesion is tenuous in the extreme. The next step is likely to involve a reduction in local cohesion and an increase in global cohesion. In this way, the new era could be characterised by many small, weakly cohesive groups, which will be embedded in a global culture that is stronger than today. The step after that would be the disappearance of local groups altogether, and the creation of a strongly cohesive global society. However, this situation will only really make sense when there are societies on other planets to serve as an external reference. This is illustrated in Figure 40-1.

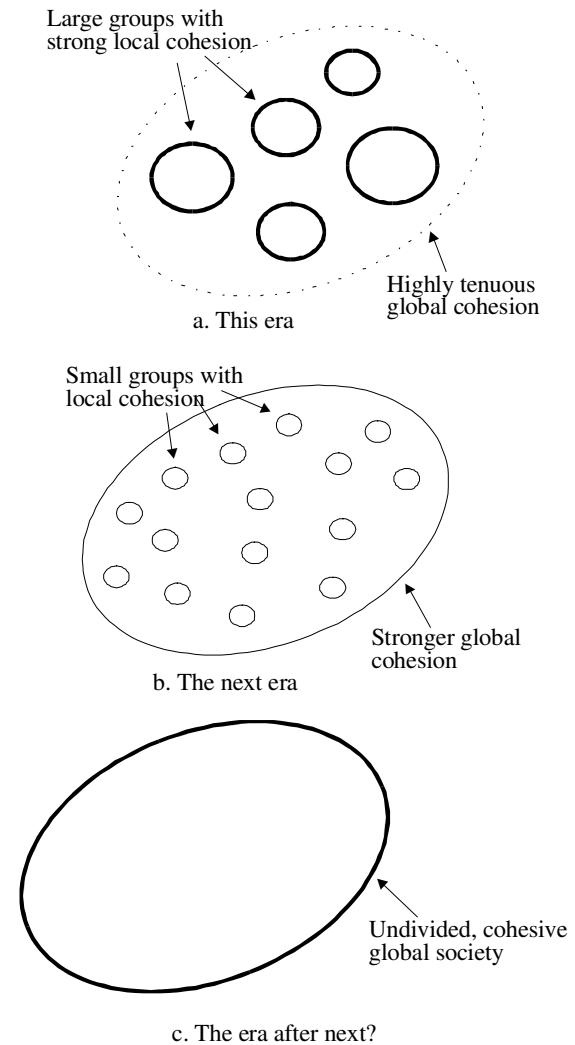


Figure 40-1: *The new era may be characterised by smaller groups embedded within a more cohesive global culture. This could be a step towards a fully unified world society, which will be achieved in some later era.*

Since strong cohesion makes a society effective in the short term but tends to be detrimental in the long term, the sort of arrangement shown in Figure 40-1b might represent an ideal compromise. It implies sufficient cohesion to ensure that people co-operate rather than waste their energies in destructive conflicts. However, it does not imply so much cohesion that creative thinking is suppressed. This might be regarded as the model for which the visionaries of the new era should aim as they pull their respective peoples out of the darkness.

Religion

Since cohesion necessitates a shared religion, social recovery will require elimination of the myriad cults that have arisen during the descent, to leave just one or two as the kernels of the new civilisations. A key characteristic will be that religion is not just shared but above all *practised*. People will become churchgoers once again – or

perhaps mosquegoers. Attendance at religious ritual, and hence affirmation of the moral way, will be effectively compulsory. Religious institutions will take up a more prominent and powerful role in society. Religious piety will intrude into everyday life.

This religious society will not be a rational or a gentle one. The conversion of Europe following the sub-Roman dark age was a peculiar, superstitious process. The lives of the saints are full of occult acts, such as slaying dragons and curing the sick, as well as magic stones, magic letters, magic belts and magic dust, all of which supposedly convinced people of Christianity's efficacy. There was also much slaughtering of pagans and smashing of their temples.²⁹⁸⁶ The early dawn will be a similarly fanatical period. Religiously inspired warriors may be responsible for the most uncompromising violence. When the emperor Constantine embraced Christianity, it was after seeing the vision of a cross and the phrase 'in this sign, conquer'. In the Iran-Iraq war, young boys served as human minesweepers, running through Iraqi minefields to clear the way for Iranian troops. Their priests had promised them paradise in return for martyrdom.²⁹⁸⁷

Societies after the dark age will be intolerant and illiberal. People will be discouraged from anti-social acts by fear of community disapprobation and spiritual retribution. They will be ready to check each other's behaviour, and children will be strictly socialised. Those who behave unconventionally, whether in important ways or in trivial ones, will by no means be tolerated or left to themselves. On the contrary, they will experience gossip, reproach and, if they do not mend their ways, ostracism. There will be social security, but it will be channelled through religious institutions. It will be dispensed not by anonymous bureaucrats but by local clerics who know all about the recipients and see them every day. In such circumstances, it will be very difficult to malingering and defraud the system. This is just another reason why the people of the dawn will inevitably prove more vigorous and more conscientious than those of the descent.

A believed religion may also prove to be an anchor for the people of the dawn as they go out to confront the vast emptiness of outer space, in a manner far more serious than that of today. Over the last thirty or forty years, the numerous attempts to search for evidence of extraterrestrial activity have had a tremendous ability to capture the public imagination. The image of a giant radio telescope listening in to the signal from some distant galaxy, seeking the sounds of intelligent life, is a thrilling one. In the latest such project, thousands of ordinary people have been using their home computers to sift through enormous amounts of

data, looking for tell-tale signs of pattern in the noise from other star systems.

Humans are not only interested in finding intelligent life in space. The first craft to land on Mars were equipped with biochemical experiments to detect the signs of possible Martian microbes. The Mars Pathfinder mission of 1997 was also on the quest for life. When scientists discovered a possible ocean under the ice of Europa, one of Jupiter's moons, their immediate reaction was to plan a robotic probe that could search for indications of life there. Obviously, the human race finds something compelling in this quest for life beyond the earth. It is behaving like a child that has woken in a silent house and is running from room to room to see if anyone is at home. Thus far it has found itself alone.

In the context of this mysterious loneliness, religion has always helped bolster people's self-belief. The space-going pioneers of the new era may find themselves very much in need of it. This is especially when scientific breakthroughs and renewed humility reveal how very little humans actually understand about who they are and where they are going. Those who colonise the solar system will be devout people, ready to accept privations and often sacrifice their own lives. One of the first buildings on Mars will surely be some sort of house of worship. These pilgrim voyagers will be driven by faith and by the certainty that, in transforming other planets to human ends, they are fulfilling the destiny god has chosen for them.

Art

Today, artists aim to disturb, disrupt and reject. After the coming dark age, they will encapsulate and communicate each civilisation's values. They will rediscover discipline. They will have something to say and will not fall back, as now, on crude shock value. There will be little subtlety. Meaning will be entirely on the surface. Artists will use conventional techniques and return repeatedly to stereotyped themes. They will suppress their individuality, like the medieval cathedral builders, of whom almost nothing is recorded.²⁹⁸⁸ They will express ideals and aspirations, ignoring everything that is base, common and mundane. The art of the dawn may seem to be out of touch with the circumstances of ordinary people, but it will thereby uplift them, providing them with a sense of identity and of transparent confidence.

The art of the new era will probably employ media that are today considered avant garde. It is increasingly rare for, say, Turner prize entries to include any painting or conventional sculpture. This is not just due to the de-legitimation of traditional art forms. It also reflects the fact that traditional forms have genuinely exhausted their potential or have become irrelevant in an era when representation is ubiquitous thanks to the videotape

and electronic camera. Art has always evolved technically as well as stylistically, and future artists will work with the advanced technologies of the dawn. In the descent, it may seem that artists do not have much further to go. They have done just about every bizarre thing that can be imagined. However, in the dawn-time, using innovative media, artists should find vast new continents to explore, and art will be made innocent again.

Roles

A society is a structure of relationships and a pattern of roles. This pattern can be understood as the result of an interplay between people with different needs and potentials. The forceful supply leadership, the enterprising enrich themselves, the charismatic give moral instruction. Others become artists or technologists, and beyond this there are many ordinary people, who more or less sleepwalk through life, fitting into the various nondescript roles. A person's behaviour and position in society are not the expression of an inherent, biological destiny, but they are the result of an interaction between what that person brings to the society and what everyone else brings. One's experiences in life result from an equilibration process between one's own drives and talents and those of one's peers.

A moral society confines people to fixed roles that are ascribed to them at birth and that dictate how they are expected to behave. The equilibration process takes place against considerable resistance. It is harder for people to realise their most appropriate role, especially when it differs significantly from what they have been born to. Such a society is repressive to those who have unusual talents, although it is not so uncomfortable for the sleepwalking majority, and actually benefits the weak and untalented who might otherwise fall by the wayside.

The most visible manifestation concerns the distinction between male and female paths through life, but that is certainly not the only area. The women's liberation that has taken place during the descent can be regarded as just one aspect of a more general human liberation. The enfranchisement of women, say, was part of a much broader process in which votes were previously given to underprivileged men, and subsequently to younger people. If one goes back several centuries, people's careers were limited in all sorts of ways. What they ate, what they wore, and how they spent their free time were all dictated not just by sex, but also by age, station in life, and even occupation. This is the situation that will characterise the dawn. Today any individual can aspire to any role. In the dawn, people will be constrained, with gender differences being an important determinant of their careers.

The relationship between men and women is not really a matter of male priorities being imposed

on women, but rather results from the interplay of male and female priorities. The traditional gender-based division of labour can suit both parties. It is true that men tend to be physically stronger than women, but far too much can be made of that as an explanation for supposed female subordination. Some women may live in physical fear of their husbands, but it is not a majority, and in general social relationships are determined by more than just a physical contest. Among men, the leaders are not necessarily the physically strongest ones. Psychological factors or personality traits tend to be more important in determining who dominates whom. In the same way, women are able to lead or dominate irrespective of their physiological capacities. Even within the social milieu of fifteenth century France, Joan of Arc managed to become the general of a great army. She was only a slight figure, and no match for any one of the soldiers she led, yet no man beat her back into subordination.

Men's and women's roles during the dawn will reflect their different stereotyped capacities. These are based on the existence of some overall distinctions between male and female orientations to life. Exactly what the distinctions are does not really matter, and in any case there is much overlap. The crucial point is that, in the moral societies of the dawn, the overlap will be ignored, and the result will be rigid social forms such as are familiar from moral societies of the past. Though many men and women do not fit the stereotypes, enough do to make such role confinement viable. These stereotyped behaviours are complementary, after all, and in that way they can form the basis of a successful society.

The return to stereotyped roles will not necessarily be worse for women than for men. Working class women of a century ago may have had hard lives, lumbered with washing, ironing and looking after children, but it is not clear that their husbands, down the pit for twelve or fourteen hours a day in filthy, unsafe conditions, were better off or more fulfilled. It will be the same during the dawn. Furthermore, some women will still be rich and powerful, by virtue of their birth. Traditionalism can actually make it easier for women to achieve wealth and status. It is telling, for instance, that Sri Lanka, India and Pakistan have all had women premiers, despite the fact that they are relatively conservative societies, which supposedly afford women a low status. By contrast, the United States, a land of opportunity, has not yet had a female president, or even vice president. The Asian women premiers came from powerful families, where the restriction of leadership roles to certain dynasties meant that their talented women faced less competition. When the competition for power is very open, as in the US, the most politically accomplished individuals are that much more likely to be male.

More constrained careers for both sexes does not immediately imply that women must return to domestic drudgery. The technology of the dawn will soon surpass that of today, and should therefore relieve the chores of home making. Being excluded from other roles by the rigid attitudes of a cohesive society, women could find themselves with considerable time on their hands. They are likely to seek new accommodations and arrangements, based on novel institutions and different kinds of role. There is apparently no previous model for such a society. Nothing like it has been seen in history, since the circumstances that would give rise to it have not existed before. It must be something entirely new.

A fourth ensemble?

There are three fundamental institutional ensembles that can form the basis of human societies. These comprise: small societies dominated by friends, medium societies dominated by acquaintances, and large societies dominated by strangers. (It should be recalled that 'friend' and the other terms have specific technical meanings.) The stranger ensemble, for instance, involves shops and rulers, whereas the friend ensemble lacks these and is characterised by sharing and egalitarianism. Any particular society is a complex mixture of ensembles, but one invariably predominates.

Although these three ensembles are the only ones that have emerged in history so far, the dawn might create the conditions for some radical new form of human existence – one that could be called a fourth type of institutional ensemble. Feminists have suggested something along these lines with the idea that the future will produce a new form of society, in which women play a leading role, and social institutions are characterised by supposedly feminine qualities, being more consensual, conciliatory and co-operative.²⁹⁸⁹ This particular vision is surely somewhat simplistic, given that men will presumably continue to exist and given the uniformitarian assumption that the men and women of the future will be like the men and women of the past. A new institutional ensemble might arise and be based on new principles, but those will not be specifically feminine principles. It will again reflect the interplay of people's different needs and potentials, with gender being just one dimension along which they differ.

The way that a new institutional ensemble may arise in the dawn is exemplified by the experiences of 'The Well', a computer club that was set up in the early 1980s, before the internet was generally established. The club's subscribers could communicate via an electronic bulletin board. It soon became clear that they were forming intense relationships, just through exchanging textual e-mails. People who met only via their computer screens were going out of their way to help one another – offering not just advice but even practical

help, such as making introductions for those trying to break into a particular career. In one case, the plight of a single mother so touched the Well's membership that they got together and raised the money for her son's college education among themselves. There was a downside, in that some members formed terrific enmities on-line. However, overall there was a real sense of community.

To understand the significance of this, one should recall the definition of friends as people who are both intimate and trusting. Friends help each other, asking for no direct reward. They share their goals, while they do not coerce or exchange with each other. Friends are bound together by social relationships, but not by economic or political ones. In every human society, the number of a person's friends is typically between ten and fifty. What was remarkable about the Well was that its members behaved like friends even though they numbered in the hundreds and later thousands – far more than one should expect. Computer-to-computer contact, it seems, can be as intense as face-to-face contact. E-mail transcripts, which are increasingly cited in divorce cases, tend to be very intimate. It is becoming possible to achieve that intimacy and intensity with far more people. The implications are potentially enormous.

Computer communications hint at the possibility of constructing high scale societies that are dominated by friends, or at least in which friend relationships are far more significant than at present. This would constitute a fourth institutional ensemble, presumably prevailing in the on-line world rather than the in-the-flesh world. This on-line world also has high vagility, which is today a feature of friend-dominated societies like the Kalahari foragers and prevents the emergence of political authority. With high vagility, domineering people get nowhere because those being dominated simply put distance between them. On-line communication is exactly like that. Anyone who feels bullied can ignore the bully's e-mails or migrate to another discussion group.

The internet, which has subsumed organisations like the Well, is certainly characterised by the kind of behaviour that one expects for a friend-based society. For a start, it is egalitarian and anarchical. It seems to be incompatible with the jurisdiction of political authorities. People tend to share with each other, or at least they share the sort of thing that can be shared by computer (i.e. computer files though not books and shoes). Although electronic commerce is believed to be the big thing, much of the material on the internet is actually available for no cost. The Linux computer operating system, for instance, has been developed by amateurs for their own enjoyment, as have numerous Linux-based software components, including word processors

and spreadsheet programs. This is all free for the taking on the internet, and in Linux discussion groups enthusiastic amateurs provide each other with free technical support.

Today, the internet is constrained by having been born into a well-established world order. Governments and entrepreneurs are trying to replicate on-line the political and economic structures that exist off-line, and they are resisting the internet to the extent that it undermines those structures. The internet is unlikely to generate radical new social forms this side of a dark age. During the dawn, however, it will be re-built on a grander scale and in a world whose institutions are still being laid down. The internet may play a large role in shaping those new institutions and may influence the course of the social recovery. The features of the fourth ensemble may spill over into ordinary existence, to create a society based on sharing and equality. In the present era, utopian attempts to create such societies have foundered on various human failings. However, the unprecedented achievement of widespread intimacy with high scale may negate the perverse incentives of welfare states and communal lifestyles. It will be difficult to abuse the generosity of one's on-line intimates, for one's behaviour will be easily detected, their generosity will quickly be withdrawn, and the news of one's anti-social behaviour will spread fast.

The internet may also provide the key when women search for new roles and new significance during the social recovery. The more that computers and computer communications are a part of everyday life, the more that women will be represented and the more that the technology will reflect women's interests and aspirations. An on-line world, populated by intimates, is essentially on the private side of life, which is traditionally the feminine domain. Therefore, women may predominate in the cyber-environment of the new era, making it a woman's world in the way that past societies have seemed to be a man's world. Already, young people are making friends and seeking romance via internet discussion groups. Women play strong roles in this environment, where men cannot push themselves forward so easily or pose a physical threat. The intimacy of the internet lets women shape situations far more to their own convenience. When a relationship is continued off-line, its structure is already well-established. In the new era, face-to-face interactions will certainly not disappear, but the new rules of the internet will cast a long shadow over them.

Other technologies could supplement the role of the internet in making possible a new institutional ensemble. For instance, electronic surveillance, including on-street video cameras and traceable electronic commercial transactions,

would make it difficult to be anonymous. Even in very large populations, people could feel as they do today in a small town or a foraging band, where their neighbours know everything about them. This would be not big brotherdom but rather community intrusiveness and the government of shame. With much greater spontaneous co-operation and disclosure of one's actions, the new era might remove much of the incentive and opportunity for crime.

There is a secular progress in human institutions, albeit that it is a glacially slow, snakes and ladders kind of progress. By introducing a fourth institutional ensemble, or by moving in that direction, the new era will continue to make progress possible. Liberal democracy and the free market are more proficient at meeting human needs than totalitarianism, feudalism or various other institutional forms that people have concocted over the last five thousand years. Yet they are still not the basis of a perfect society, and their flaws are now propelling the world towards a dark age. After the darkness, societies may be characterised by sharing, more than by selfish accumulation. The disadvantage of the weak may disappear and with it their long-standing oppression and humiliation. This will be a fairer era, and possibly one of greater understanding between people.

The cynical may regard such a forecast with disdain or indeed with derision. A world of widespread fellowship and equality seems to be an idealistic dream. Nevertheless, this dream is not just the preserve of beatniks and sentimentalists. Ordinary people everywhere aspire to such ideals, though they perennially fall short of them in practice. The great religions have always encapsulated this dream in their philosophies. It lies behind the clauses about 'peace' and 'for all mankind' that appear in everything from United Nations treaties to the message left behind by the first astronauts on the moon.* An era that takes a few more steps towards this dream will surely be one that satisfies human longings better than any that have gone before.

None of this implies that humans will have changed in themselves or become better at arranging their affairs. It is simply that the changing conditions in which people live, the unforeseen consequences of their human genius, will enforce new ensembles upon them. No other arrangements will be consistent. If one looks back on the atrocities and agonies of the last five thousand years, one might be left with little admiration for the human race and no hope for its

* 'Here men from the planet Earth first set foot upon the moon. July 1969, A.D. We came in peace for all mankind.'

future betterment. However, if one truly understands what has gone on in those years, one will realise that hope is written all over them. Five thousand years is nothing. Ahead there await inconceivable amounts of time and inconceivable amounts of space for humans to pursue this

adventure. Put all doubt aside. The human story is one of triumph and disaster. Today, humanity is moving inexorably towards the greatest disaster there has ever been. From the perspective of the millennia, though, there has been and always will be only triumph, more triumph, and triumph again.

Envoi

This book has come a long way – from the first cities on the plain of Sumer to the yet unborn world of an off-planet civilisation. It has shown that the retrenchment of once ascendant societies is no occasional catastrophe but is an absolutely central part of human experience and the historical record. It has produced a semi-formal theory of human sociality, which extracts the underlying simplicity behind complex and disparate political, economic and social phenomena. It has applied this theory to our present situation and found that we are surely on the leeward slope, descending as we advance, beset by irresolvable difficulties, stumbling towards the abyss. It has looked towards the future and guessed at what it holds in the short, medium and long term – descent, darkness and dawn.

My detailed predictions are bound to be wrong. My description of the future is really just an account of today. I have seen it through tainted eyes. The future will always contain unpredictability, an element that by definition we cannot foresee. My gloomiest prognoses will turn out to be too gloomy, my optimism too optimistic. In many areas I will prove to have been overly dramatic. In others I will have been complacent and lacking in imagination. I have tried my best. Nevertheless, crucial events will deflect history down paths that invalidate huge tracts of my analysis. That is the fate of all those who commit their expectations to the printed page.

So much for the attempt to anticipate my future critics. However, I did not write this book in order to tell my readers' fortunes. I wrote it to justify a model of society based on the concepts of integration, organisation and cohesion, and to elaborate its application in understanding the human dynamic. This model is new in its specific exposition, its terminology, and its movement towards rigour. It is not new insofar as it builds on what many have already perceived before me. The discussion of dark ages has been above all a vehicle to demonstrate the value of this theory. I fully expect that acceptance will be slow and grudging. Yet I hope that others may eventually come to follow this example. Indeed, I hope that they will in due course improve upon it. Naturally, my ideas are crude and incomplete. The light that they cast is dim. It is no use dreaming of being the Newton of social science, or even the Galileo. Social scientists are still waiting for their Copernicus.

Though my predictions may be mistaken in detail, I remain confident in the overall view that a

dark age is coming. During the next few decades it may appear that I have misjudged the situation. Things may seem to be getting better. We may appear more enlightened, wealthier, more in control of our destiny than ever before. Do not be fooled by appearances. Those that have judgement should perceive the historical undertow, unseen, relentless and deadly. Those that understand integration, organisation and cohesion should perceive our world order crumbling from the inside. Amid all the noisy confusion of history, there is one thing that comes through loud and clear, and that is the impermanence of power, wealth and love. To predict that everything we hold dear will be destroyed and that something new will be put in its place is to predict that the night will fall and the sun will rise in the morning. Nothing is more certain. Ashes to ashes, dust to dust. *Sic transit gloria mundi*.

Nevertheless, such a forecast is not just a message of doom. It carries a message of hope as well as a warning. A dark age is a time of suffering but also a time of renewal. A dark age is a great levelling, a time when the records are wiped clean and there is a chance to begin again. For the dispossessed and disadvantaged, there should be no gloom in that. No good thing was ever achieved without hardship. We will all suffer in the disintegrated, disorganised, discohesive time to come. We will all thereby be ennobled.

There is one pertinent question that I have not addressed in anything that has gone before. This is, what can be done about these things? The answer at one level is, of course, nothing. The wind blows, the tides rise and fall, the dark age buries the old era that is spent and brings in the new era that is full of opportunity. Even if we could do something about it, why should we want to?

Yet though we cannot avert the dark age, we can prepare for it, survive it, be ready to burst forth when it is over. Irish monks carried some embers of the old civilisation through the convulsion of the sub-Roman dark age. When that storm was over they soon re-lit the fires of learning and civilisation. Perhaps we can do the same. Some of us must join together to establish our own focus of integration, organisation and cohesion that can be lobbed through the dark age like a capsule through interplanetary space. We must preserve order, knowledge and faith in a time of treachery, ignorance and turmoil. If you think that is important, contact me.

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Index

- 20: 80 society, 204
- Aberfan disaster, 282
- abstraction and reality, 95
- acquaintance-ensemble, 97
- acquaintanceship: defined, 93; nature, 95
- Actium, battle of, 87
- actors: defined, 91
- adaptation. *See also* change; problems of, 165
- advantage: absolute, 113; comparative, 114
- aesthetics: assessed objectively, 34; related to state of ascendancy, 33
- Africa: as part of ancient world system, 15; break up of countries, 305; current situation, 184; development denied by current world order, 335; future wealth, 335; loss of government control, 191, 194; medieval wealth, 9; moving backwards, 191; nature of problems, 330; past achievements, 9, 10; past empires, 9; past urbanism, 9; prospects in dawn, 330; resistance to colonisation, 9; trade with Islamic world, 9; trade with Rome, 9
- Africans: as new elite, 331
- age of the alibi, 220
- ageing populations, 296; in history, 65
- agriculture: and mechanisation, 258; and rise of elites, 58; government interference, 206; growing problems, 258; profligacy, 318
- AIDS, 264
- Akhenaten, 15, 41, 88
- Akkad, 8, 11, 24, 49
- Al Azhar. *See* universities
- Albigensian crusade, 37
- Alexander the Great, 1, 8, 12, 21, 42, 45, 50, 54, 107
- Alexandrian renaissance, 7
- Alpha movement, 220
- Amazon: and Brazil's development, 210; and global dimension, 229
- ambitions: and capacities, 170; outstripping capacities, 273; tendency to outstrip capacities, 172
- amelioration of social institutions: perennial demand for, 171
- America, pre-Columbian: achievements, 10; contacts with old world, 15; north-south contacts, 15
- amnesia of civilisations, 14, 177
- Anasazi, 13, 19, 24, 29, 43. *See also* Chaco Canyon
- Angkor, 8, 18, 21, 22, 24, 26, 27, 29, 30, 31, 37, 45, 48, 52, 54, 57, 59, 60, 69, 70, 75
- Angola, 330
- animal rights, 214
- Annan, Kofi, 333
- antibiotic resistance, 264
- Arab-Israeli conflict, 249, 253; future of, 290
- Aristotle, 298; and cycles, 170
- armed robber: paralysed, 266
- arms sales overseas, 230
- arms spending: growth in east Asia, 230
- army. *See* military
- art: and signalling of values, 124; cheapness in decline, 34; concern with everyday in decline, 33; confronting values, 214; flamboyance, 33; in descent, 303; reasserting shared values, 345; renewed by dark age, 327; secular in decline, 33; ugliness in decline, 33
- artificial intelligence, 336
- asbestos, 210
- ascendancy: ability to achieve with meagre potential, 55; and poor decision-making, 168; and violence, 18; difficulty of maintaining, 169; humble origins, 41; impermanence, 6, 148, 167
- ascendancy and decline: economic factors, 32; political factors, 24; social factors, 40
- Asian values, 251
- Association of South East Asian Nations, 180, 236
- Assyria: ancient, 2
- asteroid: resources, 336
- asthma, 270
- asylum seekers, 314
- asymmetric conflicts, 289
- attitudes towards commerce, 26
- Aum Shinrikyo, 220, 221, 325; and nuclear weapons, 232; underground attack, 195
- Australia: past achievements, 10; prehistoric and world system, 15
- Austro-Hungarian empire, 12, 19. *See also* Habsburgs
- autarky, 239
- Axum, 9, 115; and world system, 15
- Aztecs, 10, 13
- baby milk scandal, 243
- Babylon, 8, 41, 42, 49, 50, 61, 81
- balance of power, 104
- balance of power game: east Asian, 288
- balance of trade, 236
- Balfour declaration, 253
- banana dispute, 295
- Bangkok, 261
- barbarians, 169; as a cause of decline, 49, 164; as cause of coming dark age, 264; future invasion, 313; imitated by declining civilisation, 38; invasion under way, 313; not louts, 164
- barter: in coming dark age, 315
- base: defined, 112
- Basque movement, 218

- Bastille, 47, 309
 Battle of Waterloo and British supremacy, 13
 beggars, 296
 Beirut, 188
 Berlin, 142
 big government, 205; all responsible, 170
 bin Laden, Osama, 196, 290
 black economy, 200
 blacks: American, 190, 219; rejecting drug culture, 192
 bodyguards, 135
 bombing: as strategic weapon, 226
 boom-bust: attempts to eliminate, 206
 bootstraps. *See* change: simultaneity
 Bork, Robert, 185, 186, 268, 279
 borrowing: healthy in ascendancy, 37; prevalence of, 147
 Boserup, Ester, 97
 Bosnia-Herzegovina, 188
 Boulding, Kenneth, 87, 91; and break up of Soviet Union, 282
 brain drain: from third world, 242
 brainwashing, 130
 break up of states: and decline, 21, 22; in modern world, 199
 Bretton Woods, 130, 155, 179
 bridges: in US, 312; Inca, 109
 Britain: current situation, 182; decline illusory, 186; loss of prestige, 13
 British empire: heyday, 13
 BSE, 240, 269, 273
 Buchanan, Pat, 201, 252, 253
 Buckingham Palace: destruction of, 312; royal family evicted, 301
 building: deterioration in decline, 74
 bureaucracy. *See also* civil service; ancient Egypt, 2; tendency to grow, 170; unmanageable today, 195
 business cycle: inevitability, 207
- Cahokia, 13, 19, 27, 43
 cancer: failure to find cure, 341
 capital flight: from debtor nations, 244
 capitalism: ancient, 25; medieval, 25
 capriciousness and history, 87
 carbon dioxide, 262
 Caribbean: existing disorder, 200; future disorder, 286
 Carolingian civilisation, 12
 carrying capacity, 149; and organisation, 150
 Carter, Jimmy, 186, 261
 Carthage, 12, 29, 44, 62, 68, 73, 74, 76, 87, 185
 Casas Grandes, 13, 28, 75
 catching up. *See also* competitive edge, pioneers, late-starting societies; ease of, 67, 156
 celibacy movement, 302
 central planning: ineffectiveness, 161
 CFCs, 190, 261, 263; and Mars, 340
 Chaco Canyon, 13, 26, 29, 43, 48, 51, 75
 Challenger disaster, 339
 challengers: attracted by ascendant societies, 67, 168
 change: and contradictions, 99; and risk, 153; inevitability, 148, 177; problems of adaptation, 165; rapid during dark ages, 76; resistance to, 66; role of children, 153; simultaneity, 63; speed of, 42, 63, 140; supposed modern rapidity, 147
 chaos theory, 87, 144
 Charlemagne: crowned Holy Roman Emperor, 12
 Charles I, 66, 286
 chemical and biological weapons, 231
 Cheops, 3, 4; hated, 4
 Chernobyl accident, 338
 chicken-and-egg. *See* principle of mutual causality
 chiefdoms, 21; ancient Europe, 4
 child abuse, 216
 Child Support Agency, 217
 China: banned voyaging, 181; coming upheavals, 286; conflict with Taiwan. *See under* Taiwan; current situation, 183; desire for lebensraum, 290; economic growth, 190; growing international presence, 226; influence on west, 14; past achievements, 8; prospects in dawn, 331; relations with west, 249; rivalry with Japan, 190; superior to Europe, 16; territorial disputes, 233
 Chinese embassy: bombed, 250
 Christianity: in descent, 302; possibility of surviving dark age, 325; transformation, 308
 Church of England: disestablishment, 302; ignorance of, 308; in decline, 221
 churches: closed down, 302; theft from, 303
 cities, 137. *See also* urbanism; abandoned with decline, 21; and protection, 20; efflux from in collapse, 311; reliance on complex infrastructure, 311
 Citizens' Charter, 215
 civic responsibility, 34
 civil service: growth of, 205
 civil unrest: and political weakness, 23
 civilisation: defined, 137; thin veneer, 188, 309
 clash of civilisations, 250
 classical revivals, 303
 Cleopatra's nose, 87
 climate: and decline, 48; and social change, 154; and social vigour, 153, 154; human influence uncertain, 260; inherently variable, 262; not understood, 262
 Clinton, Bill, 225, 227, 231, 240; and Monica Lewinsky, 251
 Clive, Sir Robert, 251
 Coast Guard Academy, 123, 128
 coercion, 101
 cognitive dissonance, 125, 126, 141; and hostility to outsiders, 126
 cohesion: and absence of crime, 131; and common enemy, 343; and effectiveness of a group, 130; and intolerance, 126; and legitimacy, 125; and power, 134; and scale, 128; and sense of service, 130; and shared experience, 128; conservatism,

- 123; contradiction, 131; creation of, 127; defined, 92; erosion in ascendant societies, 169; global, 180; growth through history, 179
- cohesive group: autonomous existence, 130
- cold spell: Asian, 262
- collapse. *See* decline; explanations for, 158; gradual approach, 6; multifarious, 7, 158; sudden and unexpected, 73, 188; violent nature, 311; western; supposed impossible, 6, 177
- collectivism, 61; and organisation, 135
- Colombia: rebel rule, 200
- Columbus, Christopher, 19, 56, 88, 165, 223, 283; link to Alexandrian researches, 7
- comets, 48; as cause of dark age, 257
- coming dark age: contemporary awareness, 283; creativity, 320; end indistinct, 328; erratic onset, 278, 283; forgetting, 278, 318, 324; freedom, 310, 322; ignorance, 316; inevitability, 274, 278, 281; likely to be devastating, 177; moral restraint, 326; narrow horizons, 322; obscurity, 311, 322; opportunity, 310; possibly partial, 295; timings, 278; underway in Africa, 191; unexpected, 281
- Common Agricultural Policy, 239
- common enemy: and cohesion, 129; not always effective, 129
- common goods, 106
- common markets: proliferation of, 236
- common people: participation in historical process, 47, 88, 171
- communications: and cohesion, 129; and commerce, 26; and integration, 107; and state formation, 21; democratising effect, 196; growth of, 178, 179; postal systems, 21
- communities: breakdown of, 301
- community versus individual, 38
- compassion: and decline, 38; growth of, 266
- compensation claims: against NHS, 271; booming, 267
- competitive edge: loss of in decline, 67
- complexification, 98, 112
- complexity: of modern government, 194
- computer crime, 312
- concentration camps: and cohesion, 130
- confidence: and entrepreneurship, 120; and modern global economy, 189; crisis of in Inca and Aztec collapses, 35; failure in decline, 56
- confinement of population: and state formation, 20
- Congo: fabulously rich, 241, 335
- connectedness: and catastrophe, 204; of ancient world, 15, 16; of economy, 116; of modern world, 178
- conservatism, 123
- consumption: tendency to outstrip production, 70
- contingent nature of historical events, 87
- contraceptive technology, 65
- contradictions: and decline, 167; and social change, 99; inability to resolve, 191; of present world order, 189; prevalence of, 192
- convergence of cultural forms, 57; and ensembles, 96
- copper: demand for, 258
- corruption: in descent, 302; increase in decline, 39; increasing, 216
- Cortés, 13, 35, 36, 45, 53, 54, 56, 57, 76
- counselling: counterproductive, 268
- countryside: reinvasion of cities, 315; ruined in dark age, 318
- covert and overt principles, 84, 86
- creative destruction, 76
- Crete, ancient. *See* Minoan civilisation
- Creutzfeld-Jakob Disease, 267
- Crick and Watson, 83
- crime: ancient world, 39; and social alienation, 216; Britain, 200; compared with Victorian times, 193; during descent, 285; increase in decline, 39; increasing, 193; international, 198; recent improvements, 193; versus tort, 104
- crime and punishment: improved in dawn, 333
- crop destruction, 239
- crop failure, 48
- crusades, 246; viciousness of, 253
- Cuban missile crisis, 291
- cults: proliferation, 221
- cultural imitation, 61; in decline, 38
- culture: defined, 152; not genetic, 153
- currency speculators: and government weakness, 199
- customs barriers, 69, 115
- customs union: of Germany, 179
- cycles, 143; Aristotle's theory, 170
- cynicism, 35, 141, 163
- Dalai Lama, 252
- dark age after next, 280
- dark ages. *See also* coming dark age; a break in cultural transmission, 72; as own solution, 192; awareness within, 73; breakdown of law and order, 75; characteristic values, 141; continuity, 143; creating own conditions, 146; creativity, 142; defined, 140; duration, 74; fundamental cause, 173; historical examples, 71; inevitability, 142, 158, 188; nature of, 71, 141; obscurity, 141; prevalence, 71; rapid onset, 140; renewal, 143; restructuring of institutions, 77; size dependent on preceding achievement, 166; term disapproved of, 71
- Dark Ages: of Europe, 71, 72
- darkness, 277; duration, 279; nature, 280
- Dawkins, Richard, 220
- dawn, 278; a fairer society, 348; intolerance, 345; larger social units, 343; nature, 280; opportunities, 329; peak of ascendancy, 328
- Dayton agreement, 225
- DDT, 210
- debt: funding western prosperity, 236; growth of, 204; of US, 189
- debt forgiveness, 245

- decadence: and collapse, 161; biological, 163; economic, 162; encouraged by ascendancy, 167; political, 161; social, 162
- decision-making pathologies, 160
- decline: a commonplace, 8; ability to detect, 51; always being predicted, 81; and mutual causality, 63; as failure to meet familiar challenges, 54, 55, 56; awareness of, 73; complex causes, 53; doubtful explanations, 51; gradual, 54; inevitability, 17, 81, 146; is it real?, 186; multiple explanations, 50; only when internally sick, 54; perceived to be occurring, 185; prehistory of causes, 53, 54; prevalence, 11; reversible, 42; simultaneity, 29–30, 300; things getting better, 187
- declinist attitudes: a symptom of decline, 56, 142
- defence spending: growth of, 169
- deforestation: and past decline, 49
- de-legitimisation, 163; of commerce, 224, 299; of government, 223; of western culture, 222
- democracies: supposed not to fight, 233
- democracy: and dark age communities, 310; and disintegration, 197; benefits, 197; defects, 161, 171; drawbacks, 110; in non-western societies, 250; inhibited by west, 251; not in dawn, 328; proliferation of, 186; threatened during descent, 286
- demographic transition, 150
- dependency. *See also* parasitism; among professions, 273; growth of, 272; in decline, 70; in descent, 296
- descent, 277; duration, 278; nature, 280
- deterrence, 104; failure of, 105; unstable, 232
- digital information: destruction of, 319
- Dilmun, 11
- diminishing marginal returns, 173, 297
- disabled people: and coming dark age, 317; preservation of dignity, 267
- discohesion: defined, 123; effect on integration and organisation, 170
- discrimination: and compensation claims, 267; new forms of, 306
- disease: and decline, 50, 164; degenerative and western health systems, 270; devastation of Americas, 165; new diseases, 165; resurgence of, 318; resurgent worldwide, 264
- disintegration, 109
- disorder. *See also* crime; increasing world-wide, 194
- disputed successions: and decline, 19
- division of labour. *See* specialisation
- divorce, 217
- doomsaying: as myths for rich, 186; failure of, 186
- downsizing, 208
- drainage systems: Aztec, 10
- drought, 260; and decline, 48
- drugs: legalisation, 302
- drugs trade, 229
- Durham cathedral, 214
- Durkheim, Emile, 85
- Dutch empire, 13
- dynasties: established by invaders, 18
- early obsolescence, 169
- early retirement, 272
- earth's dynamic systems: future control of, 340
- earthworks, 13
- east Asia: recession and western delight, 239; resurgent challenge, 288; war triggers, 233
- East India Company, 15, 23, 104, 181
- East Timor, 12, 252, 278
- Easter Island, 23, 37, 40, 50, 51, 52, 62, 74, 75, 76
- economic espionage, 239
- economic growth: and social reality, 203
- economic models: excessive complexity, 84
- economic relationship: defined, 91; nature, 92; networks, 116
- economics: inadequacies of, 83, 121, 207
- economic-social coupling, 135–36
- ecumenism, 221
- eddies. *See* organisation; unstable, 121
- education. *See also* schools; and ascendancy, 31; as characteristic of states, 138; become a right, 212; in descent, 299; lost with decline, 32; quality deteriorating, 211
- Egypt: debt forgiven, 245; Islamicisation, 254; medieval renaissance, 6
- Egypt, ancient: contact with Hittites, 15; contact with Iraq, 15; contact with Mycenae, 15; demise, 2; durability, 2; economy, 2; engineering compared with Rome, medieval Europe, 3; grandeur, 2; law, 3; literacy, 2, 5; nature of achievement, 5; nature of affluence, 5; population, 2; precociousness, 4; Ptolemaic, 1; rapid rise, 2; sophistication, 2; supposed stagnation, 7; taxation, 2; trade with Europe, 4; urbanism, 3, 20
- Egypt, modern: compared with ancient Egypt, 6; economy, 5, 6; loss of prestige, 5
- El Niño, 154
- elaboration, 277
- election turnouts, 224
- emancipation. *See* freed slaves, liberty
- empires, 21
- energy slaves, 151
- energy supply: future uncertain, 259
- Engineering Council, 272
- England: break up, 305
- English language: speakership declining, 251
- ensembles, 115. *See also* convergence of cultural forms; and modern Africa, 191; and scale, 97, 177; causing rapid change, 140; fourth, 347; inconsistency, 99; nature, 96–97
- entrepreneurial failure: endemic, 208
- entrepreneurship, 28; and industrial revolution, 179; creation of organisation, 119; disappearance with decline, 28, 162; discouraged by inter-governmental institutions, 238; encouragement of, 120; failure with decline, 28; lacking among wealthy, 162

- environment: Europe's not natural, 261;
improvements in, 210; natural changes, 154;
protection ineffectual, 261; robust, 261;
technology beneficial, 155
- environmental change: effect on society, 154;
inevitable, 262; not inherently bad, 260
- environmental deterioration: and decline, 165; and
past decline, 48; in ancient Pacific, 49
- environmental determinism, 153, 154
- environmental treaties, 238
- environmentalism, 224; and innovation failure,
210; destructive of economy, 261; irrelevant to
third world, 255
- ephemeralisation, 151, 259
- equality: desire for, 348
- equilibration of human capacities, 346
- Ethiopia: and medieval world system, 15; historic,
9
- ethnic cleansing, 248, 324
- ethnic conflict, 218; dark age bloodbaths, 323; dark
age resolution, 324; in descent, 306; increasing,
248; Yugoslavia as exemplar, 324
- ethnic tensions, 219
- Etruscans, 11, 18
- Eurodollar market, 199
- Europe: current situation, 182; growing tensions,
234, 235; not special, 14, 15; prospects in dawn,
331
- Europe, ancient, 4; existence of hierarchy, 4
- European civilisation: debt to others, 14, 16, 181;
debt to past, 67
- European Union, 8, 115, 180, 182, 192, 198, 199,
206, 219, 225, 337; aid scandal, 256; and
German ambitions, 234; and lack of ministerial
control, 194; as an overhead, 272; benefits not
obvious, 238; break up, 303; decline of trade
with America, 236; EMU, 294; enlargement,
246, 304; fraud, 246; hostility towards, 246;
inability to keep peace, 228; integration unlikely,
228; obstructing trade, 238; promotion of
cultural convergence, 246; secessions, 304
- Europeanness: failure of, 246
- evolution: teaching banned, 224
- examinations: discontinued, 299
- exchange rate, 156
- exchange, in anthropology, 86
- executive pay, 207, 216
- exogenous influences, 164
- explaining decline: difficulties, 51, 52;
multifarious, 52
- explanation in science, 84
- exploitation, 119
- exploration: ancient, 7
- exporting and importing, 118
- external proletariat. *See* barbarians
- extraction, 22; and integration, 105; benefits, 23,
106; return flow, 105
- extraterrestrial life: invasion by, 265; lack of
evidence for, 185, 345
- Exxon Valdez, 261
- fallibility: of leaders, 168; Sorosian, 99
- false dawns: during descent, 294
- family: close knit in coming dark age, 323;
disruption of, 217
- family breakdown in extreme decline, 36
- famine: a social problem, 241; not inevitable in
Africa, 335
- Faust, 163
- fear of competition, 114
- fecklessness, 172, 208, 218, 272; prevented in
dawn, 329
- feedback. *See also* institutional complexity:
reinforcement, vicious circles; in social systems,
87
- feminism: vision of future, 307, 347
- ferment: among Hittites, 42; ancient Greece, 42;
and approach to dark age, 278; caused by
interplay of political-economic-social
relationships, 136; economic, 121; Egyptian, 6;
historic examples. *See* turnover of nations;
historical, 42, 71; in Chinese history, 43; in
European history, 43, 44; in history, 41; nature
of, 143; on all scales, 44, 140, 177; pre-
Columbian America, 43; summary, 137
- feudalism, 180
- financial markets: growing unstable, 204
- firing squads, 128
- first world war, 8, 12, 22, 44, 110, 124, 128, 140,
146, 189, 194, 234, 262, 289; and democracy,
286; enthusiasm for, 289; harmful to Europe, 62;
unexpected, 281
- fishing, 258
- flags, 123; American, 305; English, 305; Mexican,
305
- flooding: and big government, 205
- Food and Agriculture Organisation, 243
- food production: limits, 258
- forager society: absence of specialisation, 111; and
population size, 166; nature of, 86
- Ford, Henry, 207
- forecasting: and informed analysis, 282; failure of,
81, 281; impossibility, 87
- foreign exchange, 155
- forest fires, 142, 167, 188
- forgetting. *See* coming dark age; forgetting
- forgotten cities, 11
- fragmentation. *See* break up; and inventiveness, 60,
66, 181; in coming dark age, 310; of culture,
303; of taste and fashion, 214
- franchise. *See also* democracy; achieved by popular
demand, 196; extended in Athens, 39; extension
of, 178
- free trade: apparent failure, 115
- freed slaves: negative experiences, 172
- friend-ensemble, 97
- friendship: defined, 93; nature, 94–95
- fuel protests, 286
- Fukuyama, Francis, 131, 186, 214, 220, 255;
religion more tolerant, 248

- fundamentalism: Islamic, 254
 future: livability, 283; overview, 280; realistically assessed, 283; rosy predictions, 283; to resemble past, 185
 futurology: optimistic, 185
- Gaddafi, Muammar (Colonel), 252, 290, 330
 gains of trade, 113. *See also* organisation; illustration, 113; practical considerations, 114
 gated communities, 201, 204, 283, 309
 Gatling gun, 178
 gender relations: increasingly strained, 217
 gender roles: and social forms, 346
 General Agreement on Tariffs and Trade, 179, 236; reduced tariffs, 239
 generalisation: as a goal of social science, 82
 genetic engineering, 337; and innovation failure, 209
 geological cataclysm: as cause of coming dark age, 264
 geostationary satellites: indicative of today's achievements, 312
 Germany: future assertiveness, 288; resurgent ambition, 234
 get rich quick attitude, 238
 Ghana: attempts to establish aluminium industry, 242
 Gildas, 72
 global cohesion: in dawn, 343, 344
 global economy: lack of controls, 199; precarious condition, 189; shift to Asia-Pacific, 295; under strain, 237
 global warming: lack of evidence, 262; not necessarily harmful, 263; reinvented as global cooling, 298
 globalisation: and government authority, 198; and peace, 288; and unemployment, 238; criticisms of, 237; not in relative terms, 236; not so new, 146; supposed benefits, 236
 GNP: significance of, 203
 golf villages, 283
 Gorbachev, Mikhail, 192
 government spending: growth of, 205
 governmental squabbles: and decline, 18
 governments: and economic management, 206; defects, 159; harming commerce, 60; mistrust of, 197; regulation, 66; supporting commerce, 59
 governments ministers: overload, 194; unable to control officials, 194
 grammar schools: loss of, 212
 grand projects, 24; promoting authority, 109
 great storm: Britain 1987, 261
 Great Zimbabwe, 9, 48, 49
 Greece: ancient, 12; past achievements, 10
 Greenham Common, 110
 Gulf war, 187, 196, 202, 225, 226, 231, 252, 285; a struggle over oil, 233; and international cohesion, 247, 250; and Islamic world, 248; and Jordan, 254; compared to crusades, 253; Japanese resentment over, 249; lessons learned by NATO opponents, 227; nuclear threat, 291
- Habsburgs, 12, 19, 22, 41, 50, 53, 59, 62, 70
 hackers: threat to military, 228
 Haiti, 225
 Harappa, 11
 Harappan civilisation. *See* Indus civilisation
 Hardin, Garrett, 84, 106
 Hawking, Stephen, 341
 health: and health spending, 269; and medicine, 318; in coming dark age, 318
 health and safety, 206, 210; as an overhead, 273; inhibiting trade, 240
 hegemony: drawbacks of, 169; eroded in descent, 286; future transfer, 190, 288; transfer dangerous, 289; US leverage of, 228
 helping enemies, 169. *See also* competitive edge
 heresy, 37
 hero theory of history, 87
 Herodotus, 2, 3, 4, 9, 11, 21, 46
 heroes: de-legitimisation, 222
 Hezbollah, 220, 307; schools, 212
 hierarchy, 108; and commoners' wellbeing, 4; and goal alignment, 135; as characteristic of states, 138
 high technology: vulnerable to dark age, 312
 Hiroshima, 291, 292
 historical parallels, 185
 history: as growth of scale, 177; deep themes, 87; invariant properties, 89; seamlessness. *See* seamlessness of history; turbulent nature, 146
 Hittites, 11
 hoarding: in descent, 300
 Hohokam, 13
 Holy Roman Empire, 12. *See also* Habsburgs
 homeorhesis, 160
 Homer, 12, 73, 77; edited at Alexandria, 7
 homosexuality, 180
 Hong Kong, 41, 150, 151, 161, 200, 226, 234; cession to Britain, 251; future, 288
 Hopewell culture, 13, 24, 45, 48, 51, 52, 57, 71, 75, 77
 House of Lords, 302
 Human Development Index: Egypt, 5; Europe and North America, 6; Iraq, 8
 human dignity: increasingly important, 266
 human rights, 195, 273. *See also* rights; and government de-legitimisation, 223; future rejection of western conception, 287, 303
 humans much the same, 47, 148, 153, 177; historical examples, 16, 46
 Huntington, Samuel, 154, 185, 250, 319. *See also* clash of civilisations; Security Council, 288
 Hutton, Will, 270
 hydrologic cycle, 260
 hypocrisy: of west, 243, 251, 252
- ice age: predicted in 1970s, 262

- idleness: human capacity for, 133, 162, 172; in decline, 68
- ignorance not stupidity, 46
- Ik, 36, 65, 130
- illegitimacy, 217
- Illich, Ivan, 270
- immigration, 156, 218; becoming majority, 306; effect on cohesion, 169; in declining societies, 65; overwhelming west, 265; to increase, 313; to US, 219
- imperialism: accidental, 181
- impoverishment, 203, 204
- in-breeding: and decline, 163
- incapacity benefit, 270
- Incas, 10
- income differentials. *See* wealth differentials
- income exceeding production, 68
- independence movements. *See* separatism
- India: current situation, 183; past achievements, 9
- individual: growing importance, 214
- individualism, 214; and pay, 216
- indoctrination, 123
- Indus civilisation, 11. *See also* Harappa
- industrial revolution, 179; ancient Egypt, 7; medieval China, 16
- industrial tribunals, 273
- infant mortality: in coming dark age, 318
- information technology: and global awareness, 229; cheap and ubiquitous, 196
- Inmarsat, 209
- innovation, 121, 277; a torrent in dawn, 336; and entrepreneurship, 121; and human suffering, 182; and unemployment, 209; during descent, 294; hampered by health and safety concerns, 262; in coming dark age, 321; perennial hostility to, 66, 152, 163; suppression by strong governments, 66; types of, 152
- innovation failure, 38; contemporary, 209; historical, 28; in late Rome, 29
- instability of homogeneity, 169
- institutional complexity, 4, 10, 18, 25, 27, 33, 60, 65, 71, 138; ancient Egypt, 5; and commerce, 25; money and writing, 31; negative reinforcement, 60; reinforcement, 58; complexity, 60
- integration: and cities, 107; and communications, 107; and grand projects, 106; and peace/order, 102; and scale, 107; and tragedy of the commons, 106; contradiction, 110; defined, 92; desire for, 110; growth through history, 178; origins, 101; severe treatment of those who defy authority, 104; suppression of criticism, 168; suppression of innovation, 134
- Intelsat, 209
- interaction and integration, 103
- interaction between institutions, 58
- interaction with other societies: and inventiveness, 61, 156
- interdependent goals: and cohesion, 129
- international aid, 180; as cover for failing peace, 227; Egypt, 5; failures of, 243; Kuwaiti, 256; motivation questionable, 243; shrinking, 191, 256
- international borders: and modern Africa, 191
- international bureaucracies, 272
- international conflict: and decline of hegemon, 24
- international criminal court, 252
- international debt, 244; funds misappropriated, 244; restructuring, 244
- International Monetary Fund, 130, 179, 180, 198; and Africa, 191; and recent crises, 237; hostility towards, 249; preventing collapse, 6; promoting western goals, 255
- international relations: monopolised by elites, 22
- international sport, 304; and immigrant loyalties, 343
- international system: lack of integration, 105
- international terrorism: perpetrated by west, 251
- international trade: government attitudes, 239
- internet, 177, 178, 195, 196, 203, 216, 219; and cohesion, 347; and romance, 301, 302; and state monopoly of force, 196; and women, 348; as battleground, 229; denounced in descent, 298; disappearance of, 312; egalitarian and anarchical, 347; employment brokering, 301; meagre innovation, 294; parasitic nature of commerce, 337; post-dark age recovery, 280
- intimacy: defined, 93
- intolerance. *See* tolerance
- invaders: and decline, 50. *See also* barbarians
- invariance: and scientific method, 87
- inventiveness, 28; disappearance with decline, 28; of ancient peoples, 47; of past societies, 16
- Iran: ancient, 8; and nuclear weapons, 290
- Iran-Iraq war, 290, 345
- Iraq: ancient, 8; and sanctions, 252; medieval renaissance, 8; western support for, 252
- irrigation, 13
- Ishihara Shintaro, 288
- Islam: growing, 220; likely to emerge from dark age, 325; not inherently repressive, 253
- Islamic civilisation: and contemporary conflict, 234; current situation, 183; former achievements, 8; future achievements, 326; future assertiveness, 303; renewed self-assertion, 252; superior to Europe, 16; supposed challenge to the west, 252; tensions with west, 250
- isolation: and cultural growth, 62; and stagnation, 38
- ivory ban, 241
- Japan: as source of tension in east Asia, 249; current situation, 183; future assertiveness, 288; future prospects, 190; growing self-assertion, 226; hostility towards west, 249; prospects in dawn, 330; rivalry with China, 190; urged to oppose west, 226
- Japanese cars: destroyed in US, 249
- Jews: exodus from Egypt, 2
- jihād: at London mosque, 254

- Kardashev classification, 339
 Kennedy, J F, 168, 215
 Kennedy, Paul, 59; and collapse of communism, 281
 Keynes, J M: and pre-war London, 236
 Keynesian economics, 120
 knowledge: capricious survival, 320; no finite geography, 342
 Kohl, Helmut, 216, 234
 Korbut, Olga, 208
 Korea: reunification, 288
 Kosovo, 105, 195, 200, 202, 225, 226, 278, 319; and drugs trade, 229; and forgetting, 278; and hackers, 229; and international cohesion, 247, 250; bombardment ineffective, 290; continuing disorder, 226; lessons learned by third world, 227; NATO to withdraw, 287; phone-ins, 289; western destabilisation, 252
 Kray twins, 101
 Kuwait: future Iraqi threat to, 290; liberalisation, 285
- lack of unity. *See also* break up; and decline, 22
 language: and cohesion, 124; declining diversity, 179
 late-starting societies: benefits of, 67
 Latin America: current situation, 182; prospects in dawn, 331
 law: ancient, 8; and political authorities, 23; earliest, 23; enshrines 'regardless of cost', 268; governmental loss of control over, 195; increasingly negotiable, 198; withdrawal of popular support, 201
 law and order: collapse of, 23
 Law Society, 216
 laws: and social science, 82
 League of Nations, 184, 189, 303, 332
 Lee Kuan Yew, 251, 268
 legal system: and decoupling from reality, 269
 legitimacy, 125
 lessening, 165, 166. *See also* change
 liberal democracy: apparent triumph, 247
 liberty: drawbacks, 171; growing constraints on, 193
 libraries: destruction of, 319
 life expectancy, 271, 283
 lifecycle concept, 42
 Linux, 347
 literacy: ancient Egypt, 2; ancient Egypt and Europe compared, 5; and ascendancy, 30; and intellectual achievement, 2; as characteristic of states, 137; in decline, 211, 213; lack in some ascendant societies, 31; lost with decline, 31; modern Egypt, 5
 litigiousness: and decline, 39; and moral abdication, 215; growth of, 273
 loneliness: in descent, 301
 long distance trade: ancient, 26
 loss of competitive advantage, 28
 Louis XIV, 205
 Lovelock, James, 81, 263
- luxury: a sign of ascendancy, 27, 68
 lynching: of overseas Chinese, 248
- Maastricht treaty, 246
 Macedonia: ancient, 2
 mafia, 216, 229; in descent, 298; Russian, 190, 201, 229; and nuclear trade, 232
 magnetic media: limited durability, 319
 Major, John, 215
 Malinowski, Bronislaw, 85, 96
 Malthus, Thomas, 149
 mandala, 22, 45, 52, 69, 70; fluctuation, 41
 Mandela, Nelson, 22, 178
 markets: sponsored by political authority, 132
 marriage: disappearance, 306
 Mars: and Muslims, 326; exploration of, 328, 345
 Marxism, 82, 84, 119, 172, 199, 223
 mass production: and ascendancy, 25
 masturbation, 222
 Mau-Mau uprising, 252
 Mauryan empire, 9, 26
 Maya, 11
 McDonalds: and conflict, 233
 mediation, 104
 medicine: ancient, 10; and abdication of responsibility, 271; causing ill-health, 270; disappearance, 317; flawed, 341; growing public distrust, 271; inadequacies of, 270; vulnerable to litigation, 271
 Medicines Control Agency, 206
 medieval Europe: cultural uniformity, 246
 mediocrity in decline, 35
 melting pot, 77; of dark age, 324
 Melville, Herman: observed death of unmarried mother, 172, 268
 meme theory: failure of, 83
 mercenaries: and decline, 19; growth industry, 227; in Sierra Leone, 227; new reliance on, 287
 mercury: in swordfish, 261
 meritocracy, 218
 Meroe, 9, 29; and world system, 15
 Merovingian civilisation, 12
 metal working, 4; Inca, 10
 metastability, 122, 137, 141, 145
 methane: effect on atmospheric oxygen, 263
 Mexico: and globalisation, 237, 238
 military: and equal opportunities, 202; growing inadequacy, 202; maladapted for future conflict, 289; Russian, 201; technological vulnerability, 229
 military spending: at record levels, 232
 minimum wage, 207
 Minoan civilisation, 12, 48
 mismanagement, 159; and chaotic behaviour, 160; and defective understanding, 159; and feedback loops, 160; caused by ascendancy, 168
 missile defence, 291; necessary for emergence from dark age, 328
 Mississippian culture, 13, 45
 Mitterand, François, 256

- mobility. *See* communications
 Mobutu, President, 244
 modern era: supposed unprecedented, 86, 146
 Mogollon culture, 13, 75
 Mogul empire, 9, 23, 66, 69, 103, 133, 183, 206
 monetary union: effects of, 156
 money: ancient Egypt, 3; and delayed exchange, 117; as characteristic of states, 138; forms of, 30; potential wealth, 116; supposed lack in some states, 30
 money rents: preferred by commoners, 171
 money supply: out of government control, 199
 Mongolia, 225
 monopoly of force, 23, 103, 104, 178, 195; and democracy, 196; and information flow, 196; and nuclear proliferation, 231; and scale, 198; erosion of, 195; erosion of (international), 228, 230; harsh treatment of defiance, 22, 201; helped by technology, 196; threatened by private groups, 229
 monumental architecture, 2, 4, 5, 74, 141. *See also* grand projects; ancient Egypt and Europe compared, 4; as characteristic of states, 137; none in descent, 300
 moon: development of, 328, 339
 moral behaviour: defined, 123
 moral regeneration: calls for, 220
 moral way: harmful for commerce, 60
 morality: and private behaviour, 302; defined, 34; reduced in decline, 34; restored by dark age, 316, 326; strong in ascendancy, 34
 morals: apparent toughness, 220; relaxation of, 180, 219
 motivational industry, 301
 multicoloured societies, 343
 multiculturalism, 214, 218, 219; and Yugoslavia, 219; dangers of, 282, 306
 multi-level model, 91, 101, 118
 murder rate, 193
 museums: destruction of art treasures, 303; no longer free, 215
 Muslim majorities: in European towns, 306
 Muslim parliament, 253
 Muslims: in Britain, 218
 mutual causality. *See* principle of mutual causality
 Mycenae, 12

 Napoleon: Egyptian expedition, 1, 3
 nation states: disappearance in dark age, 322; emergence of, 246; number growing, 225
 National Health Service, 269. *See also* health, medicine; demand out of touch with affordability, 268; huge demand, 267; hygiene standards falling, 269; outstripping available resources, 274; violence, 270
 national sovereignty. *See also* governments; under threat, 199
 nationalism, 218. *See also* separatism; English, 304
 nationalist parties: growth of, 201

 NATO, 198, 200, 225, 319; as leverage for US power, 228; enlargement, 234, 287; equipment unsuited for future threats, 290; failure in Kosovo, 226; Kosovo and strains, 248; loosening, 255; multiple challenges, 287; networks hacked, 229; nuclear doctrine, 292; reduced US support, 286; shrinking militaries, 230; to break up, 287; withdrawal as hegemon, 279
 natural disaster: and collapse, 48
 needs: inadequate as explanation of social behaviour, 89
 neolithic revolution, 4, 65
 neo-Nazis, 306
 Nestlé. *See* baby milk scandal; future failure, 300
 new dynasties, 310
 new era, 278
 new order of the ages, 329
 new religions: historical, 37
 new world order, 329
 Newton, Isaac: as a rapist, 222
 nickel: and aerospace industry, 335
 Nixon, Richard, 194, 199, 225, 341; and autarky, 239
 Nobel, Alfred, 291
 no-go areas, 193
 non-governmental organisations, 198; and government authority, 198
 North American Free Trade Area, 238, 240, 241, 304
 Northern Ireland, 123, 192, 201, 229, 278, 286, 325
 nose jewellery, 302
 nuclear cornflakes, 258
 nuclear fusion, 338
 nuclear power: accidents making more acceptable, 338; and innovation failure, 210; hostility towards, 259; resurgent in dawn, 337
 nuclear power station: need for maintenance, 315
 nuclear proliferation, 231; runaway process, 231
 nuclear technology: expansion in dawn, 338
 nuclear war: survivable, 292; will reduce fear of it, 292
 nuclear weapons, 160, 178, 210, 228, 255, 292; and desire for security, 231; and Gulf war, 227; and Iraq, 231; Chinese-sponsored proliferation, 190; disarmament stalled, 291; increasingly usable, 232; proliferation. *See* nuclear proliferation; reinvented in dawn, 328; Russian sale of, 232; threatened use, 291; use inevitable, 155, 232, 291; usefulness in descent, 292
 Nuer, 104, 105
 Nuremburg rally, 308

 obscurity of dark ages, 71, 72
 ocean: resources, 336
 Oceania: past achievements, 10; prospects in dawn, 331
 oceans: future development, 297
 Odoacer, 38, 45, 49, 158, 313

- oil: a source of conflict, 233; pollution, 261; threat to world order, 259
- Oklahoma bombing, 253
- Olmeccs, 13
- Olympic games: disappearance, 304
- opium trade, 230, 242, 251, 338
- optimism: and coming dark age, 280; human nature, 282
- organisation: and education, 113; and scale, 112; and self-indulgence, 116, 162; and specialisation, 111; bias against, 119; contradiction, 119; creation of, 119, 120, 121; defined, 92; eddies, 116; global nature, 116; growth through history, 179; non-zero sum, 116
- organised crime, 201; international dimension, 229
- Ottoman empire: banned printing press, 181
- overheads, 173; contemporary, 266; defined, 170; due to democracy, 328; growing according to own logic, 268; on world of work, 272
- overindulgence, 68, 161. *See also* luxury
- overstretch: prior to decline, 67
- overtaxation, 133
- ozone hole, 261
- pace of change, 147. *See* change
- pain: of trade curtailment, 315
- Pakistan: becomes nuclear power, 227
- paper and trees, 261
- paradoxes: driving history, 334
- parasitism, 70; historical, 69
- parental bonds: weakened, 216
- parliament: and Scottish voting rights, 285
- participation of common people. *See* common people
- past and present: similarities, 16
- paternalism: benefits, 172
- Patients' Charter, 269
- peace: and commerce, 288; and integration, 102; and order, 23; drawbacks, 110; naive belief in, 146; often predicted, 282
- Peloponnesian war, 20, 24, 35, 42, 50
- pension funds, 204
- pensions time bomb, 205
- people much the same, 85, 86. *See also* uniformitarianism
- perception and reality, 98, 105, 109, 121, 135, 136, 167, 173; causing rapid change, 140; realigned in dark age, 310
- permissive society: growth of, 180
- permissiveness, 219; in descent, 302
- Persia: ancient, 2; empire, 8, 18
- perverse incentives, 172; inherent to welfare systems, 172, 270; resolved by fourth ensemble, 348
- pharmaceutical industry: collapse of, 298
- philanthropy: in decline, 215
- philosophy: renewed capacity for hardship in dark age, 327
- Phoenician civilisation, 12; destruction, 12
- phoenix principle. *See* principle: phoenix
- photographs: deteriorating, 319
- physics: banned, 299
- Pilger, John, 315
- pioneers: disadvantage, 67, 169
- piracy: Elizabethan, 190; in Roman era, 108; return of, 230
- Pizarro, 36, 52, 54, 56, 70, 74
- Playfair, William, 286
- pluralism: aspiration for, 127; incompatible with cohesion, 126
- plutonium, 293
- police: denounced, 306; increased size and powers, 193; losing battle, 193; soft approach, 197
- political authority and economic activity, 26
- political hierarchy, 19
- political integration. *See* integration
- political relationship: defined, 91; nature, 92
- political-economic coupling, 132–34
- political-economic-social coupling, 136–37
- political-social coupling, 134–35
- politicians: impotence, 194
- poll tax. *See* Thatcher, Margaret
- pollution: decreased by advanced technology, 261
- Pompeii, 264
- Poor Law Amendment, 268
- poor pay more, 105
- pope, 12, 66, 126, 215, 221, 222
- Popper, Karl, 83
- population: control of, 65, 149; excess breeding of lower orders, 164; great expansion of dawn, 337; growth a sign of vigour, 65; stagnation in declining societies, 65
- population crash: in coming dark age, 318
- population density: and integration, 108; and state formation, 19; low among foragers, 65; reduced during decline, 20
- population explosion, 149, 257
- population growth: third world, 313
- population stagnation: sign of decline, 257
- pornography: and internet, 294
- Portuguese empire, 13
- postal systems. *See* communications
- post-modernism, 212
- pottery: ancient Europe, 4
- poverty: and decline, 27; in Britain, 189; increasing, 203
- Powell, Enoch, 323
- power: and prosperity, 58, 132; and size of political unit, 21; factors affecting, 18; legitimisation, 134; necessary for ascendancy, 18
- powerful people: impotence, 194; limited freedom of action, 88
- powerful rulers: and ascendancy, 18
- precautionary principle, 263
- prediction. *See* forecasting
- premature births, 188, 270; and affordability, 268
- present: a snapshot, 148
- Princess Anne, 268
- principle: of mutual causality, 59–60, 62, 65, 97; phoenix, 76–77

- prison: degrading nature, 333
 prison population: growth of, 193; US, 189
 private property, 135
 private security: booming, 201
 privatisation: and waste, 205
 production: promotion by elites, 24
 professional merchants, 28
 progress: overall in history, 143, 148, 177, 348
 Promise Keepers, 220, 222
 protection and subjection, 102
 protection rackets and states, 101, 105
 protectionism, 113; and descent, 295; by and within
 EU, 240; by US, 240; Japan accused of, 239; of
 1930s, 179; shown self-defeating, 240
 proximate causes: categories, 159; versus ultimate
 causes, 158
 Putin, Vladimir, 191; and North Korea, 255
 pyramids, 2, 3, 4, 5, 13, 16, 24, 27, 74, 106, 300

 quangos, 205

 racial conflict, 219
 racism, 127, 223; origins of, 127
 rain dances, 47
 raj, 18, 43, 181, 183, 251
 rape, 217
 Rape of Nanking, 288
 ratchet effect: and social privileges, 171, 172
 reach: defined, 112
 reality: indifference to, 282
 recording formats: forgotten, 319, 320
 recurrence of cultural forms, 46
 Rees-Mogg, William, 185
 reflexivity, 98, 99, 105, 109, 121, 140
 regime, 98. *See* ensembles
 regionalism: to increase in descent, 286
 regulations: burden on industry, 206
 regulators, 205
 relationships: as innate, 93; not simultaneously
 strong, 136; order of precedence, 93; types of,
 91, 123
 relativism, 220; in decline, 35
 religion: and legitimacy, 125; as solace for space
 explorers, 345; in coming dark age, 325; locus of
 cohesion, 124; need for, 37; newly important in
 dawn, 345; orthodoxy and ascendancy, 37; out-
 worldly in decline, 37; proliferation of faiths in
 decline, 36, 37; reconstitution, 125; social versus
 spiritual functions, 124; used by political
 authorities, 126
 religious revival: in Rome, 35
 renaissances, 42
 Renfrew, Colin, 107, 108
 resilience: and timing of dark age, 279; lack in
 failing societies, 55; loss of, 263; of human race,
 257, 278
 resource exhaustion: a non-problem, 258; and
 decline, 48; and social dislocations, 259

 resources: excessive consumption by west, 188;
 exhaustion, 150; in dawn, 336; not necessary for
 wealth, 55, 151
 return to land: in coming dark age, 317
 revolt: a normal feature of political life, 109, 171;
 as a cause of decline, 50; occurs when conditions
 improving, 171
 right against right, 249, 324
 rights: ancient Egypt, 39; ancient Greece, 39;
 ancient Rome, 38; and decline, 38; and descent,
 306; and employment, 216; of oppressed, 215;
 tendency to accumulate, 171
 rise and fall. *See* turnover of nations
 risky shift phenomenon, 168
 ritualisation, 277
 ritualise-stylise-elaborate-innovate, 277
 Roaccutane, 269
 roads: ancient, 21; Chacoan, 13; Inca, 10; Mayan,
 11; Britain's dilapidated, 185
 roles: confined in dawn, 346; male versus female,
 307
 Roman Catholicism: demise, 308; in decline, 251
 Roman dole, 69, 171. *See also* parasitism
 Roman empire, 10; compared to today, 185
 Rome: accumulation of rights, 38, 39; and
 barbarians, 55; borrowings from Greece and
 Etruria, 14; explanations for collapse, 158;
 Islam's 'enemy until doomsday', 255; loss of
 medical knowledge, 319; precursors, 11; reduced
 moral standards, 34
 Rosetta stone, 1
 royal family: future of, 285, 301
 Royal Navy, 67, 68, 223
 ruins, 76; created in dark age, 312
 Russia: and future war, 234; boom, 295; buildings
 collapsing, 312; current situation, 183; future
 conflicts, 290; mounting chaos, 190; prospects in
 dawn, 331; self-image not shared by west, 190
 Russian mafia. *See* mafia
 Rwanda, 227

 safety tax, 267
 salination: and decline, 48; contemporary, 258
 sanctions, 240; and Iraq, 252; Cuba, 330; Iraq, 329;
 to become unworkable, 287
 Saudi Arabia: and fundamentalist protest, 254;
 challenges to monarchy, 285
 Saudi monarchy: and Charles I, 286
 scale: and cohesion, 128; and integration, 107; and
 organisation, 112; defined, 97; growth of, 177,
 178
 scavenging, 336
 scholarship. *See also* education; and ascendancy,
 32
 school discipline: lack of, 197, 212
 school meals, 203
 schools: ancient, 31; shabbiness, 211
 science: failing imagination, 298, 340; medieval
 Egypt, 6; quack practices, 341; rediscovery of
 ignorance, 320; suspicion of, 224

- scientific method: and the humanities, 82–83;
nature of, 83–84
- Scottish parliament, 304
- scouting: loss of moral community, 214
- seamlessness of history, 44, 45, 143, 148, 177
- second world war: attritional nature, 230;
emblematic of western violence, 253; settlement
unravelling, 234
- Security Council, 8, 181, 187, 233; and Japan, 226,
288; and Muslim nations, 8
- self-belief of ascendant societies, 34
- self-defeating processes, 167
- self-fulfilling prophecy, 87, 325
- selfish sociality, 301
- selfishness: in coming dark age, 323, 326; in
decline, 38, 163; increasing, 215
- self-organised criticality, 144, 145, 158, 161
- self-sufficiency: following collapse, 27; in coming
dark age, 315
- Seneca, 25, 68
- sentencing, 193
- separatism, 200, 218; Cornish, 218; in descent,
304, 305; Scottish, 218
- seven wonders of the world, 8
- shah of Iran, 254, 281
- shanty towns, 177
- shari'a law, 253
- shirts and pots, 113
- shocks: triggers for change, 257
- Sierra Leone: guerrillas, 314
- signature: concept lost in dark age, 327
- silk roads, 29
- silting: and decline, 48
- simultaneous invention, 88
- single parents, 217
- skin colour: insignificance of, 127
- slavery: and British prosperity, 251
- Smith, David, 331
- Smoot-Hawley tariff, 179
- smuggling, 229
- sociability: in decline, 215
- social differentiation: in dawn, 328
- social insurance, 24
- social relationship: defined, 91; human capacity
for, 125; nature, 92
- social security: as disincentive to entrepreneurship,
272; causes own problems, 269; decoupled from
reality, 268; generosity reduced, 215; growth of,
180, 192, 266; helps everyone, 266;
impossibility of dismantling, 268; in dawn, 345;
in descent, 297; inability to meet demand, 274
- society: as a structure of relationships, 89; formal
versus informal usage, 91; theories of, 89
- sociobiology, 82, 83
- Socrates, 35
- soft living, 68
- software piracy, 190
- solar power, 259
- Somalia, 225; disorder, 200; US debacle, 227, 229,
255
- Soros, George, 98, 99, 105, 120, 121; capitalism
endangered, 237; future crash, 294
- South Africa: disorder, 200
- South Korea: recovery from Asian crash, 294
- south-east Asia: current situation, 183
- space colonisation: and self-government, 340;
supposed impossible, 339
- space exploration. *See also* United Nations: space
treaties; Africa and dawn, 335; and innovation
failure, 209; in dawn, 339; in descent, 297
- space tourism, 339
- Spanish empire, 13
- specialisation, 25; and cohesion, 135; and need for
given service, 111; and organisation, 111; and
wealth, 27; forced, 25; growth of, 179
- spirit of the age, 88
- spiritual sustenance: need for, 308
- sport: as force for cohesion, 322
- Sputnik, 186
- squatters' world, 74–75; and descent, 299
- St Augustine of Hippo, 37
- St Paul, 88, 169
- St Paul's cathedral, 300; surviving dark age, 312
- stagnation: threat to social order, 188
- state formation: and mutual causality, 63; rapidity,
63
- states: disappearance with dark age, 141; growth
of, 193; nature of, 137; theories of origin, 138;
unnatural, 100
- static view of the world, 152, 155, 156, 190, 210,
258; and space exploration, 339; and third world
disadvantage, 242
- steam engine, 87, 179, 181, 294; ancient, 7; failure
to develop, 28
- stereotyping, 127; and art of dawn, 345; and gender
roles, 307
- stoicism, 142; and coping, 163; benefits of, 268
- Stonehenge, 4, 100, 313
- stranger-ensemble, 97
- strangership: defined, 93; nature, 95
- stress: of complex societies, 272
- strong rulers: and peace, 23; desire for, 23
- stylisation, 277
- subordination: human capacity for, 134
- success: attracting rivals, 62
- Sudan: historic, 9
- Suez crisis, 253; nuclear threat, 291
- suicide, 188; among males, 218; in Russian army,
232; increasing, 216
- Sumer, 8, 11, 20, 24, 25, 37, 41, 49, 138, 146, 351
- superconductivity, 336
- Suppiluliamas, 15, 18, 41, 42, 63
- surplus demanded by governments, 60
- surprise in history: people ill-informed, 281
- surveillance: electronic, 333, 348
- survival of cultural elements, 42, 45
- sustainable development, 155
- Taiwan: and United Nations, 290; conflict with
China, 189, 234, 290

- Taj Mahal, 9, 30
- Tanzania: riot over rations, 314
- tariff barriers: relatively insignificant, 240; supposed protecting effect, 239
- taxation, 23. *See also* extraction; ancient Egypt, 2; benefits, 23; disappearance in darkness, 309; effects of, 132; excessive, 68, 69; increased prior to decline, 28; precipitates revolt, 286; tendency to grow, 170
- teachers: quality declining, 211; under attack, 211
- Tebbit, Norman, 343
- technical standards: as inhibiting trade, 240
- technological fix, 152
- technological infrastructure: unravelling, 315
- technology: ancient (advanced), 29; deterioration in descent, 299; effect on jobs, 152; evolution of, 151; increasingly vulnerable to terrorism, 195; retrenchment with collapse, 152
- teenage pregnancies, 217
- teleworking, 301
- Tenochtitlan, 45; description, 10
- Teotihuacan, 13, 20, 22, 30, 33, 38, 49, 50, 52, 58, 71, 72, 73, 74, 75
- terms of trade: declining for third world, 242
- Terran patriotism, 343
- terrorism: and racketeering, 229; effective, 195; increasing, 195
- Thatcher, Margaret, 187, 192, 194, 205; and community charge, 286; leadership style, 307
- The end of science* (book), 340
- The Japan that can say no* (book), 226
- The Japan That Can Say No* (book), 288
- The limits to growth* (book), 81
- The rotten heart of Europe* (book), 235
- The time machine* (book), 283
- third world. *See also* international debt; corruption, 243; defined, 183; desperation, 191, 255; difficulties of entrepreneurship, 242; disadvantaged situation, 335; failure to develop, 189; former achievements, 8; poverty not inevitable, 241, 242; slipping behind, 188; well informed, 314
- Three Mile Island incident, 282
- tide of history, 191
- time lags: and government control, 160
- Tokyo: coming earthquake, 264
- tolerance: and cohesion, 126, 169; and decline, 163; of anti-social behaviour, 189
- tourism: growth of, 249
- town walls. *See* walls
- Toynbee, Arnold, 7, 91, 109, 125, 138, 164, 180
- trade. *See* specialisation; ancient and primitive, 25; and prosperity, 26; benefits, 115; reduced with decline, 27
- trade disputes: and war, 296
- tragedy of the commons, 106, 109, 132, 159, 162, 170; and social security, 268; and space exploration, 339
- transfer pricing, 198
- transistor, 152, 181
- trans-national corporations, 198, 199; and government authority, 198; inadequate controls, 199; not so global, 236; not so new, 236
- trust: defined, 93
- Turkey: and EU, 237, 246, 287
- turning point: unnoticed, 283
- turnover of nations, 11, 13; debts to the past, 14, 37; inevitability, 41
- Tuvalu, 337
- typhoon mentality, 188
- ugliness: extolled during descent, 303
- ultimate resource, 151
- UN Conference on Trade and Development, 255
- UN Convention on the Law of the Sea, 297, 336
- underclass, 204
- unemployment, 272; at record levels, 208; Germany, 208; not real in Africa, 189
- uniformitarianism, 84–86; a refined interpretation, 86; defined, 148
- unintended consequences, 159
- United Kingdom: break up, 304
- United Nations, 8, 13, 177, 180, 189, 198, 199, 203, 227, 228. *See also* Security Council; and mercenaries, 287; as an overhead, 272; as source of international cohesion, 246; corruption, 247; demise, 322; failure as integrator, 333; future restructuring, 287; inability to enforce peace, 227; legitimacy sought in dawn, 332; opposed to terrorism, 229; parasitic on US, 228; preventing collapse, 6; promoting western goals, 255; relations more conflictual, 247; space treaties, 339; unlikely to reach centenary, 303
- United States: break up, 305; changing ethnic composition, 265; conflict with Canada, 304; current situation, 182; hegemony, 225; inhibiting rivals, 289; loss of hegemony, 190; prospects in dawn, 332; recent resurgence, 192; repatriation of troops, 286
- universal franchise. *See also* democracy; and growth of social ambition, 171; and growth of welfare, 268
- universities: Al Azhar, 6; declining standards, 212
- unmarried mothers: and coming dark age, 316; growth of numbers, 270
- urbanism, 20; ancient Egypt and Europe compared, 5; and integration, 108; return as sign of new era, 328
- USS Cole, 226
- vaccination: suspicion of, 264
- vagility, 108; on internet, 347
- vagueness of social science language, 83
- values, attitudes and beliefs, 123, 124, 125, 126, 127, 128, 129, 131, 135, 153, 169, 180, 221, 251; diversification of, 180; inculcated at work, 301; linguistic signalling, 124; of dark age, 141; visual signalling, 123
- vandalism: and destruction of historical record, 76; and dis cohesion, 170

- vengeance: in coming dark age, 314
 VHS format, 278
 vicious circles, 60, 99, 136, 190; and third world, 191, 243; disrupted by dark age, 335
 video cameras. *See* surveillance
 vigilantism: in collapse, 309
 vineyards: medieval, 262
 violence: against medical staff, 270
 violent ends, 76
 virtual company, 301
 votes for women: ancient Athens, 39; Kuwait, 285
- Wall Street crash, 278
 walls. *See also* gated communities; and integration, 20, 103
 war proneness, 155
 warfare, 155; a continuing problem, 232; and national consciousness, 61, 179; as a cause of decline, 50; debilitating effects, 61; expected to increase, 233; future, 290, 293; helpful to peripheral powers, 62; in dark age, 309; liking for, 289; of descent, 289; supposed unthinkable, 291
 water: a source of conflict, 233; future shortages, 260
 waterwheel: failure to develop, 28
 Watt, James, 179, 181
 weak leadership: and decline, 18
 wealth: and power, 59, 132; equivalent to organisation, 113–16; from trade not resources, 26
 wealth differentials: and decline, 27; growing, 207; in dawn, 335; in descent, 296; inimical to organisation, 116; inimical to organisation, 135; international, 241
 Wedgwood, Josiah, 16, 147, 179
 welfare: encouragement of failure, 172
 Wells, H G, 283, 332, 333; predictions, 332
 west, the. *See also* European civilisation; ascendancy not inevitable, 181; culpability, 329; defined, 180; dislike for, 330; indifference to third world plight, 255; non-existence in dawn, 343; reasons for ascendancy, 181, 182; record of abuse, 222; victim of its own success, 182; widespread dislike for, 255
 western civilisation: de-legitimisation, 301
 western emulation of other cultures, 302
 western values: failure to enforce, 251; not inevitably superior, 250; rejected, 303
 westernisation: a false idea, 15, 250
 wheel: contrasted with money and writing, 31
 wind power, 259
 wine industry: British, 154
 winner-take-all mentality. *See* individualism
 women: and Islam, 222, 308; and violence, 307; emancipation equivocal, 307; in coming dark age, 326; in dawn, 346; in descent, 306; in military, 307; liberation of, 217; supposed oppression by men, 346; supposed superiority, 307
 work: less sociable, 301
 World Bank, 41, 113, 116, 180, 207; and Africa, 191; and Egypt, 5; and third world debt, 244; demise of, 296
 world economy. *See* global economy
 world government: need for catastrophe, 333; prospects for, 332
 World Health Organisation, 271
 World Trade Organisation, 179, 236, 239; demonstrations against, 237; in descent, 295; subversion of, 241, 296
 world war three, 233
 writing: lost in coming dark age, 319
- xenophobia: and cohesion, 126
- yakuza, 102, 105, 289
 Yeltsin, Boris, 196, 287
 Yir Yoront, 25, 28, 29, 63, 76, 172
 youthful population: and disorder, 287
 Yugoslavia: and reversion to type, 248; western destabilisation, 252

Notes

¹ Piggott 1966.

² Préaux 1971, p. 334.

³ Toynbee 1972, p. 71.

⁴ Cottrell 1966, p. 82.

⁵ Cottrell 1966, p. 114.

⁶ Herodotus 1954, pp. 142, p. 134.

⁷ Cottrell 1966, p. 116.

⁸ McEvedy 1967, p. 46 ff.

⁹ Préaux 1971, p. 341.

¹⁰ Cottrell 1966, p. 18.

¹¹ Rice 1991, p. 3.

¹² Trigger et al. 1983, p. 300.

¹³ Cottrell 1966, p. 51; Tainter 1988, p. 8.

¹⁴ The origins of writing are not entirely clear. The idea of writing may have been introduced to Egypt from Mesopotamia, p. although the Egyptians rapidly developed their own distinctive version. Some authors (e.g. Goody 1978) have suggested that writing came first and enabled the development of state organisation. A more reasonable supposition however is that the two developed hand in hand.

¹⁵ Trigger 1983, p. 326.

¹⁶ Cottrell 1966, p. 57.

¹⁷ Trigger 1983, p. 328.

¹⁸ *Professional Engineering*, p. 8.12.99.

¹⁹ Cottrell 1966, p. 31.

²⁰ Ceram 1959, p. 171.

²¹ Ceram 1959, p. 171.

²² Cottrell 1966, p. 102.

²³ Mumford 1966, p. 97.

²⁴ Mumford 1966, p. 99.

²⁵ Mumford 1966, p. 98.

²⁶ Cottrell 1966, p. 74.

²⁷ Piggott 1965, p. 58.

²⁸ Hodges 1970, p. 188.

²⁹ Hodges 1970, p. 209.

³⁰ McEvedy 1967, p. 22.

³¹ Whittle 1985, p. 186.

³² McEvedy 1967, p. 28.

³³ McEvedy 1967, p. 30.

³⁴ Hodges 1970, p. 80;

McEvedy 1967, pp. 40-2.

³⁵ Whittle 1985, p. 251.

³⁶ Whittle 1985, p. 236.

³⁷ Whittle 1985, p. 251.

³⁸ Whittle 1985, p. 234.

³⁹ Piggott 1965, pp. 139-40.

⁴⁰ Whittle 1985, p. 261.

⁴¹ Whittle 1985, p. 257.

⁴² Whittle 1985, p. 306.

⁴³ Hodges 1970, p. 57;

McEvedy 1967 has this trade starting around 1300 BC.

⁴⁴ Piggott 1965, p. 138.

⁴⁵ Piggott 1965, pp. 140-1.

⁴⁶ Coates 1977, p. 61.

⁴⁷ Herodotus 1954, p. 180.

⁴⁸ Herodotus 1954, p. 179.

⁴⁹ Rice 1991, p. 9.

⁵⁰ McEvedy 1967, p. 26.

⁵¹ Whittle 1985, p. 219.

⁵² Piggott 1965, pp. 52, p. 54, p. 58, p. 89.

⁵³ Cottrell 1966, pp. 28-9.

⁵⁴ Stonehouse 1985, p. 258.

⁵⁵ World Bank 1992, p. 218.

⁵⁶ United Nations Development Programme 1999, p. 136.

⁵⁷ World Bank 1992, p. 306-7.

⁵⁸ United Nations Development Programme 1999, p. 136.

⁵⁹ United Nations Development Programme 1993, p. 57.

⁶⁰ Coates 1977, p. 227.

⁶¹ Atkinson 1975, p. 244.

⁶² United Nations Development Programme 1993, pp. 188, p. 212.

⁶³ Atkinson 1975, p. 245.

⁶⁴ Coates 1977, p. 91.

⁶⁵ Trigger 1983, p. 346.

⁶⁶ Toynbee 1972, p. 63.

⁶⁷ Toynbee 1972, p. 64.

⁶⁸ Préaux 1971, p. 328.

⁶⁹ Préaux 1971, p. 331.

⁷⁰ Préaux 1971, p. 330.

⁷¹ Préaux 1971, p. 331.

⁷² Hodges 1970, p. 183.

⁷³ Préaux 1971, p. 331.

⁷⁴ Préaux 1971, p. 338.

⁷⁵ Lloyd 1984, p. 15.

⁷⁶ Van de Mierop 1999, p. 1.

⁷⁷ Lissner 1957, p. 99.

⁷⁸ Needham 1954, p. 83.

⁷⁹ Needham 1954, p. 132.

⁸⁰ Parkinson 1963, p. 109.

⁸¹ Pakenham n.d., p. 21.

⁸² Herodotus 1972, p. 140.

⁸³ Oliver and Fage 1962, p. 42.

⁸⁴ Oliver and Fage 1962, p. 51.

⁸⁵ Ferro 1984, p. 23-4.

⁸⁶ Oliver and Fage 1962, p. 89.

⁸⁷ Oliver and Fage 1962, p. 106.

⁸⁸ von Hagen 1973, p. 82.

⁸⁹ Mason 1957, p. 164.

⁹⁰ Mason 1957, p. 263.

⁹¹ Hyams and Ordish 1963, p. 29.

⁹² Kennedy 1988, p. 192.

⁹³ Kennedy 1988, p. 249.

⁹⁴ Lissner 1957, p. 81.

⁹⁵ Cottrell 1966, p. 206.

⁹⁶ Gurney 1954, p. 1.

⁹⁷ Gurney 1954, p. 215.

⁹⁸ Gurney 1954, p. 39.

⁹⁹ Gurney 1954, p. 45.

¹⁰⁰ Gurney 1954, p. 46.

¹⁰¹ Bibby 1972, p. 10.

¹⁰² Bibby 1972, p. 9.

¹⁰³ Bibby 1972, p. 399.

¹⁰⁴ Bibby 1972, p. 47.

¹⁰⁵ Lissner 1957, p. 18.

¹⁰⁶ Cottrell 1966, p. 210.

¹⁰⁷ Cottrell 1966, p. 210.

¹⁰⁸ Cottrell 1966, p. 215.

¹⁰⁹ Cottrell 1966, p. 216.

¹¹⁰ von Hagen 1973, p. 122.

¹¹¹ von Hagen 1973, p. 120.

¹¹² von Hagen 1973, p. 132.

¹¹³ Fiedel 1987, p. 294.

¹¹⁴ von Hagen 1973, p. 120.

¹¹⁵ Tainter 1988, p. 5.

¹¹⁶ Lissner 1957, p. 410.

¹¹⁷ Lissner 1957, p. 357.

¹¹⁸ Kinder and Hilgemann

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226.

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