Nicholas Humphrey is a psychologist and author, based in Cambridge. In the seventies he carried out fundamental research on the nature of visual perception. More recently he has become known for papers and reviews on a variety of topics in animal and human psychology, including the evolution of intelligence, the biology of aesthetics, and the nature of human consciousness.

Four Minutes to Midnight

NICHOLAS HUMPHREY

The Bronowski Memorial Lecture 1981

THE MENARDPRESS LONDON 1982

Four Minutes to

 $\ensuremath{\mathbb{C}}$ Nicholas Humphrey 1981 and 1982 All rights reserved

Second edition

ISBN 0 903400 74 X

The Menard Press 8 The Oaks, Woodside Avenue London N12 8AR

By arrangement with the British Broadcasting Corporation.

Nicholas Humphrey's Bronowski Memorial Lecture was broadcast on BBC2 Television on 23 October 1981. Also published in *The Listener* and in pamphlet form by the BBC, 1981.

 $Clock\ symbol\ {\Bbb O}\ Bulletin\ of\ Atomic\ Scientists,\ Chicago,\ and\ used\ with\ their\ kind\ permission.$

Printed in England by Skelton's Press Ltd Wellingborough, Northants Jacob Bronowski went in November 1945 as a member of the British Mission to the Japanese city of Nagasaki. In August that year President Truman, with the agreement of Winston Churchill, had ordered that the city and its population be destroyed by an atomic bomb. The bomb dropped on Nagasaki on 9 August killed 70,000 people. The bomb dropped on Hiroshima three days earlier killed 140,000. In the central square mile of each city nine out of every ten people died. Nine out of ten of those nine out of ten were not soldiers or politicians: they were children, mothers, grey-haired old men and women.

At the outbreak of war in 1939 such an attack by the Allies on non-combatant civilians would have been unthinkable. Civilised countries still clung to a morality which enjoined them to respect life and to limit suffering even of those in arms against them – a morality which taught a naval captain that having sunk an enemy ship he must rescue the survivors from the sea, and a prison-camp commander that he must treat with chivalry his prisoners of war. It was a morality which forbade at all times the use of indiscriminate violence against an unarmed population. The Allies had gone to war to defend these very values against the barbarous state of Nazi Germany.

But the world – and civilisation – had come a long way between 1939 and 1945. Hitler was dead. He had lost the battle. But the policies of terror which Hitler himself had pioneered had, it seemed, won the war.

Bronowski recalls that as he stood among the ruins of Nagasaki his imagination was dwarfed by the catastrophe. He was a man – we know – not often lost for words; but here he had none adequate. It was, he says, `a universal moment . . . civilisation face to face with its own consequences'.¹

The world had come a long way between 1939 and 1945. It has come far further between 1945 and 1981. There are today in readiness for military use not two but 50,000 nuclear weapons, with a combined explosive power equal to more than one million

Hiroshima bombs, or the equivalent of more than three tons of TNT for every individual on the earth. If these weapons should be used, then, as President Carter said in his farewell address to the American nation, `more destructive power than in all of the Second World War would be unleashed every second for the long afternoon it would take for all the missiles and bombs to fall . . . A Second World War every second – more people killed in the first few hours than in all the wars of history put together.' Carter went on: `It is now only a matter of time before madness, desperation, greed or miscalculation let loose this terrible force.'²

Bronowski made a television series, *The Ascent of Man*. Must what goes up come down? Looking at our progress over the last thirty years, it is hard to avoid the conclusion that mankind, having flown too near the sun, is already in a stall.

There are voices enough now raised in warning, the voices of statesmen who at other times have been attended to. Lord Mountbatten, speaking in Strasbourg a few weeks before he was assassinated: 'The world now stands on the brink of the final abyss . . .'³Lord Zuckerman in a lecture to the American Academy of Sciences: 'The world has without doubt become a more perilous place that it has ever been in human history The process of the nuclear race clearly has no logic ...¹⁴ Professor George Kennan, former US ambassador to Russia, speaking in Washington this year: 'We have gone on piling weapon upon weapon, missile upon missile ... like the victims of some sort of hypnotism, like men in a dream, like lemmings heading for the sea ...¹⁵ On the front cover of the Bulletin of the Atomic Scientists, the doomsday clock, set at ten minutes to midnight some years ago, was advanced by six minutes last January: four minutes to go.

I want to ask a simple question. Why? Why do we behave like lemmings? Why do we let it happen? In the words of Lord Mountbatten: 'How can we stand by and do nothing to prevent the destruction of our world?'

Mountbatten said in the same speech: `Do the frightening facts about the arms race, which show that we are rushing headlong towards a precipice, make any of those responsible for this disastrous course pull themselves together and reach for the brakes? The answer is "no" . . .' I want to ask how the answer can be `no'.

I leave it to others to explain our extraordinary plight in terms of military necessity, economic competition, or the politics of the Cold War. My concern is more primitive. I am concerned as a psychologist with the feelings, perceptions and motives of *individual* human beings. When a lemming runs, it is not pushed or pulled by outside forces, it runs to destruction on its own four feet. It is as individuals that we can and might apply the brakes, and as individuals that we can and do fail. Responsibility for `this disastrous course' begins right here.

Perhaps there is an obvious answer, which is that we are simply unaware. Is it possible that we either do not know or else discount the dangers of the arms race? That we think the bonfire which is being built around us will never catch light – indeed that the larger it grows the less dangerous it becomes?

When I was a child we had an old pet tortoise we called Ajax. One autumn Ajax, looking for a winter home, crawled unnoticed into the pile of wood and bracken my father was making for Guy Fawkes' Day. As days passed and more and more pieces of tinder were added to the pile, Ajax must have felt more and more secure; every day he was getting greater protection from the frost and rain. On 5 November bonfire and tortoise were reduced to ashes. Are there some of us who still believe that the piling up of weapon upon weapon *adds* to our security – that the dangers are nothing compared to the assurance they provide?

Yes, there are some of us. And it is hardly surprising that there are. For those in authority do little if anything to inform us of the dangers. We do not hear the British Prime Minister talking about the world 'standing on the brink of the abyss'. We do not hear the Defence Secretary talking about the nuclear arms race as being 'clearly without logic' . . . The Director General of the BBC protects television audiences from seeing the film *The War Game*, because he calculates, quite rightly, that people would find it alarming and distressing . . . Newspaper editors and Defence Correspondents have become apologists for official policy, instead of serving their traditional and honoured role as critics . . .And when we do get news of what's going on, it is couched in a language designed to enlist our admiration for the marvels of military technology and to quiet our fears and blunt our sensitivities . . . News-speak – Pentagon-speak – is employed by military spokesmen to distance us from the reality. It has become commonplace, as the Archbishop of Canterbury observed in a speech in Washington, to refer to the destruction of a city and its people as `demographic targetting'.⁶

And yet . . . and yet not everyone, not even the majority of the population is taken in. Opinion polls carried out in the past year show that, despite all the talk about the effectiveness of a deterrent strategy, nearly half the adult population expects nuclear war within their lifetime. Despite all the talk about civil defence, less than one in ten believes that they and their families would not be killed. And that of course is only the adult population; no one has vet carried out a national survey of our school-children, but parents and teachers know that children too, and perhaps children above all, are deeply troubled. A County Inspector of Schools writes in a letter to The Times: 'I have sat in on discussion lessons when children have brought up the question of the Bomb. Many have come to accept that they may not live out their lives in full . . . Some smile about it . . . Others are most painfully aware of what is involved.[?] Never in recent times, not since the plagues and famines of the Middle Ages, can so many people of this country have had such a pessimistic vision of the future.

But does this pessimism stir them into action? When questioned on behalf of the magazine *New Society*, 70% of the sample said they were worried about nuclear weapons – but nine out of ten of this 70% stated either that nothing could be done or else that they were unwilling to do anything. And even for the one in ten who said they might do something, the actions mentioned would seem to be totally incommensurate with the perceived dangers: they would go on a march, they would write a letter to the newspapers . . .⁸

It is as though we have become passive, fascinated spectators of the slowly unfolding nuclear Tragedy. I was taught at school that the essential quality of a Tragic Play is this: when the curtain rises you see a gun on the wall, and you know that in the last act the hero or heroine will take the gun from the wall and shoot themselves. It has to be so, the internal logic of the play allows no other ending . . . But now we are not the *audience* to this play. It is *we* who will get shot.

It is easy for those of us who are not historians to kid ourselves that nothing like this has ever happened before – and that

because it has never happened before, it cannot really be happening now. But it has happened before, if never on such a disastrous scale. There are in fact dreadful precedents in history: times when whole groups of human beings, men and women whose love of life was no less than our own, have gone almost without protest to destruction – like `the victims of hypnotism, like men in a dream'. I think of the long-suffering European Jews in the last war . . . of the way so many of them patiently took the trains to the extermination camps . . . of what happened in 1942 in the ravine near Kiev known as Babi Yar, where thousand upon thousand queued up for execution, mothers and fathers hand in hand with children, shuffling their way slowly forwards till they reached the front of the line and were gunned down. I think of the victims of the Stalinist purges in the Russia of the 1930s . . . of the way, week by week, people saw their comrades disappear into the torture chambers and the jails, they knew they would be next - and waited.

In her brave memoir of the purges, *Hope Against Hope*, Nadezhda Mandelstam, widow of the Russian poet Osip Mandelstam, describes how with disbelief she watched first her friends and finally her husband go the way of all the others. 'Later,' she writes, 'I often wondered whether it is right to scream when you are being beaten and trampled under foot . . . I decided it is better to scream. This pitiful sound . . . is a concentrated expression of the last vestige of human dignity . . . By his screams a man asserts his right to live, sends a message to the outside world demanding help and calling for resistance. If nothing else is left, one must scream. Silence is the real crime against humanity.'⁹

Why do we not scream? Why, when faced with the nuclear threat, do so many of us adopt a policy of quietism and collaboration? Why do we choose appeasement rather than protest? `Daddy, what are *YOU* doing to stop the next war?'

That man is many different people – and the answer appropriate to one person will not necessarily be appropriate to another. But he is *me*, and he is *you*. And in trying to explain why it is that so many people are doing nothing, I will not take the easy path of suggesting explanations of a kind which always seem to fit *other* people so much better than ourselves – explanations in terms, say, of moral shallowness, unthinking obedience to authority, or plain stupidity. No doubt the world does have its fair share of mindless sheep . . . and no doubt they are doing nothing. But they are not alone. And I want here to bring the discussion nearer home: to focus on things I have felt in myself, which I know among my friends, and which I believe you too will recognise. In all of us there are powerful inhibitory forces working, which block or deflect us from effective protest. I shall speak first of Incomprehension and Denial, second of Social Embarrassment, third of Helplessness, and fourth, perhaps most sinister, of what I would call the Strangelove Syndrome – latent feelings of admiration, almost of appetite, for the Bomb and the final solution it provides.

I start with Incomprehension, where I suspect many of us both begin and end. Nuclear weapons are *not comprehensible:* neither you nor I have any hope of understanding just what they are and what they do. In saying that, I mean to belittle none of us; it is almost a compliment. For I do not see how any human being whose intelligence and sensitivities have been shaped by traditional facts and values could possibly understand the nature of these unnatural, other-worldly weapons. So-called `facts' about the Bomb are not facts in the ordinary sense at all: they are not facts we can relate to, get our minds round. Mere numbers, words.

Let me repeat a fact. The Bomb which was dropped on Hiroshima killed 140,000 people. The uranium it contained weighed about twenty-five pounds; it would have packed into a cricket-ball. 140,000 people is about equal to the total population of Cambridge.

I, for one, cannot grasp that kind of fact. I cannot make the connection between a cricket-ball and the deaths of everyone who lives in Cambridge. I cannot picture the 140,000 bodies, let alone feel sympathy for each individual as they died. And when someone tells me – and I tell you – that a war between the United States and Russia will now mean a Second World War every second, and that the equivalent of 5000 Hiroshima bombs will land in England, my imagination draws a blank. It is not just that I cannot *bear* the thought: I cannot even *have* the thought of 5000 Hiroshima bombs ... 5000 times 140,000 equals 700 million. Seven hundred million dead out of a population of fifty million. Something wrong somewhere. Everyone getting killed ten or twenty times over ...

We close off from such nonsense. Try as we may, we shall not get the message. Our minds are minds finely tuned by culture and by evolution to respond to the frequencies of the real world. And when a message comes through on an alien wavelength it sets up no vibrations. The so-called facts pass clean through us and away, like radio emissions from the stars.

There are strange and interesting precedents in history. When Captain Cook's great ship, *Endeavour*, sailed two hundred years ago into Botany Bay, the Australian aborigines who were fishing off the shore showed *no* reaction. 'The ship' – I quote from Joseph Banks' journal of the voyage – 'The ship passed within a quarter of a mile of them and yet they scarce lifted their eyes from their employment . . . expressed neither surprise nor concern.' In the experience of these people nothing so monstrous had ever been seen upon the surface of the waters – and now it seems they could not see it when it came.

But theirs was a selective blindness. Cook put down his rowing boats: *now* the natives were alarmed, now they looked to their defences. Blind to the greater but incomprehensible terror, they reacted quick enough to a threat which came within their ken.

We too react, selectively, to man-sized threats. It is not giant dangers or giant tragedies, but the plight of single human beings which troubles us. In a week when 3000 people are killed in an earthquake in Iran, a lone boy falls down a well-shaft in Italy – and the whole world grieves. Six million Jews are put to death in Hitler's Germany, and it is Anne Frank trembling in her garret that remains stamped into our memory.

The story of Hiroshima too can be told as the story of individual human beings. The tale, for example, of a little girl: `When my grandmother came back, I asked "Where's Mother?" "I brought her on my back," she answered. I was very happy and shouted "Mama!" But when I looked closely, I saw she was only carrying a rucksack. I was disappointed . . . Then my grand-mother put the rucksack down and took out of it some bones . . .I miss my mother very much.¹⁰

Keiko Sasaki and her mother. But multiply the tragedy a hundred thousand times, and it no longer has any meaning to us. We are each too human to understand the killing power of nuclear weapons, each too close to the good earth to understand how a metal cricket-ball could explode with the force of ten thousand tons of TNT. Each of us aboriginally blind.

We must live with this blindness. It will not change. I do not expect my dog to learn to read *The Times*, and I do not expect myself or any other human being to learn the meaning of nuclear war, or to speak rationally about megadeaths or megatonnes of TNT. The most we can ask for is an open recognition that neither we, when we protest against nuclear armaments, nor the generals and the politicians when they defend them, know what we are talking about.

And yet we do know *something* about what we are talking about. We know, if nothing else, that we are talking about some-thing which would if it happened be very, very bad. And in face of this knowledge we may find ourselves suffering from another kind of blindness, a blindness equally human but in many ways less innocent than the blindness which comes from lack of understanding. I mean the deliberate blindness which comes over us when we see something and then reject it: when we recognise the truth, or at least part of the truth, and – finding it perhaps too painful or inconvenient – we censor its access to our conscious mind. I mean what psychologists have called Denial. Call it wishful thinking if you like – or call it optimism, or the good old British habit of not taking things too seriously. It comes to the same thing.

There are of course obvious and good excuses for denial. It not only makes for a comfortable life; it makes, some would argue, for the only kind of worthwhile life there is. Certainly we cannot carry on as normal under the shadow of the Bomb. The prospect of nuclear war would, *if we allowed it to*, be totally distracting and totally depressing. It would, *if we allowed it to*, take away the meaning from the rest of our life and finish us off as creative and productive people. It is a prospect which flatly contradicts every other prospect we hold dear.

Human beings strive for consistency in their affairs. They cannot – at least they cannot for long – hold incompatible beliefs. Either, it seems, we look to the right of the picture or else the left. Either we believe the world is threatened by extinction, or else we don't. How can we at one and the same time declare ourselves for human rights, devote ourselves to our children, labour to produce lasting works of art and scholarship... and take

seriously a vision of the future in which there are no children, in which our books will never be read, and our paintings, our houses, our flower-gardens will end as dust? One or the other vision has to go.

Let us not be deceived. The dangers will not be diminished because we close our eyes to them. If we cannot carry on as normal under the shadow of the Bomb, then for the time being we have a duty *not* to carry on as normal. We live at a time when to deny the prospect of death may well cost us our lives.

Yet try telling that to other people. Try telling it in Gath and publishing it in the streets of Askelon . . . for the attitude of the daughters of the Philistines is little changed.

To speak the truth among people who do not want to hear it is considered almost an aggressive act - an invasion of privacy, a trespass into someone else's space. Not nice, not done ...

A year ago in Pennsylvania, USA, eight nuclear protesters who called themselves the Plowshares 8 (including among them two priests, a nun, a lawyer and a professor of history) broke into a weapons factory and damaged the nose cone of a Mark 12 missile with a hammer.¹¹ They were accused at their trial of burglary, criminal conspiracy and trespass. Each faced a maxi-mum sentence of twenty-five years. 'This time,' the prosecution said, 'you've gone too far.' They *had* gone too far, they *had* trespassed: but their trespass was not so much against the property of the General Electric Company as against the minds of the American public. By attacking the missile with a hammer they were forcing other people to think, however briefly, about a subject regarded as indecent – the question of just what such a missile might be for.

Their behaviour was Embarrassing. Not nice. Niceness can be a virtue. Most of us are nice people – we will not put other people out of countenance if we can help it, we will not deliberately rob them of comforting illusions. But niceness can be a dreadful vice as well. Here is what Heinrich Himmler had to say in a speech in 1943: `In public we will never talk about it ... It is with us, thank God, an inborn gift of tactfulness, that we have never conversed about this matter, never spoken about it ... I am referring to the extermination of the Jewish people.'¹² Indeed Himmler did not refer, in public, to the `extermination of the Jewish people': words like `special treatment' were made to serve instead.

The Nazis however were not alone in their anxiety to avoid plain speaking. The victims did so too. We find certain elders of the Jewish community referring to the trains which took their brothers and sisters to the killing centres as `favoured transport'; even in Auschwitz a crematorium would be called a `bakery'.

And now? Who can avoid the parallel with our own situation, and the tricks of language which good taste and good form impose upon discussions – at least official discussions – of the Bomb? For `special treatment' read `demographic targetting', for `bakery' read `domestic fall-out shelter'.

But it would be wrong to pretend that it is only our own decent reticence which holds us from breaking the taboos. We will – and we are generally quite well aware of it – be made to pay a public price for `going too far'. When other people do not want to know, they *do not want to know* – and they do not take kindly to the self-appointed prophet who sees it as his duty to inform them.

In the old days it is said that kings would kill the messenger who brought bad news. Today, in the United States, the messenger may, as almost happened to the Plowshares 8, be silenced by the law; in Russia he may get locked up in a mental hospital. But there are other and subtler ways of restraining those who might otherwise speak out. And in our own country none is better tried or more effective than the technique of the social pillory. Anyone who forces an unwanted confrontation on the subject of the Bomb is liable to be punished for his impudence by being mocked, snubbed, made the butt of sneers and ridicule.

We all know the standard vocabulary of put-downs. 'Idealist', 'pacificist', 'moralist', 'holier-than-thou'. They have been with us a long time. The same schoolboy insults which Winston Churchill used to disparage those who objected to the idea of using anthrax bombs in the last war – 'psalm-singing defeatists' Churchill called them¹³– have now been dusted off by the brave editors of the *Daily This* or *Morning That* for use against our nuclear disarmers. And in settings where such cliches might be seen for what they are, cleverer men can be counted on to produce cleverer but equally dismissive sneers. Alistair Cooke, for example, writing about Bertrand Russell in the *Manchester Guardian* some years ago: 'A midget suspended against a huge Cinemascope screen ... a charming puppet straining for a miracle and in the act wobbling the tiny wire frame of his body ... "It is", he said in his high nasal voice, "the most important question men have ever had to decide in the whole history of the human race." ¹¹⁴ A clever insult? Yes, a clever insult whereby a man who has shown too much emotion is defined as a puppet, a doll without emotions.

Lord Russell, peer of the realm and the greatest philosopher in England, was surely able to weather this kind of abuse. But few of us have Russell's social or intellectual confidence. Hardly surprising if we sometimes persuade ourselves that, whatever we think privately, it is just not our place to make a public stand against the Bomb. Lords, philosophers, actresses, priests ... they do that kind of thing. They can make exhibitions of them-selves. But for the rest of us? Well, on the whole, all things considered, we like to keep calm. It is not our way to scream, or sing psalms, or call things the most important question in the whole history of the human race – even when the water is lapping round our feet. First one to panic is a wet.

But there is another and in some ways more telling reason why even the most courageous of us may be reluctant to speak out. Not so much that we mind the accusations of bad form, or that we are embarrassed to find ourselves mentioning an unmentionable problem, as that we are embarrassed to find ourselves mentioning it and yet *doing nothing more*. If we are going to alarm people we had better alarm them to some purpose; we had better offer a solution to the problem, and what is more we had better show by our example that we ourselves are actively pursuing it. We can-not simply knock on our neighbour's door and say, 'The world is standing on the brink of the final abyss . . . I thought you'd like to know.' If we ourselves do not have a solution, or if we are not prepared to dedicate our lives to finding one, then it is not only other people but our own consciences which will tell us to shut up. There is no honour whatever in being *a helpless* prophet – all dressed up with protest and nowhere to go.

Helplessness. I mean the dreadful feeling many of us know that there is in fact nothing we can do, that we are indeed midgets dwarfed by mighty forces over which individual human beings have no control.

I find no objective reasons for this helplessness. There is nothing in the political, economic or strategic situation which dictates that the world must continue on its present course. When people talk about the Russian threat, or about the power of the military-industrial complex, or about the unstoppable march of weapons technology, they are providing covers, not explanations, for why the race goes on. I have yet to hear of one good reason for not halting it tomorrow.

One good reason – except, that is, for the sense of helplessness itself. For helplessness can be a self-confirming process. It is a malady of the human spirit which once it has got going needs no good reasons to continue. When human beings *believe* them-selves helpless, helpless they become.

Psychologists recognise two kinds of helplessness. *Learned* helplessness may develop when, for example, a person has repeatedly found that previous efforts to take control of his own life have genuinely come to nothing; he loses all faith in his own effectiveness and carries over to the present a picture of himself as someone unable any longer to influence events.

Does not learning play at least some part in the helplessness we now feel when confronted by nuclear weapons? We live in a society where people have in fact increasingly found themselves unable by their own efforts to take control over their lives. An unemployed labourer helpless to get himself a job, a homeless couple helpless to find themselves a lodging, a businessman help-less against market forces . . . Are such people likely to have faith in their power to act against the Bomb?

But there is also a different sort of helplessness: *a superstitious* helplessness where a person's belief in his own impotence has no basis in experience, but results instead from nothing more than a superstitious premonition that his life, and perhaps the life of the whole world, is set on an unalterable course – unalterable, that is, by human agency. The belief, for example, that his own fate has been sealed by a specific curse; or that, the world over, God and the Devil are working out their higher purposes without care for individual human beings. I say 'no more' than such a superstitious premonition – but superstitious helplessness can take the fight out of a man quite as effectively as any more reasonable fear. Cordelia Edvardson, one of the delegates to this year's reunion of Holocaust survivors, described how some of the Jews in Germany fell victim to just such a paralysing superstition: 'Of course,' she says, 'we wanted to survive, but we were not at all

sure we had the right to survive.¹⁵ And when a person no longer believes he has the right to survive, his helplessness itself is killing. I quote from a study of what has been called `voodoo death': `A Brazilian Indian condemned and sentenced by a medicine man dies within hours . . . In Australia a witch-doctor points a bone at a man. Believing that nothing can save him, the man rapidly sinks in spirits and prepares to die.'¹⁶

Earlier I cited the statistics from *a New Society* poll: nine out often people, worried by nuclear weapons, declared that there is nothing they can do . . . Nothing but sink in spirits and prepare to die? We behave at times as though we have been hexed by the Bomb, put under a spell.

A superstitious belief in the Bomb as an engine of fate over which human beings have no control has obvious origins in the human imagination. The Bomb is patently a superhuman weapon: mind-blowingly destructive . . . and, if we so see it, mind-blowingly magnificent. Small wonder if people's fear is mixed with awe – if they become hypnotised by the Bomb's dread beauty and its fascinating power.

The Bomb's first makers, the physicists who put it together in1945, themselves treated their creation with almost mystical reverence. When Robert Oppenheimer witnessed the earliest test explosion in the New Mexico desert at Alamogordo, the words which came to him were from the holy book, the Bhagavad Gita:

If the radiance of a thousand suns Were to burst at once into the sky That would be like the splendour of the Mighty One I am become Death, The shatterer of worlds.

The test was given the code-name *Trinity*. And in the official report of the explosion the language was full of specifically Christian imagery. Here is part of the report which was rushed to President Truman, who was meeting with Churchill and Stalin at Potsdam:

`It lighted every peak, crevasse and ridge of the nearby mountain range with a clarity and beauty that cannot be described but must be seen to be imagined. It was the beauty the great poets dream about but describe most poorly and inadequately . . . Then came the strong, sustained, awesome roar which warned of doomsday and made us feel that we puny things were blasphemous to dare tamper with the forces heretofore reserved to the Almighty...¹⁷

Heretofore reserved to the Almighty – and hereinafter re-served to Truman, Churchill and Stalin? To Ronald Reagan, Margaret Thatcher and Leonid Brezhnev? No. We may be for-given if we see our political leaders as servants, not masters to this force, and the Bomb itself as a wrathful giant which, having been woken from its slumber, will take vengeance on man's Jack-like arrogance.

It is easy to understand how people may move from this kind of superstitious image to a truly apocalyptic vision of a nuclear war. I mean now `apocalyptic' in the old-fashioned sense: a Day of Judgement. A day when the Bomb will come to judge both the quick and the dead. A day which will be seen by some as a day of renewal, a cleansing holocaust – when our decadent civilisation must answer for its sins, its failure to understand or to make proper use of the gifts of science and technology, its failure in the Third World, its failure to establish a firm moral order.

For evidence that there are in fact people in this country who see the holocaust as a period of renewal, read the magazine of the nuclear shelter industry, *Protect and Survive Monthly*. The frontier spirit is, we'll find, still alive and well . . . and living `somewhere in England' in ten years' time, when the survivors of the next World War will be leading heroically self-sufficient lives off the thin of the land, smiling and whistling and shooting their way out of all difficulties. The guns are `primarily' for use against packs of marauding animals, though `sadly' they may also be needed against our fellow human beings. Not that the next war won't be awful. It can and will be *wonderfully* awful . . . like Dunkirk, like the London Blitz – provided those whom they call`defeatists, "moles", trendy clerics, cranks, fools and traitors' don't get their way and stop it happening.¹⁸

Or read – no, you will not be allowed to, because it's a Confidential document – the Contingency War Plan of one of our Regional Health Authorities:

`In its way a nation is like a forest and the aim of war-planning is to secure survival of the great trees . . . If all the great trees and

much of the brushwood are felled, a forest may not regenerate for centuries. If a sufficient number of the great trees is left, however, if felling is to some extent selective and controlled, recovery is swift . . . There will remain brushwood enough, if 30 million survivors may be so described. The planning policy is clearly elitist ... 19

The author of this official document was not, I think, directly quoting Nietzsche, the philosoper who inspired the Nazis. But he might have been. 'Examine' – Nietzsche wrote – 'Examine the lives of the best and most fruitful men and peoples, and ask your-selves whether a tree, if it is to grow proudly into the sky, can do without bad weather and storms \dots ²⁰

Apocalyptic fantasies have always lurked beneath the surface of men's subconscious minds. They have emerged again and again in history at times of trouble, uncertainty, moral insecurity. In the Middle Ages the image of the Day of Judgement would have been familiar to us, one of the few pictures we knew, painted up above the transpet on the walls of the local church. We would have heard the words of St John's *Revelation* thundered from the pulpit. I read them now as a description of a fantasy which could be the reality of nuclear war:

I looked, and behold a pale horse: and his name that sat on him was Death, and Hell followed with him . . . and, lo, there was a great earthquake; and the sun became black as sackcloth of hair, and the moon became as blood; And the stars of heaven fell unto the earth . . . And the heaven departed as a scroll when it is rolled together; and every mountain and island were moved out of their place. And the kings of the earth, and the great men, and the rich men, and the chief captains, and the mighty men, and every bondman, and every free man, hid themselves in the dens and in the rocks of the mountains; And said to the mountains and rocks, Fall on us, and hide us from the face of him that sitteth on the throne, and from the wrath of the Lamb.

Fall on us – that strange imperative. In this state of mind people may come to welcome the very thing they fear, they may feel lured to the imminent catastrophe – like Trilby to her Svengali, like rabbits mesmerised by the twisting snake. Such is the Strangelove Syndrome. An attachment to the engines of

destruction, an attachment even to the blissful state of being destroyed.

For people do not really accept the facts of their own deaths. Like a suicide who leaves a note, `I picture you reading this note when I am gone', people picture themselves standing above the chaos in which they themselves have died – and may experience a sickening excitement at the images of destruction and decay.

`Do it beautifully,' says Hedda Gabler to Lovborg, as she hands him the gun. Oh yes, we'll do it beautifully. What more beautiful way to do it than in the way that poets dream about, but describe most poorly and inadequately? But the gun goes off by accident, and Lovborg dies miserably, shot not through the heart but through the balls. The Bomb is not beautiful. We must call down the curtain on this Tragic Play, scream it off the stage.

Silence, said Nadezhda Mandelstam, is the real crime. In Russian her name *`nadezhda'* means *'hope'*. The hope lies in hope. Just as despair can be a self-fulfilling prophecy, so can its opposite. Hope, too, will create its own object – by giving us the strength of mind and voice to tackle our embarrassment, our helplessness, our own dark images of death, and come through toa world not merely of our making but of our choosing.

When Mountbatten asks `Do any of those responsible for this disastrous course pull themselves together and reach for the brakes?', the answer must be `Watch me!' And the answer `No' can be reserved for a different question, the question Jacob Bronowski himself asked at the end of his essay, *Science and Human Values:* `Has science fastened upon our society a monstrous gift of destruction which we can neither undo nor master, and which like a clockwork automation is set to break our necks?' No. The Bomb is not an uncontrollable automaton, and we are not uncontrolling people.

Our control lies – as it always has done *whenever it's been tried* – in the force of public argument and public anger. It was public opinion in this country which forced the ending of the slave trade

- opinion marshalled then as it can be now by pamphlets, speeches and meetings in every village hall. It was fear of the public's outcry which prevented President Nixon from using an atom bomb in Vietnam, and it was the protests of the American people against that cruel and pointless war which eventually secured the American withdrawal. And now in Poland it is the people's loud support for free trades unions which is forcing changes on the reluctant communist machine.

We forget sometimes our own power. In this country every penny spent on armaments is money *we* subscribe, every acre of grass behind every barbed-wire fence round every bomber base is an acre of *our* land, and every decision taken by every Minister of State is a decision made on our behalf by a representative elected to *our* service. If those we entrust to manage our affairs adopt strange policies; if they turn out, in office, to be double agents – one hand to pat our babies, the other raised in salute to the Bomb – then we have the right and the duty to dismiss them as unfit.

What happens when an irresistible force meets *a movable* object? Why, it moves. But it will not happen quietly. Nadezhda's hope was loud and strident. Ours must be too.

Dylan Thomas spoke these words to his ageing father:

Do not go gentle into that good night, Rage, rage, against the dying of the light. Notes

- 1 J. Bronowski, Science and Human Values (Harper and Row, 1965).
- 2 Guardian, 15 January 1981.
- 3 Earl Mountbatten, Strasbourg, 1979.
- 4 Lord Zuckerman, Science Advisers, Scientific Advisers & Nuclear Weapons (Menard Press, 1980).
- 5 Guardian, 25 May 1981.
- 6 Financial Times, 29 April 1981.
- 7 The Times, letter from Philip Payne, 22 May 1981.
- 8 New Society, 25 September 1980.
- 9 Nadezhda Mandelstam, *Hope Against Hope* (Collins and Harvill Press, 1971).
- 10 Children of Hiroshima (Taylor and Francis, 1980).
- 11 New York Times, 28 March 1981.
- 12 Quoted in Raul Hilberg, *The Destruction of the European Jews* (W. H. Allen, 1961).
- 13 The Listener, 4 June 1981.
- 14 Manchester Guardian, 1955, quoted in E. P. Thompson, Out of Apathy (Stevens and Sons, 1960).
- 15 Guardian, 20 June 1981.
- 16 Walter Cannon, quoted in M. Seligman, *Helplessness (W.* H. Free-man & Co., 1975).
- 17 Brigadier Thomas Farrell, quoted in R. J. Lifton, *The Broken Connection* (Simon and Schuster, 1980).
- 18 Protect and Survive Monthly, 1981.
- 19 North East Thames Regional Health Authority Contingency War Plan.
- 20 R. J. Hollingdale, A Nietzsche Reader (Penguin, 1977).