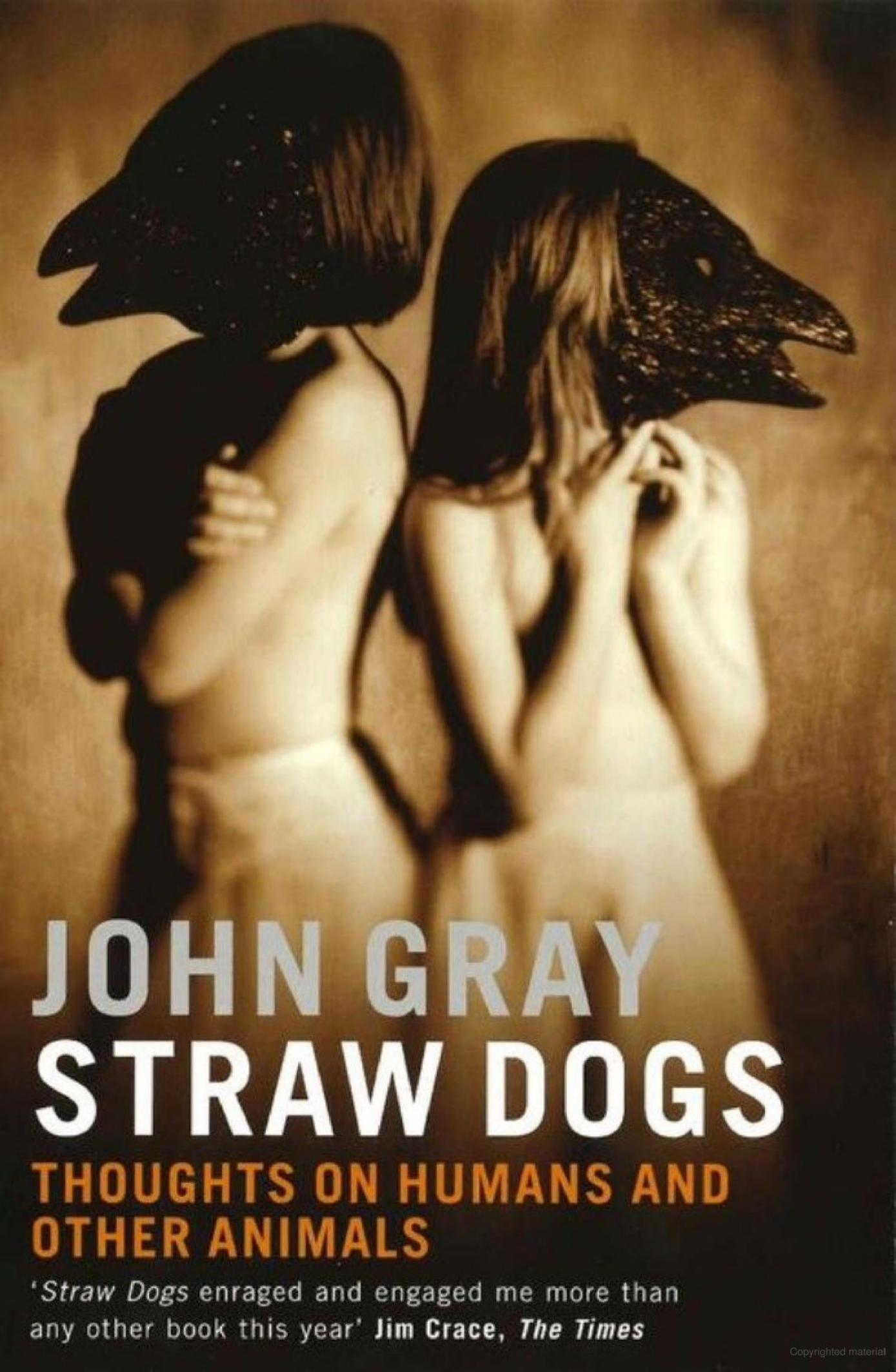

JOHN GRAY

STRAW DOGS

THOUGHTS ON HUMANS AND OTHER ANIMALS

'*Straw Dogs* enraged and engaged me more than any other book this year' **Jim Crace, *The Times***

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Heaven and earth are ruthless, and treat the myriad creatures as straw dogs.

LAO TZU

ACKNOWLEDGEMENTS

In this book I have tried to present a view of things in which humans are not central. My thoughts are presented in fragments, but they are not unsystematic. I hope they can be read one after the other, or dipped into at will. I have made rather extensive use of quotations – not, I believe, in order to lend authority to an unfamiliar way of thinking, but simply to illustrate what it might mean. The notes at the back of the book have the same aim.

Several people have given me stimulus, advice and encouragement. Exchanges with James Lovelock helped clarify my thinking on the Gaia hypothesis. Reading and talking with J.G. Ballard sharpened my view of the present and the near future. Adam Phillips's comments and suggestions on a draft version have shaped the book in a number of ways. Simon May gave me detailed comments on the philosophical portions, and Vincent Deary gave me comments on the sections of the book dealing with consciousness. At Granta, Neil Belton gave me unfailing encouragement and advice, and Sara Holloway gave me invaluable comments and suggestions all the way through the book's gestation and production. I owe debts to all of these people, but I have not always followed any advice they may have given. Responsibility for the thoughts expressed here remains mine.

The book is dedicated to Mieko, without whom it would not have been written.

FOREWORD TO THE PAPERBACK EDITION

Straw Dogs is an attack on the unthinking beliefs of thinking people. Today liberal humanism has the pervasive power that was once possessed by revealed religion. Humanists like to think they have a rational view of the world; but their core belief in progress is a superstition, further from the truth about the human animal than any of the world's religions.

Outside of science, progress is simply a myth. In some readers of *Straw Dogs* this observation seems to have produced a moral panic. Surely, they ask, no one can question the central article of faith of liberal societies? Without it, will we not despair? Like trembling Victorians terrified of losing their faith, these humanists cling to the moth-eaten brocade of progressive hope. Today religious believers are more free-thinking. Driven to the margins of a culture in which science claims authority over all of human knowledge, they have had to cultivate a capacity for doubt. In contrast, secular believers – held fast by the conventional wisdom of the time – are in the grip of unexamined dogmas.

The prevailing secular worldview is a pastiche of current scientific orthodoxy and pious hopes. Darwin has shown that we are animals; but – as humanists never tire of preaching – how we live is 'up to us'. Unlike any other animal, we are told, we are free to live as we choose. Yet the idea of free will does not come from science. Its origins are in religion – not just any religion, but the Christian faith against which humanists rail so obsessively.

In the ancient world the Epicureans speculated about the possibility that some events may be uncaused; but the belief that humans are marked off from all other animals by having free will is a Christian inheritance. Darwin's theory would not have caused such a scandal had it been formulated in Hindu India, Taoist China or animist Africa. Equally, it is only in post-Christian cultures that philosophers labour so piously to reconcile scientific determinism with a belief in the unique capacity of humans to choose the way they live. The irony of evangelical Darwinism is that it uses science to support a view of humanity that comes from religion.

Some readers have seen *Straw Dogs* as an attempt to apply Darwinism to ethics and politics, but nowhere does it suggest that neo-Darwinian orthodoxy contains the final account of the human animal. Instead Darwinism is deployed strategically in order to break up the prevailing humanist worldview. Humanists turn to Darwin to support their shaky modern faith in progress; but there is no progress in the world he revealed. A truly naturalistic view of the world leaves no room for secular hope.

Among contemporary philosophers it is a matter of pride to be ignorant of theology. As a result, the Christian origins of secular humanism are rarely understood. Yet they were perfectly clear to its founders. In the early nineteenth century the French Positivists, Henri Saint-Simon and Auguste

Comte, invented the Religion of Humanity, a vision of a universal civilization based on science that is the prototype for the political religions of the twentieth century. Through their impact on John Stuart Mill, they made liberalism the secular creed it is today. Through their deep influence on Karl Marx, they helped shape 'scientific socialism'. Ironically, for Saint-Simon and Comte were fierce critics of *laissez-faire* economics, they also inspired the late twentieth century cult of the global free market. I have told this paradoxical and often farcical story in my book, *Al Qaeda and What It Means To Be Modern*.

Humanism is not science, but religion – the post-Christian faith that humans can make a world better than any in which they have so far lived. In pre-Christian Europe it was taken for granted that the future would be like the past. Knowledge and invention might advance, but ethics would remain much the same. History was a series of cycles, with no overall meaning.

Against this pagan view, Christians understood history as a story of sin and redemption. Humanism is the transformation of this Christian doctrine of salvation into a project of universal human emancipation. The idea of progress is a secular version of the Christian belief in providence. That is why among the ancient pagans it was unknown.

Belief in progress has another source. In science, the growth of knowledge is cumulative. But human life as a whole is not a cumulative activity; what is gained in one generation may be lost in the next. In science, knowledge is an unmixed good; in ethics and politics it is bad as well as good. Science increases human power – and magnifies the flaws in human nature. It enables us to live longer and have higher living standards than in the past. At the same time it allows us to wreak destruction – on each other and the Earth – on a larger scale than ever before.

The idea of progress rests on the belief that the growth of knowledge and the advance of the species go together – if not now, then in the long run. The biblical myth of the Fall of Man contains the forbidden truth. Knowledge does not make us free. It leaves us as we have always been, prey to every kind of folly. The same truth is found in Greek myth. The punishment of Prometheus, chained to a rock for stealing fire from the gods, was not unjust.

If the hope of progress is an illusion, how – it will be asked – are we to live? The question assumes that humans can live well only if they believe they have the power to remake the world. Yet most humans who have ever lived have not believed this – and a great many have had happy lives. The question assumes the aim of life is action; but this is a modern heresy. For Plato contemplation was the highest form of human activity. A similar view existed in ancient India. The aim of life was not to change the world. It was to see it rightly.

Today this is a subversive truth, for it entails the vanity of politics. Good politics is shabby and makeshift, but at the start of the twenty-first century the world is strewn with the grandiose ruins of failed utopias. With the Left moribund, the Right has become the home of the utopian imagination. Global communism has been followed by global capitalism. The two visions of the

future have much in common. Both are hideous and fortunately chimerical.

Political action has come to be a surrogate for salvation; but no political project can deliver humanity from its natural condition. However radical, political programmes are expedients – modest devices for coping with recurring evils. Hegel writes somewhere that humanity will be content only when it lives in a world of its own making. In contrast, *Straw Dogs* argues for a shift from human solipsism. Humans cannot save the world, but this is no reason for despair. It does not need saving. Happily, humans will never live in a world of their own making.

John Gray, May 2003

1

THE HUMAN

All religions, nearly all philosophies, and even a part of science testify to the unwearying, heroic effort of mankind desperately denying its contingency.

JACQUES MONOD

1

SCIENCE VERSUS HUMANISM

Most people today think they belong to a species that can be master of its destiny. This is faith, not science. We do not speak of a time when whales or gorillas will be masters of their destinies. Why then humans?

We do not need Darwin to see that we belong with other animals. A little observation of our lives soon leads to the same conclusion. Still, since science has today an authority that common experience cannot rival, let us note that Darwin teaches that species are only assemblies of genes, interacting at random with each other and their shifting environments. Species cannot control their fates. Species do not exist. This applies equally to humans. Yet it is forgotten whenever people talk of 'the progress of mankind'. They have put their faith in an abstraction that no one would think of taking seriously if it were not formed from cast-off Christian hopes.

If Darwin's discovery had been made in a Taoist or Shinto, Hindu or animist culture it would very likely have become just one more strand in its intertwining mythologies. In these faiths humans and other animals are kin. By contrast, arising among Christians who set humans beyond all other living things, it triggered a bitter controversy that rages on to this day. In Victorian times this was a conflict between Christians and unbelievers. Today it is waged between humanists and the few who understand that humans can no more be masters of their destiny than any other animal.

Humanism can mean many things, but for us it means belief in progress. To believe in progress is to believe that, by using the new powers given us by growing scientific knowledge, humans can free themselves from the limits that frame the lives of other animals. This is the hope of nearly everybody nowadays, but it is groundless. For though human knowledge will very likely continue to grow and with it human power, the human animal will stay the same: a highly inventive species that is also one of the most predatory and destructive.

Darwin showed that humans are like other animals, humanists claim they are not. Humanists insist that by using our knowledge we can control our environment and flourish as never before. In affirming this, they renew one of Christianity's most dubious promises – that salvation is open to all. The humanist belief in progress is only a secular version of this Christian faith.

In the world shown us by Darwin, there is nothing that can be called progress. To anyone reared on humanist hopes this is intolerable. As a result, Darwin's teaching has been stood on its head, and Christianity's cardinal error – that humans are different from all other animals – has been given a new lease on life.

2

THE MIRAGE OF CONSCIOUS EVOLUTION

Humans are the most adventitious of creatures – a result of blind evolutionary drift. Yet, with the power of genetic engineering, we need no longer be ruled by chance. Humankind – so we are told – can shape its own future.

According to E.O. Wilson, conscious control of human evolution is not only possible but inevitable:

> ... genetic evolution is about to become conscious and volitional, and usher in a new epoch in the history of life.... The prospect of this 'volitional evolution' – a species deciding what to do about its own heredity – will present the most profound intellectual and ethical choices humanity has ever faced ... humanity will be positioned godlike to take control of its own ultimate fate. It can, if it chooses, alter not just the anatomy and intelligence of the species but also the emotions and creative drive that compose the very core of human nature.

The author of this passage is the greatest contemporary Darwinian. He has been attacked by biologists and social scientists who believe that the human species is not governed by the same laws as other animals. In that war Wilson is undoubtedly on the side of truth. Yet the prospect of conscious human evolution he invokes is a mirage. The idea of humanity taking charge of its destiny makes sense only if we ascribe consciousness and purpose to the species; but Darwin's discovery was that species are only currents in the drift of genes. The idea that humanity can shape its future assumes that it is exempt from this truth.

It seems feasible that over the coming century human nature will be scientifically remodelled. If so, it will be done haphazardly, as an upshot of struggles in the murky realm where big business, organised crime, and the hidden parts of government vie for control. If the human species is re-engineered it will not be the result of humanity assuming a godlike control of its destiny. It will be another twist in man's fate.

3

DISSEMINATED PRIMATEMAIA

James Lovelock has written:

> Humans on the Earth behave in some ways like a pathogenic organism, or like the cells of a tumour or neoplasm. We have grown in numbers and disturbance to Gaia, to the point where our presence is perceptibly disturbing ... the human species is now so numerous as to constitute a serious planetary malady. Gaia is suffering from *Disseminated Primatemaia*, a plague of people.

Around 65 million years ago the dinosaurs and three quarters of all other species suddenly perished. The cause is disputed, but many scientists believe the mass extinction was the result of a meteorite colliding with the Earth.

Today species are disappearing at a rate that is set to surpass that last great extinction. The cause is not any cosmic catastrophe. As Lovelock says, it is a plague of people.

'Darwin's dice have rolled badly for Earth,' Wilson points out. The lucky throw that brought the human species to its present power has meant ruin for countless other life forms. When humans arrived in the New World around twelve thousand years ago, the continent abounded in mammoths, mastodons, camels, giant ground sloths and dozens of similar species. Most of these indigenous species were hunted to extinction. North America lost over 70 per cent and South America 80 per cent of its large mammals, according to Diamond.

The destruction of the natural world is not the result of global capitalism, industrialisation, 'Western civilisation' or any flaw in human institutions. It is a consequence of the evolutionary success of an exceptionally rapacious primate. Throughout all of history and prehistory, human advance has coincided with ecological devastation.

It is true that a few traditional peoples lived in balance with the Earth for long periods. The Inuit and the Bushmen stumbled into ways of life in which their footprint was slight. We cannot tread the Earth so lightly. *Homo rapiens* has become too numerous.

The study of population is not a very exact science. No one forecast the population collapse that is occurring in post-communist European Russia, or the scale of the fall in fertility that is under way in much of the world. The margin of error in calculations of fertility and life expectancy is large. Even so, a further large increase is inevitable. As Morrison observes, 'Even if we assume a declining birth rate due to social factors and a rising death rate due to starvation, disease and genocide, the present global population of over 6 billion will grow by at least 1.2 billion by the year 2050.'

A human population of approaching 8 billion can be maintained only by desolating the Earth. If wild habitat is given over to human cultivation and habitation, if rainforests can be turned into green deserts, if genetic engineering enables ever-higher yields to be extorted from the thinning soils – then humans will have created for themselves a new geological era, the Eremozoic, the Era of Solitude, in which little remains on the Earth but themselves and the prosthetic environment that keeps them alive.

It is a hideous vision, but it is only a nightmare. Either the Earth's self-regulating mechanisms will make the planet less habitable for humans or the side effects of their own activities will cut short the current growth in their numbers.

Lovelock suggests four possible outcomes of *disseminated primatemaia:* 'destruction of the invading disease organisms; chronic infection; destruction of the host; or symbiosis – a lasting relationship of mutual benefit to the host and invader'.

Of the four outcomes, the last is the least likely. Humanity will never initiate a symbiosis with the Earth. Even so, it will not destroy its planetary host, Lovelock's third possible outcome. The biosphere is older and stronger

than they will ever be. As Margulis writes, 'No human culture, despite its inventiveness, can kill life on this planet, were it even to try.'

Nor can humans chronically infect their host. True, human activity is already altering the planetary balance. The production of greenhouse gases has changed global ecosystems irreversibly. With worldwide industrialisation, such changes can only accelerate. In a worst-case scenario that some scientists are taking seriously, climate change could wipe out populous coastal countries such as Bangladesh and trigger agricultural failure in other parts of the world, spelling disaster for billions of people, before the end of the present century.

The scale of the change afoot cannot be known with certainty. In a chaotic system even the near future cannot be predicted accurately. Yet it seems likely that the conditions of life are shifting for much of humankind, with large segments of it facing much less hospitable climates. As Lovelock has suggested, climate change may be a mechanism through which the planet eases its human burden.

As a side effect of climate change, new patterns of disease could trim the human population. Our bodies are bacterial communities, linked indissolubly with a largely bacterial biosphere. Epidemiology and microbiology are better guides to our future than any of our hopes or plans.

War could have a major impact. Writing at the turn of the nineteenth century, Thomas Malthus named war as being one of the ways – along with recurrent famines – in which population and resources were kept in balance. Malthus's argument was satirised in the twentieth century by Leonard C. Lewin:

> Man, like all other animals, is subject to the continuing process of adapting to the limitations of his environment. But the principal mechanism he has utilised for this purpose is unique among living creatures. To forestall the inevitable historical cycles of inadequate food supply, post-Neolithic man destroys surplus members of his own species by organised warfare.

The irony is misplaced. War has rarely resulted in any long-term reduction of human numbers. Yet today its impact could be considerable. It is not only that weapons of mass destruction – notably biological and (soon) genetic weapons – are more fearsome than before. More, their impact on the life-support systems of human society is likely to be greater. A globalised world is a delicate construction. A vastly greater population than hitherto is dependent on far-flung supply networks, and any war on the scale of the larger conflicts of the twentieth century could have the effect of culling the population in the way Malthus described.

In 1600 the human population was about half a billion. In the 1990s it increased by the same amount. People who are now over forty have lived through a doubling of the world's human population. It is natural for them to think that these numbers will be maintained. Natural, but – unless humans really are different from all other animals – mistaken.

The human population growth that has taken place over the past few

hundred years resembles nothing so much as the spikes that occur in the numbers of rabbits, house mice and plague rats. Like them, it can only be short-lived. Already fertility is falling throughout much of the world. As Morrison observes, humans are like other animals in responding to stress. They react to scarcity and overcrowding by tuning down the reproductive urge:

> Many other animals seem to have a hormone-regulated response to environmental stress that switches their metabolism into a more economical mode whenever resources become scarce. Inevitably, the energy-hungry processes of reproduction are the first to be targeted.... The telltale hormonal signature of this process ... has been identified in captive lowland gorillas, and in women.

In responding to environmental stress by ceasing to breed, humans are no different from other mammals.

The current spike in human numbers may come to an end for any number of reasons – climate change, new patterns of disease, the side effects of war, a downward spiral in the birth rate, or a mix of these and other, unknown factors. Whatever brings about its end, it is an aberration:

> ... if the human plague is really as normal as it looks, then the collapse curve should mirror the population growth curve. This means that the bulk of the collapse will not take much more than one hundred years, and by the year 2150 the biosphere should be safely back to its preplague population of Homo sapiens – somewhere between 0.5 and 1 billion.

Humans are like any other plague animal. They cannot destroy the Earth, but they can easily wreck the environment that sustains them. The most likely of Lovelock's four outcomes is a version of the first, in which *disseminated primatemaia* is cured by a large-scale decline in human numbers.

4

WHY HUMANITY WILL NEVER MASTER TECHNOLOGY

'Humanity' does not exist. There are only humans, driven by conflicting needs and illusions, and subject to every kind of infirmity of will and judgement.

At present there are nearly two hundred sovereign states in the world. Most are unstable, oscillating between weak democracy and weak tyranny; many are rusted through with corruption, or controlled by organised crime; whole regions of the world – much of Africa, southern Asia, Russia, the Balkans and the Caucasus, and parts of South America – are strewn with corroded or collapsed states. At the same time, the world's most powerful states – the United States, China and Japan – will not accept any fundamental limitation on their sovereignty. They are jealous of their freedom of action, if only because they have been enemies in the past and know they may become

so again in the future.

Yet it is not the number of sovereign states that makes technology ungovernable. It is technology itself. The ability to design new viruses for use in genocidal weapons does not require enormous resources of money, plant or equipment. New technologies of mass destruction are cheap; the knowledge they embody is free. It is impossible to prevent them becoming ever more easily available.

Bill Joy, one of the pioneers of the new information technologies, has written thus:

> The 21st century technologies – genetics, nanotechnologies and robotics – are so powerful that they can spawn whole new classes of accidents and abuses. Most dangerously, for the first time, these accidents and abuses are widely within the reach of individuals or small groups. They will not require large facilities or rare raw materials. Knowledge alone will enable the use of them. Thus we have the possibility not just of weapons of mass destruction but of knowledge-enabled mass destruction (KMD), this destructiveness hugely amplified by the power of self-replication.

In part, governments have created this situation. By ceding so much control over new technology to the marketplace they have colluded in their own powerlessness. Nevertheless, the proliferation of new weapons of mass destruction is not in the end a result of errors in policy. It is a consequence of the diffusion of knowledge.

Controls on technology cannot be enforced. The genetic modification of crops, animals or humans may be forbidden in some countries, but it will go ahead in others. The world's powers can pledge that genetic engineering will have only benign uses, but it can be only a matter of time before it is used for purposes of war. Perhaps the world's most unstable states can be prevented from acquiring nuclear capability. But how can biological weapons be kept out of the hands of forces no government controls?

If anything about the present century is certain, it is that the power conferred on 'humanity' by new technologies will be used to commit atrocious crimes against it. If it becomes possible to clone human beings, soldiers will be bred in whom normal human emotions are stunted or absent. Genetic engineering may enable age-old diseases to be eradicated. At the same time, it is likely to be the technology of choice in future genocides.

Those who ignore the destructive potential of new technologies can do so only because they ignore history. Pogroms are as old as Christendom; but without railways, the telegraph and poison gas there could have been no Holocaust. There have always been tyrannies; but without modern means of transport and communication, Stalin and Mao could not have built their gulags. Humanity's worst crimes were made possible only by modern technology.

There is a deeper reason why 'humanity' will never control technology. Technology is not something that humankind can control. It is an event that has befallen the world.

Once a technology enters human life – whether it be fire, the wheel, the automobile, radio, television or the internet – it changes it in ways we can never fully understand. Cars may have been invented to make moving about easier; but they soon came to be embodiments of forbidden desires. According to Illich, 'The model American puts in 1,600 hours to get 7,500 miles: less than five miles an hour' – not much more than he could travel on his own feet. Which is more important today: the use of cars as means of transportation, or their use as expressions of our unconscious yearnings for personal freedom, sexual release and the final liberation of sudden death?

Nothing is more commonplace than to lament that moral progress has failed to keep pace with scientific knowledge. If only we were more intelligent or more moral, we could use technology only for benign ends. The fault is not in our tools, we say, but in ourselves.

In one sense this is true. Technical progress leaves only one problem unsolved: the frailty of human nature. Unfortunately that problem is insoluble.

5

GREEN HUMANISM

Green thinkers understand that humans can never be masters of the Earth. Yet in their Luddite struggle against technology they renew the illusion that the world can be made the instrument of human purposes. Whatever they say, most Green thinkers offer yet another version of humanism, not an alternative to it.

Technology is not a human artefact: it is as old as life on Earth. As Brian J. Ford notes, it is found in the kingdom of insects:

> The industry undertaken by some leaf-cutter ants is close to farming. They excavate large underground nests which the colony inhabits. Workers go out foraging for leaves which they cut with their jaws and bring back to the nest. These leaves are used to grow colonies of fungi, enzymes from which can digest the cellulose cell walls of the leaves and render them suitable for eating by the colony.... The garden is vital for the ants' survival; without the continuous farming and feeding of the fungal colonies, the ant colony is doomed. These ants are indulging in an agricultural enterprise which they systematically maintain.

Cities are no more artificial than the hives of bees. The Internet is as natural as a spider's web. As Margulis and Sagan have written, we are ourselves technological devices, invented by ancient bacterial communities as means of genetic survival: 'We are a part of an intricate network that comes from the original bacterial takeover of the Earth. Our powers and intelligence do not belong specifically to us but to all life.' Thinking of our bodies as natural and of our technologies as artificial gives too much importance to the accident of

our origins. If we are replaced by machines, it will be in an evolutionary shift no different from that when bacteria combined to create our earliest ancestors.

Humanism is a doctrine of salvation – the belief that humankind can take charge of its destiny. Among Greens, this has become the ideal of humanity becoming the wise steward of the planet's resources. But for anyone whose hopes are not centred on their own species the notion that human action can save themselves or the planet must be absurd. They know the upshot is not in human hands. They act as they do not out of the belief that they can succeed, but from an ancient instinct.

For much of their history and all of prehistory, humans did not see themselves as being any different from the other animals among which they lived. Hunter-gatherers saw their prey as equals, if not superiors, and animals were worshipped as divinities in many traditional cultures. The humanist sense of a gulf between ourselves and other animals is an aberration. It is the animist feeling of belonging with the rest of nature that is normal. Feeble as it may be today, the feeling of sharing a common destiny with other living things is embedded in the human psyche. Those who struggle to conserve what is left of the environment are moved by the love of living things, *biophilia*, the frail bond of feeling that ties humankind to the Earth.

The mass of mankind is ruled not by its intermittent moral sensations, still less by self-interest, but by the needs of the moment. It seems fated to wreck the balance of life on Earth – and thereby to be the agent of its own destruction. What could be more hopeless than placing the Earth in the charge of this exceptionally destructive species? It is not of becoming the planet's wise stewards that Earth-lovers dream, but of a time when humans have ceased to matter.

6

AGAINST FUNDAMENTALISM – RELIGIOUS AND SCIENTIFIC

Religious fundamentalists see the power of science as the chief source of modern disenchantment. Science has supplanted religion as the chief source of authority, but at the cost of making human life accidental and insignificant. If our lives are to have any meaning, the power of science must be overthrown, and faith re-established. But science cannot be removed from our lives by an act of will. Its power flows from technology, which is changing the way we live regardless of what we will.

Religious fundamentalists see themselves as having remedies for the maladies of the modern world. In reality they are symptoms of the disease they pretend to cure. They hope to recover the unreflective faith of traditional cultures, but this is a peculiarly modern fantasy. We cannot believe as we please; our beliefs are traces left by our unchosen lives. A view of the world is not something that can be conjured up as and when we please. Once gone, traditional ways of life cannot be retrieved. Whatever we contrive in

their wake merely adds to the clamour of incessant novelty. However much they may wish it, people whose lives are veined through with science cannot return to a pre-scientific outlook.

Scientific fundamentalists claim that science is the disinterested pursuit of truth. But representing science in this way is to disregard the human needs science serves. Among us, science serves two needs: for hope and censorship. Today, only science supports the myth of progress. If people cling to the hope of progress, it is not so much from genuine belief as from fear of what may come if they give it up. The political projects of the twentieth century have failed, or achieved much less than they promised. At the same time, progress in science is a daily experience, confirmed whenever we buy a new electronic gadget, or take a new drug. Science gives us a sense of progress that ethical and political life cannot.

Again, science alone has the power to silence heretics. Today it is the only institution that can claim authority. Like the Church in the past, it has the power to destroy, or marginalise, independent thinkers. (Think how orthodox medicine reacted to Freud, and orthodox Darwinians to Lovelock.) In fact, science does not yield any fixed picture of things, but by censoring thinkers who stray too far from current orthodoxies it preserves the comforting illusion of a single established worldview. From the standpoint of anyone who values freedom of thought, this may be unfortunate, but it is undoubtedly the chief source of science's appeal. For us, science is a refuge from uncertainty, promising – and in some measure delivering – the miracle of freedom from thought; while churches have become sanctuaries for doubt.

Bertrand Russell – a defender of science wiser than its ideologues today – had this to say:

> When I speak of the importance of scientific method in regard to the conduct of human life, I am thinking of scientific method in its mundane forms. Not that I would undervalue science as a metaphysic, but the value of science as metaphysic belongs in another sphere. It belongs with religion and art and love, with the pursuit of the beatific vision, with the Promethean madness that leads the greatest men to strive to become gods. Perhaps the only ultimate value of human life is to be found in this Promethean madness. But it is a value that is religious, not political, or even moral.

The authority of science comes from the power it gives humans over their environment. Now and then, perhaps, science can cut loose from our practical needs, and serve the pursuit of truth. But to think that it can ever embody that quest is pre-scientific – it is to detach science from human needs, and make of it something that is not natural but transcendental. To think of science as the search for truth is to renew a mystical faith, the faith of Plato and Augustine, that truth rules the world, that truth is divine.

SCIENCE'S IRRATIONAL ORIGINS

As portrayed by its fundamentalists, science is the supreme expression of reason. They tell us that if it rules our lives today, it is only after a long struggle in which it was ceaselessly opposed by the Church, the state and every kind of irrational belief. Having arisen in the struggle against superstition, science – they say – has become the embodiment of rational inquiry.

This fairy tale conceals a more interesting history. The origins of science are not in rational inquiry but in faith, magic and trickery. Modern science triumphed over its adversaries not through its superior rationality but because its late-medieval and early-modern founders were more skilful than them in the use of rhetoric and the arts of politics.

Galileo did not win in his campaign for Copernican astronomy because he conformed to any precept of 'scientific method'. As Feyerabend argued, he prevailed because of his persuasive skill – and because he wrote in Italian. By writing in Italian rather than Latin, Galileo was able to identify resistance to Copernican astronomy with the bankrupt scholasticism of his time, and so gain support from people opposed to older traditions of learning: 'Copernicus now stands for progress in other areas as well, he is a symbol for the ideals of a new class that looks back to the classical times of Plato and Cicero and forward to a free and pluralistic society.'

Galileo won out not because he had the best arguments but because he was able to represent the new astronomy as part of a coming trend in society. His success illustrates a crucial truth. To limit the practice of science by rules of method would slow the growth of knowledge, or even halt it:

> The difference between science and methodology which is such an obvious fact of history ... indicates a weakness in the latter, and perhaps of the 'laws of reason' as well.... Without 'chaos', no knowledge. Without a frequent dismissal of reason, no progress. Ideas which today form the very basis of science exist because there were such things as prejudice, conceit, passion; because these things *opposed reason*; and because they *were permitted to have their way*.

According to the most influential twentieth-century philosopher of science, Karl Popper, a theory is scientific only in so far as it is falsifiable, and should be given up as soon as it has been falsified. By this standard, the theories of Darwin and Einstein should never have been accepted. When they were first advanced, each of them was at odds with some available evidence; only later did evidence become available that gave them crucial support. Applying Popper's account of scientific method would have killed these theories at birth.

The greatest scientists have never been bound by what are now regarded as the rules of scientific method. Nor did the philosophies of the founders of modern science – magical and metaphysical, mystical and occult – have much in common with what is today taken to be the scientific worldview. Galileo

saw himself as a defender of theology, not as an enemy of the Church. Newton's theories became the basis for a mechanistic philosophy, but in his own mind his theories were inseparable from a religious conception of the world as a divinely created order. Newton explained apparently anomalous occurrences as traces left by God. Tycho Brahe viewed them as miracles. Johannes Kepler described anomalies in astronomy as reactions of 'the telluric soul'. As Feyerabend observes, beliefs that are today regarded as belonging to religion, myth or magic were central in the worldviews of the people who originated modern science.

As pictured by philosophers, science is a supremely rational activity. Yet the history of science shows scientists flouting the rules of scientific method. Not only the origins but the progress of science comes from acting against reason.

8

SCIENCE AS A REMEDY FOR ANTHROPOCENTRISM

In all its practical uses, science works to entrench anthropocentrism. It encourages us to believe that, unlike any other animal, we can understand the natural world, and thereby bend it to our will.

Yet, in fact, science suggests a view of things that is intensely uncomfortable to the human mind. The world as seen by physicists such as Erwin Schrödinger and Werner Heisenberg is not an orderly cosmos. It is a demi-chaos that humans can hope to understand only in part. Science cannot satisfy the human need to find order in the world. The most advanced physical sciences suggest that causality and classical logic may not be built into the nature of things. Even the most basic features of our ordinary experience may be delusive.

The passage of time is an integral part of everyday life. Yet, as Barbour points out, science suggests that time may not be part of the scheme of things. Classical logic tells us that the same event cannot happen and not happen. Yet, in 'many-worlds' interpretations of modern physics, that is precisely what does occur. It has become part of common sense to believe that the physical world is not changed by the fact that we observe it. But the alteration of the world by its observers is at the core of quantum mechanics. Like technology, science has evolved to meet human needs; again like technology, it discloses a world humans cannot control, or ever fully understand.

Science has been used to support the conceit that humans are unlike all other animals in their ability to understand the world. In fact, its supreme value may be in showing that the world humans are programmed to perceive is a chimera.

9

Humanists believe that if we know the truth we will be free. In affirming this they imagine they are wiser than thinkers of earlier times. In fact they are in the grip of a forgotten religion.

The modern faith in truth is a relic of an ancient creed. Socrates founded European thought on the faith that truth makes us free. He never doubted that knowledge and the good life go together. He passed on this faith to Plato, and so to Christianity. The result is modern humanism.

Socrates was able to believe that the examined life is best because he thought the true and the good were one and the same: there is a changeless reality beyond the visible world, and it is perfect. When humans live the unexamined life they run after illusions. They spend their lives searching for pleasure or fleeing pain, both of which are bound to pass away. True fulfilment lies in changeless things. An examined life is best because it leads us into eternity.

We need not doubt the reality of truth to reject this Socratic faith. Human knowledge is one thing, human well-being another. There is no predetermined harmony between the two. The examined life may not be worth living.

The faith of Socrates in the examined life may well have been a trace of an archaic religion: he 'habitually heard and obeyed an inner voice which knew more than he did ... he called it, quite simply, "the voice of God"'. Socrates was guided by a *daimon*, an inner oracle, whose counsels he followed without question, even when they led him to his death. In admitting that he was guided by an inner voice, he showed the lingering power of shamanic practices, in which humans have immemorially sought communion with spirits.

If Socratic philosophy originates in shamanism, European rationalism was born in a mystical experience. Modern humanism differs from Socratic philosophy chiefly in failing to recognise its irrational origins – and in the hubris of its ambitions.

The bequest of Socrates was to tether the pursuit of truth to a mystical ideal of the good. Yet neither Socrates nor any other ancient thinker imagined that truth could make *mankind* free. They took for granted that freedom would always remain the privilege of a few; there was no hope for the species. By contrast, among contemporary humanists, the Greek faith that truth makes us free has been fused with one of Christianity's most dubious legacies – the belief that the hope of freedom belongs to everyone.

Modern humanism is the faith that through science humankind can know the truth – and so be free. But if Darwin's theory of natural selection is true this is impossible. The human mind serves evolutionary success, not truth. To think otherwise is to resurrect the pre-Darwinian error that humans are different from all other animals.

An example is the theory of memes. Memes are clusters of ideas and beliefs, which are supposed to compete with one another in much the same

way that genes do. In the life of the mind, as in biological evolution, there is a kind of natural selection of memes, whereby the fittest memes survive. Unfortunately, memes are not genes. There is no mechanism of selection in the history of ideas akin to that of the natural selection of genetic mutations in evolution.

In any case, only someone miraculously innocent of history could believe that competition among ideas could result in the triumph of truth. Certainly ideas compete with one another, but the winners are normally those with power and human folly on their side. When the medieval Church exterminated the Cathars, did Catholic memes prevail over the memes of the heretics? If the Final Solution had been carried to a conclusion, would that have demonstrated the inferiority of Hebrew memes?

Darwinian theory tells us that an interest in truth is not needed for survival or reproduction. More often it is a disadvantage. Deception is common among primates and birds. As Heinrich observes, ravens pretend to hide a cache of food, while secreting it somewhere else. Evolutionary psychologists have shown that deceit is pervasive in animal communication. Among humans the best deceivers are those who deceive themselves: 'we deceive ourselves in order to deceive others better', says Wright. A lover who promises eternal fidelity is more likely to be believed if he believes his promise himself; he is no more likely to keep the promise. In a competition for mates, a well-developed capacity for self-deception is an advantage. The same is true in politics, and many other contexts.

If this is so, the view that clusters of false beliefs – inferior memes – will tend to be winnowed out by natural selection must be mistaken. Truth has no systematic evolutionary advantage over error. Quite to the contrary, evolution will 'select for a degree of self-deception, rendering some facts and motives unconscious so as not to betray – by the subtle signs of self-knowledge – the deception being practised'. As Trivers points out, evolution favours useful error: 'the conventional view that natural selection favours nervous systems which produce ever more accurate images of the world must be a very naive view of mental evolution'.

In the struggle for life, a taste for truth is a luxury – or else a disability:

> only
> tormented persons want truth.
> Man is like other animals, wants food and success and women,
> not truth. Only if the mind
> Tortured by some interior tension has despaired of happiness:
> then it hates
> its life-cage and seeks further.

Science will never be used chiefly to pursue truth, or to improve human life. The uses of knowledge will always be as shifting and crooked as humans are themselves. Humans use what they know to meet their most urgent needs – even if the result is ruin. History is not made in the struggle for self-

preservation, as Hobbes imagined or wished to believe. In their everyday lives humans struggle to reckon profit and loss. When times are desperate they act to protect their offspring, to revenge themselves on enemies, or simply to give vent to their feelings.

These are not flaws that can be remedied. Science cannot be used to reshape humankind in a more rational mould. Any new-model humanity will only reproduce the familiar deformities of its designers. It is a strange fancy to suppose that science can bring reason to an irrational world, when all it can ever do is give another twist to the normal madness. These are not just inferences from history. The upshot of scientific inquiry is that humans cannot be other than irrational. Curiously, this is a conclusion few rationalists have been ready to accept.

Tertullian, a theologian who lived in Carthage sometime around AD 200, wrote of Christianity: *Certum est, quia impossible* (it is certain because it is impossible). Humanists are less clear-minded, but their faith is just as irrational. They do not deny that history is a catalogue of unreason, but their remedy is simple: humankind must – and will – be reasonable. Without this absurd, Tertullian-like faith, the Enlightenment is a gospel of despair.

10

A PASCAL FOR THE ENLIGHTENMENT

Humans cannot live without illusion. For the men and women of today, an irrational faith in progress may be the only antidote to nihilism. Without the hope that the future will be better than the past, they could not go on. In that case, we may need a latter-day Pascal.

The great seventeenth-century religious thinker found many reasons for belief, but he never imagined that they could instil faith. Instead he counselled that reason be stupefied. Pascal knew that faith rests on the force of habit: 'we must make no mistake about ourselves: we are as much automaton as mind'. Only by submitting to the Church and taking Mass with believers could doubt be stilled.

By submitting to the authority of science we can hope for a similar freedom from thought. By revering scientists and partaking of their gifts of technology, we can achieve what Pascal hoped for from prayer, incense and holy water. By seeking the company of earnest investigators and intelligent machines, we can stupefy our reason and fortify our faith in mankind.

11

HUMANISM VERSUS NATURALISM

For Jacques Monod, one of the founders of molecular biology, life is a fluke which cannot be deduced from the nature of things, but once it has emerged, it evolves by the natural selection of random mutations. The human species is

no different from any other in being a lucky throw in the cosmic lottery.

This is a hard truth for us to accept. As Monod writes, 'The liberal societies of the West still pay lip-service to, and present as a basis for morality, a disgusting farrago of Judeo-Christian religiosity, scientistic progressism, belief in the "natural" rights of man and utilitarian pragmatism.' Man must set these errors aside and accept that his/her existence is entirely accidental. He 'must at last awake out of his millenary dream and discover his total solitude, his fundamental isolation. He must realise that, like a gypsy, he lives on the boundary of an alien world; a world that is deaf to his music and as indifferent to his hopes as it is to his suffering and his crimes'.

Monod is right that it is hard to accept the fact that humans are no different from other animals. He does not accept it himself. He rightly scorns the modern worldview, but his own philosophy is another version of the same sordid mishmash. For Monod, humanity is a uniquely privileged species. It alone knows that its existence is an accident, and it alone can take charge of its destiny. Like the Christians, Monod believes humankind finds itself in an alien world, and insists that it must make a choice between good and evil: 'The kingdom above or the darkness below: it is for him to choose.' In this fantasy, mankind in future will be different not only from any other animal but also from anything it has ever been. The Christians who resisted Darwin's theory feared that it left humanity looking insignificant. They need not have worried. Darwinism has been used to put humankind back on its pedestal.

Like many others, Monod runs together two irreconcilable philosophies – humanism and naturalism. Darwin's theory shows the truth of naturalism: we are animals like any other; our fate and that of the rest of life on Earth are the same. Yet, in an irony all the more exquisite because no one has noticed it, Darwinism is now the central prop of the humanist faith that we can transcend our animal natures and rule the Earth.

12

STRAW DOGS

Humanism is a secular religion thrown together from decaying scraps of Christian myth. In contrast, the Gaia hypothesis – the theory that the Earth is a self-regulating system whose behaviour resembles in some ways that of an organism – embodies the most rigorous scientific naturalism.

In James Lovelock's model of Daisyworld, a planet containing only black and white daisies becomes one in which global temperature is self-regulating. Daisyworld is lit by a sun that grows hotter over time. White daisies reflect the sun's heat, thereby cooling the surface of the planet, while black daisies absorb the heat, so warming the surface. Without any element of purpose, these daisies interact to cool their world despite the warming sun.

All that is required to bring a self-regulating biosphere into existence are mechanistic and stochastic processes, which can be modelled in a computer simulation. Joel de Rosnay explains:

> The simulation ... starts with a low temperature. The black daisies, which absorb the heat of the sun better, survive, develop and occupy a large area. As a result, the temperature of the soil increases, becoming more favourable to life. The black daisies reproduce at a high rate but cover too much area, and temperature increases above a critical point; the black daisies die off en masse. But the white ones adapt, develop, and colonize large areas, reflecting the heat and cooling the planet again. The temperature drops – too much. The white daisies die and the black ones return in profusion. After a certain number of fluctuations, a 'mosaic' of black and white areas begins to coexist and coevolve on the planet's surface. Individual daisies are born and die, but the two populations, through successive heating and cooling, maintain an average temperature favourable to the life of both species, and this temperature fluctuates around an optimal balance. No one set the temperature, it simply emerged – the result of the daisies' behaviour and their co-evolution.

Daisyworld arises from chance and necessity.

As the Daisyworld model shows, the Gaia hypothesis is consistent with the narrowest scientific orthodoxy. Even so, the hostility of scientific fundamentalists to it is well founded. At bottom the conflict between Gaia theory and current orthodoxy is not a scientific controversy. It is a collision of myths – one formed by Christianity, the other by a much older faith.

Gaia theory re-establishes the link between humans and the rest of nature which was affirmed in mankind's primordial religion, animism. In monotheistic faiths God is the final guarantee of meaning in human life. For Gaia, human life has no more meaning than the life of slime mould.

Lovelock has written that Gaia was named after the ancient Greek goddess of the Earth at the suggestion of his friend the novelist William Golding. But the idea of Gaia is anticipated most clearly in a line from the *Tao Te Ching*, the oldest Taoist scripture. In ancient Chinese rituals, straw dogs were used as offerings to the gods. During the ritual they were treated with the utmost reverence. When it was over and they were no longer needed they were trampled on and tossed aside: 'Heaven and earth are ruthless, and treat the myriad creatures as straw dogs.' If humans disturb the balance of the Earth they will be trampled on and tossed aside. Critics of Gaia theory say they reject it because it is unscientific. The truth is that they fear and hate it because it means that humans can never be other than straw dogs.

2

THE DECEPTION

How far is truth susceptible of embodiment? – that is the question, that is the experiment.

NIETZSCHE

1

AT THE MASKED BALL

'I should liken Kant to a man at a ball, who all evening has been carrying on a love affair with a masked beauty in the vain hope of making a conquest, when at last she throws off her mask and reveals herself to be his wife.' In Schopenhauer's fable the wife masquerading as an unknown beauty was Christianity. Today it is humanism.

What Schopenhauer wrote of Kant is no less true today. As commonly practised, philosophy is the attempt to find good reasons for conventional beliefs. In Kant's time the creed of conventional people was Christian, now it is humanist. Nor are these two faiths so different from one another. Over the past two hundred years, philosophy has shaken off Christian faith. It has not given up Christianity's cardinal error – the belief that humans are radically different from all other animals.

Philosophy has been a masked ball in which a religious image of humankind is renewed in the guise of humanist ideas of progress and enlightenment. Even philosophy's greatest unmaskers have ended up as figures in the masquerade. Removing the masks from our animal faces is a task that has hardly begun.

Other animals are born, seek mates, forage for food, and die. That is all. But we humans – we think – are different. We are *persons*, whose actions are the results of their *choices*. Other animals pass their lives unawares, but we are *conscious*. Our image of ourselves is formed from our ingrained belief that *consciousness, selfhood* and *free will* are what define us as human beings, and raise us above all other creatures.

In our more detached moments, we admit that this view of ourselves is flawed. Our lives are more like fragmentary dreams than the enactments of conscious selves. We control very little of what we most care about; many of our most fateful decisions are made unbeknownst to ourselves. Yet we insist that *mankind* can achieve what *we* cannot: conscious mastery of its existence. This is the creed of those who have given up an irrational belief in God for an irrational faith in mankind. But what if we give up the empty hopes of Christianity and humanism? Once we switch off the soundtrack – the babble of God and immortality, progress and humanity – what sense can we make of our lives?

2

SCHOPENHAUER'S CRUX

The first and still unsurpassed critique of humanism was made by Arthur Schopenhauer. This combative bachelor, who retired to Frankfurt in 1833 for the last decades of his reclusive life because he thought the city had 'no floods', 'better cafés', 'a skilful dentist and less bad physicians', brought the

way we think about ourselves to a crux we have yet to resolve.

A hundred years ago, Schopenhauer was vastly influential. Writers including Thomas Hardy and Joseph Conrad, Leo Tolstoy and Thomas Mann were deeply affected by his philosophy, and the works of musicians and painters such as Schoenberg and de Chirico were infused with his ideas. If he is scarcely read today, it is because few great modern thinkers have gone so much against the spirit of their time and ours.

Schopenhauer scorned the ideas of universal emancipation that had begun to spread through Europe in the mid-nineteenth century. In political terms, he was a reactionary liberal, looking to the state only to protect his life and property. He viewed the revolutionary movements of his day with a mixture of horror and contempt, offering his opera glasses for use as a telescopic rifle sight to guardsmen firing on a crowd during the popular demonstrations of 1848. Yet he also scorned the official philosophy of the day, viewing Hegel – Europe's most widely esteemed philosopher and a massive influence on later thinkers such as Marx – as little more than an apologist for state power.

In his personal life, Schopenhauer was guarded and self-possessed. He had an acute sense of the dangers of human life. He slept with loaded pistols by his bed and refused to allow his barber to shave his neck. He delighted in company but often preferred his own. He never married but seems to have been sexually highly active. An erotic diary found in his papers at his death was burnt by his executor, but his celebrated essay 'On Women' gave him a reputation for misogyny that has stayed with him ever since.

He had a love of habit. During his later life in Frankfurt he followed an unvarying daily routine. Getting up around seven, he would write until noon, play the flute for half an hour, then go out to lunch, always in the same place. Afterwards he returned to his rooms, read until four, then went for a two-hour walk, ending up at a library where he read the London *Times*. In the evening he went to a play or a concert, after which he had a light supper in a hotel called the Englischer Hof. He kept to this regime for nearly thirty years.

One of the few memorable episodes in Schopenhauer's uneventful life came about as a result of his hatred of noise. Infuriated by a seamstress talking outside his rooms, Schopenhauer pushed her down a flight of stairs. The woman was injured and sued him. He lost the case, and as a result had to give her a quarterly sum of money for the rest of her life. When she died, he wrote in Latin on her death certificate: 'Obit anus, abit onus' (the old woman dies, the burden departs). A disbeliever in the reality of the self, Schopenhauer devoted his life to himself.

Yet it is not Schopenhauer's life or personality that account for his neglect. It is his philosophy, which – so far as Europe is concerned, anyhow – is more subversive of humanist hopes than any other.

Schopenhauer believed that philosophy was ruled by Christian prejudices. He devoted much of his life to dissecting the influence of these prejudices on Immanuel Kant, a thinker he admired more than any other, but whose philosophy he attacked relentlessly as a secular version of Christianity. Kant's philosophy was one of the main strands in the Enlightenment – the movement

of progressive thinkers that sprang up throughout much of Europe in the eighteenth century. The thinkers of the Enlightenment aimed to replace traditional religion by faith in humanity. But the upshot of Schopenhauer's criticism of Kant is that the Enlightenment was only a secular version of Christianity's central mistake.

For Christians, humans are created by God and possess free will, for humanists they are self-determining beings. Either way, they are quite different from all other animals. In contrast, for Schopenhauer we are at one with other animals in our innermost essence. We think we are separated from other humans and even more from other animals by the fact that we are distinct individuals. But that individuality is an illusion. Like other animals, we are embodiments of universal Will, the struggling, suffering energy that animates everything in the world.

Schopenhauer was the first major European thinker to know anything about Indian philosophy, and he remains the only one to have absorbed and accepted its central doctrine – that the free, conscious individual who is the core of Christianity and humanism is an error that conceals from us what we really are. But it was a view he had arrived at independently, through his devastating criticism of Kant.

Kant wrote that David Hume aroused him from dogmatic slumber. He was certainly shaken by the great eighteenth-century Scottish philosopher's profound scepticism. Traditional metaphysicians claimed to demonstrate the existence of God, the freedom of the will and the immortality of the soul. In Hume's view, we cannot even know that the external world really exists. Indeed we do not even know that we ourselves exist, since all we find when we look within is a bundle of sensations. Hume concluded that, knowing nothing, we must follow the ancient Greek Sceptics, and rely on nature and habit to guide our lives.

Kant's dogmatic slumber may have been disturbed by Hume's scepticism, but it was not long before he was snoring soundly again. Kant accepted Hume's argument that we cannot know things in themselves, only the phenomena that are given us in experience. The reality lying behind experience – what Kant called the noumenal world of things in themselves – is unknowable. But he refused to accept Hume's sceptical conclusion. According to Kant, I could not have the experience of choosing freely if I were only the empirical organism I seem to be. It is only because I belong in the noumenal world outside space and time that I can live my life according to moral principles.

Like most philosophers, Kant worked to shore up the conventional beliefs of his time. Schopenhauer did the opposite. Accepting the arguments of Hume and Kant that the world is unknowable, he concluded that both the world and the individual subject that imagines it knows it are *maya*, dreamlike constructions with no basis in reality. Morality is not a set of laws or principles. It is a feeling – the feeling of compassion for the suffering of others which is made possible by the fact that separate individuals are finally figments. Here Schopenhauer's thought converges with the Vedanta and

Greek cult of the god Dionysus, 'the wild spirit of antithesis and paradox, of immediate presence and complete remoteness, of bliss and horror, of infinite vitality and the cruelest destruction', whose death and rebirth were celebrated to mark the renewal of life after winter. This was Nietzsche's answer to Schopenhauer's 'pessimism' – a 'Dionysian' affirmation of life in all its cruelty. Yet it was not the coldly cheerful Schopenhauer – 'the flute-playing pessimist', as Nietzsche scornfully described him – who was destroyed by pity. It was Nietzsche, whose acute sensitivity to the pain of the world tormented him throughout his life. In his last days of sanity, he sent euphoric letters to friends, alternately signed 'Dionysus' and 'The Crucified'.

The circumstances of Nietzsche's breakdown suggest another irony. Unlike Nietzsche, Schopenhauer turned away from Christianity and never looked back, and one of the core Christian beliefs that he left behind was a belief in the significance of human history. For Christians, it is because they occur in history that the lives of humans have a meaning that the lives of other animals do not. What enables humans to have a history is that – unlike other animals – they can freely choose how to live their lives. They are given this freedom by God, who created them in his own image.

If we truly leave Christianity behind, we must give up the idea that human history has a meaning. Neither in the ancient pagan world nor in any other culture has human history ever been thought to have an overarching significance. In Greece and Rome, it was a series of natural cycles of growth and decline. In India, it was a collective dream, endlessly repeated. The idea that history must make sense is just a Christian prejudice.

If you believe that humans are animals, there can be no such thing as the history of humanity, only the lives of particular humans. If we speak of the history of the species at all, it is only to signify the unknowable sum of these lives. As with other animals, some lives are happy, others wretched. None has a meaning that lies beyond itself.

Looking for meaning in history is like looking for patterns in clouds. Nietzsche knew this; but he could not accept it. He was trapped in the chalk circle of Christian hopes. A believer to the end, he never gave up the absurd faith that something could be made of the human animal. He invented the ridiculous figure of the Superman to give history meaning it had not had before. He hoped that humankind would thereby be awakened from its long sleep. As could have been foreseen, he succeeded only in adding further nightmares to its confused dream.

4

HEIDEGGER'S HUMANISM

Heidegger tells us that, by comparison with man, animals are 'world-poor'. Animals merely exist, reacting to the things they encounter around them; whereas humans are makers of the worlds they inhabit. Why does Heidegger believe this? Because he cannot rid himself of the prejudice that humans are

necessary in the scheme of things, whereas other animals are not.

In his *Letter on Humanism*, Heidegger claims to reject the man-centred thinking that has prevailed – ever since the pre-Socratics, he tells us – in Western philosophy. In the past, philosophers were concerned only with the human, now they should put the human on one side and concern themselves with 'Being'. But Heidegger turns to 'Being' for the same reason that Christians turn to God – to affirm the unique place of humans in the world.

Like Nietzsche, Heidegger was a postmonotheist – an unbeliever who could not give up Christian hopes. In his great first book, *Being and Time*, he sets out a view of human existence that is supposed to depend at no point on religion. Yet every one of the categories of thought he deploys – 'thrownness' (*Dasein*), 'uncanniness' (*Unheimlichkeit*), 'guilt' (*Schuld*) – is a secular version of a Christian idea. We are 'thrown' into the world, which remains always foreign or 'uncanny' to us, and in which we can never be truly at home. Again, whatever we do, we cannot escape guilt; we are condemned to choose without having any ground for our choices, which will always be somehow mysteriously at fault. Obviously, these are the Christian ideas of the Fall of Man and Original Sin, recycled by Heidegger with an existential-sounding twist.

In his later writings, Heidegger declared that he had abandoned humanism in order to concern himself with 'Being'. In fact, since he sought in Being what Christians believe they find in God, he no more gave up humanism than Nietzsche did. Admittedly he is never clear what Being signifies. Often he writes as if it is altogether indefinable. But whatever Being may be, there can be no doubt that for Heidegger it gives humans a unique standing in the world.

For Heidegger, humans are the site in which Being is disclosed. Without humans, Being would be silent. Meister Eckardt and Angelus Silesius, German mystics whose writings Heidegger seems to have studied closely, said much the same: God needs man as much as man needs God. For these mystics, humans stand at the centre of the world, everything else is marginal. Other animals are deaf-mutes; only through humans can God speak and be heard.

Heidegger sees everything that lives solely from the standpoint of its relations with humans. The differences between living creatures count for nothing in comparison with their difference from humans. Molluscs and mice are the same as bats and gorillas, badgers and wolves are no different from crabs and gnats. All are 'world-poor', none has the power to 'disclose Being'. This is only the old anthropocentric conceit, rendered anew in the idiom of a secular Gnostic.

Heidegger praised 'the crooked path of thought', but he did so because he believed it led back to 'home'. In Heidegger's never-renounced engagement with Nazism, the quest for 'home' became a hatred of hybrid thinking and the worship of a deadly unity of will. There can be little doubt that Heidegger's flirtation with Nazism was in part an exercise in opportunism. In May 1933, with the help of Nazi officials, he was appointed Rector of the University of Freiburg. He used the post to give speeches in support of Hitler's policies,

including one in November 1933 in which he pronounced, 'The Fuhrer himself and alone is the present and future German reality and its law.' At the same time he broke off relations with students and colleagues (such as his old friend and former teacher Edmund Husserl) who were Jewish. In acting in this way, Heidegger was not much different from many other German academics at the time.

But Heidegger's involvement with Nazism went deeper than cowardice and power worship. It expressed an impulse integral to his thinking. By contrast with Nietzsche, a nomad who wrote for travellers like himself and who was able to put so much in question because he belonged nowhere, Heidegger always yearned desperately to belong. For him, thinking was not an adventure whose charm comes from the fact that one cannot know where it leads. It was a long detour, at the end of which lay the peace that comes from no longer having to think. In his rectorial address at Freiburg, Heidegger came close to saying as much, leading the observer Karl Lowith to comment that it was not quite clear whether one should now study the pre-Socratic philosophers or join the Brownshirts.

Heidegger claimed that in his later thought he turned away from humanism. Yet, except perhaps in his last years, he showed no interest in traditions in which the human subject is not central. He held resolutely to the European tradition because he believed that in it alone 'the question of Being' had been rightly posed. It was this belief that led him to assert that Greek and German are the only truly 'philosophical' languages – as if the subtle reasonings of Nagarjuna, Chuang-Tzu and Dogen, Jey Tsong Khapa, Averroës and Maimonides could not be philosophy because Indian, Chinese, Japanese, Tibetan, Arab and Jewish thinkers did not write in these European tongues. Purged of alien voices and returned to its primordial purity, philosophy could once again become the voice of Being. Philosophers could read the runes of history, and know what mankind was called upon to do – as Heidegger claimed he did in Germany in the thirties. Seldom has a philosopher claimed so much for himself, or been so deluded.

In Heidegger's last writings he speaks of *Gelassenheit*, or releasement – a way of thinking and living that has turned away from willing. Perhaps this reflects the influence on him of East Asian thought, particularly Taoism. More likely, Heidegger's *Gelassenheit* is only the release from willing that Schopenhauer had long before seen as the source of art. In art, and above all in music, we forget the practical interests and strivings that together make up 'the will'. By doing so we forget ourselves, Schopenhauer claimed: we see the world from a standpoint of selfless contemplation. In the last phase of his thought, the only one in which he really turned away from humanism, Heidegger did little more than return to Schopenhauer by a roundabout route.

5

CONVERSING WITH LIONS

'If a lion could talk, we could not understand him,' the philosopher Ludwig Wittgenstein once said. 'It's clear that Wittgenstein hadn't spent much time with lions,' commented the gambler and conservationist John Aspinall.

Like Heidegger, Wittgenstein was a humanist in a venerable European tradition. Philosophers from Plato to Hegel have interpreted the world as if it was a mirror of human thinking. Later philosophers such as Heidegger and Wittgenstein went further, and claimed that the world is a construction of human thought. In all these philosophies, the world acquires a significance from the fact that humans have appeared in it. In fact, until humans arrive, there is hardly a world at all.

Wittgenstein believed that his later thought had transcended traditional philosophy, but at bottom it is not much more than another version of the oldest of philosophies – Idealism. For idealists, thought is the final reality; there is nothing that is independent of mind. In practice, this means that the world is a human invention. If solipsism is the belief that only I exist, Idealism is the belief that only humans exist.

Unusual, possibly unique amongst philosophers in producing two different and opposed systems of thought, Wittgenstein tried in his first philosophy to give an account of thought and language in which it mirrored the logical structure of the world. This is the philosophy of his *Tractatus Logico-Philosophicus.* By the time he had formulated his second philosophy, most clearly expressed in his *Philosophical Investigations*, Wittgenstein had given up the idea that language could mirror the world. Instead he denied that any sense could be given to the idea of a world existing apart from language. This led him to give up his earlier mystical belief, expressed in the *Tractatus* and owing a good deal to Schopenhauer, that there are some things that cannot be expressed in words and about which we must be silent – in Wittgenstein's later philosophy, there is nothing that cannot be said. Despite the power and subtlety with which Wittgenstein developed this view, it is only Idealism stated in linguistic terms.

Wittgenstein took it as given that we cannot talk to lions. If humans were found among whom conversation with other animals was normal, he could say only that we – that's to say, he – could not understand them. He wrote: 'The common behaviour of mankind is the system of reference by means of which we interpret an unknown language.' We might more truly say: The common behaviour of animals is the system of reference by means of which we interpret the brute noises of humans.

6

'POSTMODERNISM'

Postmodernists tell us there is no such thing as nature, only the floating world of our own constructions. All talk of human nature is spurned as dogmatic and reactionary. Let us put these phoney absolutes aside, say the postmodernists, and accept that the world is what we make of it.

Postmodernists parade their relativism as a superior kind of humility – the modest acceptance that we cannot claim to have the truth. In fact, the postmodern denial of truth is the worst kind of arrogance. In denying that the natural world exists independently of our beliefs about it, postmodernists are implicitly rejecting any limit on human ambitions. By making human beliefs the final arbiter of reality, they are effectively claiming that nothing exists unless it appears in human consciousness.

The idea that there is no such thing as truth may be fashionable, but it is hardly new. Two and half thousand years ago, Protagoras, the first of the Greek sophists, declared, 'Man is the measure of all things.' He meant human individuals, not the species; but the implication is the same. Humans decide what is real and what is not. Postmodernism is just the latest fad in anthropocentrism.

7

ANIMAL FAITH

Philosophers have always tried to show that we are not like other animals, sniffing their way uncertainly through the world. Yet after all the work of Plato and Spinoza, Descartes and Bertrand Russell we have no more reason than other animals do for believing that the sun will rise tomorrow.

8

PLATO AND THE ALPHABET

The calls of birds and the traces left by wolves to mark off their territories are no less forms of language than the songs of humans. What is distinctively human is not the capacity for language. It is the crystallisation of language in writing.

From its humble beginnings as a means of stocktaking and tallying debts, writing gave humans the power to preserve their thoughts and experiences from time. In oral cultures this was attempted by feats of memory, but with the invention of writing human experience could be preserved when no memory of it remained. The *Iliad* must have been handed down as a song for many generations, but without writing we would not have the vision of an archaic world it preserves for us today.

Writing creates an artificial memory, whereby humans can enlarge their experience beyond the limits of one generation or one way of life. At the same time it has allowed them to invent a world of abstract entities and mistake them for reality. The development of writing has enabled them to construct philosophies in which they no longer belong in the natural world.

The earliest forms of writing preserved many links with the natural world. The pictographs of Sumer were metaphors of sensuous realities. With the evolution of phonetic writing those links were severed. Writing no longer

indispensable to our survival. We fall into sleep in obedience to a primordial circadian rhythm; we nightly inhabit the virtual worlds of dreams; nearly all our daily doings go on without conscious awareness; our deepest motivations are shut away from conscious scrutiny; nearly all of our mental life takes place unknown to us; the most creative acts in the life of the mind come to pass unawares. Very little that is of consequence in our lives requires consciousness. Much that is vitally important comes about only in its absence.

Plato and Descartes tell us that consciousness is what marks off humans from other animals. Plato believed that ultimate reality is spiritual, and that humans are alone among animals in being at least dimly conscious of it. Descartes saw humans as thinking beings. He declared he knew he existed only because he found himself thinking – 'Cogito, ergo sum' (I think, therefore I am) – and that animals were mere machines. Yet cats, dogs and horses display awareness of their surroundings; they experience themselves as acting or failing to act; they have thoughts and sensations. As primatologists have shown, our nearest evolutionary kin among the apes have many of the mental capacities we are accustomed to think belong only to ourselves. Despite an ancient tradition that tells us otherwise, there is nothing uniquely human in conscious awareness.

Where other animals differ from humans is in lacking the sensation of selfhood. In this they are not altogether unfortunate. Self-awareness is as much a disability as a power. The most accomplished pianist is not the one who is most aware of her movements when she plays. The best craftsman may not know how he works. Very often we are at our most skilful when we are least self-aware. That may be why many cultures have sought to disrupt or diminish self-conscious awareness. In Japan, archers are taught that they will hit the target only when they no longer think of it – or themselves.

The meditative states that have long been cultivated in Eastern traditions are often described as techniques for heightening consciousness. In fact they are ways of bypassing it. Drugs, fasting, divination and dance are only the most familiar examples. In earlier times, architecture was used to produce a systematic derangement of the senses. As Rebecca Stone Miller wrote of ancient Andean art: 'Chavin is a very complex, "baroque" and esoteric style, intentionally difficult to decipher, intended to disorient, and ultimately to transport the viewer into alternative realities.' Among modern architects, Gaudí is one of the few who sought to alter everyday perception. But some of the most successful experiments in twentieth-century painting were attempts to do just that. The Surrealists understood that if we are to look at the world afresh we must recover the vision of things we are given by unconscious or subliminal perception. Artists such as Giorgio de Chirico and Max Ernst did not give up representing things as we ordinarily see them because they were captivated by novel techniques. They experimented with new techniques so as to recover a vision of things that may once have been common. In the earliest art there are traces of what the senses showed before they were overlaid by conscious awareness. The artists of the Upper Paleolithic 'had no history,' N.K. Sandars observes. 'This does not mean that their minds were an intellectual

void, a tabula rasa waiting to be filled with the experiences of civilisation. The mind of the artist was already stored with the million years of his life as a reflective being. Most of this is now beyond our reach.'

Subliminal perception – perception that occurs without conscious awareness – is not an anomaly but the norm. Most of what we perceive of the world comes not from conscious observation but from a continuous process of unconscious scanning: 'Unconscious vision ... [has] proved to be capable of ... gathering more information than a conscious scrutiny lasting a hundred times longer ... the undifferentiated structure of unconscious vision ... displays scanning powers that are superior to conscious vision.' These words were written by the psychoanalyst Anton Ehrenzweig in the course of developing a theory of art, but the sciences tell the same story. The early-twentieth-century neurologist O. Potzl showed that images shown to waking people too briefly to be noticed or consciously remembered surface in their dreams. Again, in the phenomenon of blindsight, brain-damaged people can describe and manipulate objects that fall outside their field of vision.

These examples come from scientific research into anomalous experiences, but subliminal perception is not something that occurs on the margins of our lives. It is continuous and all-pervasive. It was in order to exploit this fact that enterprises such as the Subliminal Projection Company were formed to influence consumer behaviour by the use of messages too brief to be registered in conscious awareness. Subliminal advertising works – which is why in most countries it was effectively banned around forty years ago.

The world we see through the filter of conscious awareness is a fragment of that which is given us by subliminal vision. Our senses have been censored so that our lives can flow more easily. Yet we rely on our preconscious view of the world in everything we do. To equate what we know with what we learn though conscious awareness is a cardinal error. The life of the mind is like that of the body. If it depended on conscious awareness or control it would fail entirely.

11

LORD JIM'S JUMP

In his novel *Lord Jim*, Joseph Conrad writes of the son of an English parson who is charmed by the heroic vision of life as a seaman. He takes up the seafaring life only to be disillusioned: 'entering the regions so well known to his imagination, [he] found them strangely barren of adventure'. Yet he does not go back, but goes on with his life at sea. In his mid-twenties, he enlists as first mate on the *Patna*, a battered old steamer. En route to Mecca with a human cargo of eight hundred pilgrims, the *Patna* hits a submerged obstacle and seems about to sink. Leaving the pilgrims to their fate, the ship's German captain and European officers take to a lifeboat they have lowered alongside. At first Jim does nothing, viewing the event almost as a spectator; but finally he jumps, and finds himself in the lifeboat:

> 'I had jumped.' He checked himself, averted his gaze ... 'It seems,' he added.

As it turns out, the *Patna* is unharmed, and its Muslim passengers are safely towed to harbour. But Jim's life is changed for ever. The ship's captain disappears, and Jim has to face the disgrace of a public inquiry alone. In private, he is haunted by the feeling that he has betrayed the seaman's ethic of bravery and service. In the years that follow, he seeks anonymity in perpetual travel. He ends up in Patusan, a remote settlement in northwest Sumatra, where he finds sanctuary from the world and becomes Tuan Jim – Lord Jim – the ruler who brings peace to the native people. But events – and his own character – conspire against him. Patusan is invaded by a malign buccaneer, Gentleman Brown, and his gang. Jim arranges for Brown to leave the island, but the pirate murders Jim's friend, the son of the elderly native chieftain. Jim has pledged his life to the safety of the inhabitants of Patusan. He honours the pledge by going to the grieving chieftain, who shoots him dead.

Lord Jim's life is overshadowed by a question he cannot answer. Did he jump? Or was he pushed by events? The idea that we are authors of our actions is required by 'morality'. If Jim is to be held accountable for his jump, he must have been able to act otherwise than he did. That is what free will means – if it means anything. Did Jim do what he did freely? How can he – or anyone else – ever know?

There are many reasons for rejecting the idea of free will, some of them decisive. If our actions are caused then we cannot act otherwise than we do. In that case we cannot be responsible for them. We can be free agents only if we are authors of our acts; but we are ourselves products of chance and necessity. We cannot choose to be what we are born. In that case, we cannot be responsible for what we do.

These are strong arguments against free will; but recent scientific research has weakened it even more. In Benjamin Libet's work on 'the half-second delay', it has been shown that the electrical impulse that initiates action occurs half a second *before* we take the conscious decision to act. We think of ourselves as deliberating what to do, then doing it. In fact, in nearly the whole of our lives, our actions are initiated unconsciously: the brain makes us ready for action, *then* we have the experience of acting. As Libet and his colleagues put it:

> ... the brain evidently 'decides' to initiate, or, at the least, prepare to initiate the act at a time before there is any reportable subjective awareness that such a decision has taken place ... cerebral initiation even of a spontaneous voluntary act ... can and usually does begin *unconsciously*.

If we do not act in the way we think we do, the reason is partly to do with the bandwidth of consciousness – its ability to transmit information measured in terms of bits per second. This is much too narrow to be able to register the

information we routinely receive and act on. As organisms active in the world, we process perhaps 14 million bits of information per second. The bandwidth of consciousness is around eighteen bits. This means we have conscious access to about a millionth of the information we daily use to survive.

The upshot of neuroscientific research is that we cannot be the authors of our acts. Libet does retain a faint shadow of free will in his notion of the veto – the capacity of consciousness to stall or abort an act that the brain has initiated. The trouble is that we can never know when – or if – we have exercised the veto. Our subjective experience is frequently, perhaps always, ambiguous.

When we are on the point of acting, we cannot predict what we are about to do. Yet when we look back we may see our decision as a step on a path on which we were already bound. We see our thoughts sometimes as events that happen to us, and sometimes as our acts. Our feeling of freedom comes about through switching between these two angles of vision. Free will is a trick of perspective.

Stuck in an incessant oscillation between the perspective of an actor and that of a spectator, Lord Jim is unable to decide what it is he has done. He hopes to dredge from consciousness something that will end his uncertainty. He is in search of his own character. It is a vain search. For, as Schopenhauer – an author much read by Conrad – had written, whatever identity we may possess is only very dimly accessible to conscious awareness:

> It is assumed that the identity of the person rests on that of consciousness. If, however, we understand by this merely the conscious recollection of the course of life, then it is not enough. We know, it is true, something more of the course of our life than of a novel we have formerly read, yet very little indeed. The principal events, the interesting scenes, have been impressed on us; for the rest, a thousand events are forgotten for one that has been retained. The older we become, the more does everything pass us by without a trace.... It is true that, in consequence of our relation to the external world, we are accustomed to regard the subject of knowing, the knowing I, as our real self.... This, however, is the mere function of the brain, and is not our real self. Our true self, the kernel of our inner nature, is that which is to be found behind this, and which really knows nothing but willing and not-willing ...

The knowing I cannot find the acting self for which it seeks. The unalterable character with which Schopenhauer and sometimes Conrad believed all humans are born may not exist; but we cannot help looking within ourselves to account for what we do. All we find are fragments, like memories of a novel we once read.

Lord Jim can never know why he jumped. That is his fate. As a result, he can never start his life afresh, 'with a clean slate'. The last word on Lord Jim's jump must be given to Marlow, the shrewd and sympathetic narrator of the tale, who writes:

As to me, left alone with the solitary candle, I remained singularly unenlightened. I was no longer young enough to behold at every turn the magnificence that besets our insignificant footsteps in good and evil. I smiled to think that, after all, it was yet he, of us two, who had the light. And I felt sad. A clean slate, did he say? As if the initial word of each our destiny were not graven in imperishable characters on the face of a rock.

12

OUR VIRTUAL SELVES

We think our actions express our decisions. But in nearly all of our life, willing decides nothing. We cannot wake up or fall asleep, remember or forget our dreams, summon or banish our thoughts, by deciding to do so.

When we greet someone on the street we just act, and there is no actor standing behind what we do. Our acts are end points in long sequences of unconscious responses. They arise from a structure of habits and skills that is almost infinitely complicated. Most of our life is enacted without conscious awareness. Nor can it can be made conscious. No degree of self-awareness can make us self-transparent.

Freud believed that by bringing repressed memories into conscious awareness we can gain greater control of our lives. So long as they remain inaccessible, we may be puzzled by attacks of anxiety, or beset by recurrent slips of the tongue. Retrieving the memories that lie behind such compulsive behaviour may enable us to alter it.

Freud understood that much of the life of the mind goes on in the absence of consciousness. Perhaps he was right that bringing back to conscious awareness those of our thoughts that are unconscious because we have repressed them can enable us to cope with life better. But the preconscious mental activities that lie behind everyday perception and behaviour cannot be retrieved in this way. Unlike the unconscious mind of which Freud speaks, they are what makes conscious awareness possible.

Our conscious selves arise from processes in which conscious awareness plays only a small part. We resist this fact because it seems to deprive us of control of our lives. We think of our actions as the end-results of our thoughts. Yet much the greater part of everyone's life goes on without thinking. The sense of conscious agency may be an artefact of conflicts among our impulses. When we know what to do we are hardly conscious of doing it. That does not mean we are ruled by instinct or habit. It means we spend our lives coping with what comes along.

We deal with the death of a friend in much the same way we step aside to avoid a falling slate. We may be in doubt as to how to show our sadness or comfort others who have been bereaved, but if we succeed in doing so it is not because we have altered our beliefs or improved our reasonings. It is because we have learnt to cope with things more skilfully.

officer's incredulity as a flying fragment cut off his leg at the knee during a naval battle in the Second World War; wandering through the ruins of Germany in the aftermath of war and coming across a vast hangar abandoned by the Luftwaffe in which thousands of men, women and children had contrived makeshift homes for themselves from green branches plucked from the nearby fields; recovering in a hospital ward after a near-fatal accident – he recalled these memories as bright vignettes in a waste of forgotten time.

Rees writes that 'at no time in my life have I had that enviable sensation of constituting a continuous personality, of being something which, in the astonishing words of T.H. Green, "is eternal, is self-determined, and which thinks"'. He quotes approvingly the ironic comment of the great Scottish sceptic David Hume, who looked into himself and likewise found no enduring self: 'Setting aside some metaphysicians ... I may venture to affirm of the rest of mankind that they are nothing but a collection of perceptions which succeed each other with inconceivable rapidity and are in perpetual flux and movement.' For Hume, selfhood is only a rehearsal of continuities. As he wrote:

> The mind is a kind of theatre, where several perceptions successively make their appearance; pass, re-pass, glide away, and mingle in an infinite variety of postures and situations. There is properly no *simplicity* in it at one time, nor *identity* in different; whatever natural propensity we have to imagine that simplicity and identity. The comparison of the theatre must not mislead us. They are the successive perceptions only, that constitute the mind; nor have we the most distant notion of the place, where these scenes are represented, or of the materials, of which this is compos'd.

Hume's experience of finding no simplicity or identity in himself was also Rees's. In a fascinating memoir, Rees's daughter confirms his account of himself as 'Mr Nobody, a man without qualities, a person without a sense of "self"'. Rees's experience may have been unusual in its intensity, as the name his daughter gave him suggests; but it is in no way abnormal. The discontinuities he perceived in himself are present in everyone. We are all bundles of sensations. The unified, continuous self that we encounter in everyday experience belongs in *maya*. We are programmed to perceive identity in ourselves, when in truth there is only change. We are hardwired for the illusion of self.

We cannot look steadily at the momentary world, for if we did we could not act. Nor can we observe the changes that are taking place incessantly in ourselves, for the self that witnesses them comes and goes in the blink of an eye. Selfhood is a side effect of the coarseness of consciousness; the inner life is too subtle and transient to be known to itself. But the sense of self has another source. Language begins in the play of animals and birds. So does the illusion of selfhood.

On watching two monkeys playing, Gregory Bateson wrote thus:

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