III

THE ABOLITION OF MAN

It came burning hot into my mind, whatever he said and however he flattered, when he got me home to his house, he would sell me for a slave.

Bunyan

'MAN's conquest of Nature' is an expression often used to describe the progress of applied science. 'Man has Nature whacked' said someone to a friend of mine not long ago. In their context the words had a certain tragic beauty, for the speaker was dying of tuberculosis. 'No matter,' he said, 'I know I'm one of the casualties. Of course there are casualties on the winning as well as on the losing side. But that doesn't alter the fact that it is winning.' I have chosen this story as my point of departure in order to make it clear that I do not wish to disparage all that is really beneficial in the process described as 'Man's conquest,' much less all the real devotion and selfsacrifice that has gone to make it possible. But having done so I must proceed to analyse this conception a little more closely. In what sense is Man the possessor of increasing power over Nature?

Let us consider three typical examples: the aeroplane, the wireless, and the contraceptive. In a civilized community, in peace-time, anyone who can pay for them may use these things. But it cannot strictly be said that when he does so he is exercising his own proper or individual power over Nature. If I pay you to carry me, I am not therefore myself a strong man. Any or all of the three things I have mentioned can be withheld from some men by other men-by those who sell, or those who allow the sale, or those who own the sources of production, or those who make the goods. What we call Man's power is, in reality, a power possessed by some men which they may, or may not, allow other men to profit by. Again, as regards the powers manifested in the aeroplane or the wireless, Man is as much the patient or subject as the possessor, since he is the target both for bombs and for propaganda. And as regards contraceptives, there is a paradoxical, negative sense in which all possible future generations are the patients or subjects of a power wielded by those already alive. By contraception simply, they are denied existence; by contraception used as a means of selective breeding, they are, without their concurring voice, made to be what one generation, for its own reasons, may choose to prefer. From this point of view, what we call Man's power over Nature turns out to be a power exercised by some men over other men with Nature as its instrument.

It is, of course, a commonplace to complain that men have hitherto used badly, and against their fellows, the powers that science has given them. But that is not the point I am trying to make. I am not speaking of particular corruptions and abuses which an increase of moral virtue would cure: I am considering what the thing called 'Man's power over Nature' must always and essentially be. No doubt, the picture could be modified by public ownership of raw materials and factories and public control of scientific research. But unless we have a world state this will still mean the power of one nation over others. And even within the world state or the nation it will mean (in principle) the power of majorities over minorities, and (in the concrete) of a government over the people. And all long-term exercises of power, especially in breeding, must mean the power of earlier generations over later ones.

The latter point is not always sufficiently emphasized, because those who write on social matters have not yet learned to imitate the physicists by always including Time among the dimensions. In order to understand fully what Man's power over Nature, and therefore the power of some men over other men, really means, we must picture the race extended in time from the date of its emergence to that of its extinction. Each generation exercises power over its successors: and each, in so far as it modifies the environment bequeathed to it and rebels against tradition, resists and limits the power of its predecessors. This modifies the picture which is sometimes painted of a progressive emancipation from tradition and a progressive control of natural processes resulting in a continual increase of human power. In reality, of course, if any one age really attains, by eugenics and scientific education, the power to make its descendants what it pleases, all men who live after it are the patients of that power. They are weaker, not stronger: for though we may have put wonderful machines in their hands we have pre-ordained how they are to use them. And if, as is almost certain, the age which had thus attained maximum power over posterity were also the age most emancipated from tradition, it would be engaged in reducing the power of its predecessors almost as drastically as that of its successors. And we must also remember that, quite apart from this, the later a generation comes-the nearer it lives to that date at which the species becomes extinct-the less power it will have in the forward direction, because its subjects will be so few. There is therefore no question of a power vested in the race as a whole steadily growing as long as the race survives. The last men, far from being the heirs of power,

will be of all men most subject to the dead hand of the great planners and conditioners and will themselves exercise least power upon the future. The real picture is that of one dominant age-let us suppose the hundredth century A.D.which resists all previous ages most successfully and dominates all subsequent ages most irresistibly, and thus is the real master of the human species. But even within this master generation (itself an infinitesimal minority of the species) the power will be exercised by a minority smaller still. Man's conquest of Nature, if the dreams of some scientific planners are realized, means the rule of a few hundreds of men over billions upon billions of men. There neither is nor can be any simple increase of power on Man's side. Each new power won by man is a power over man as well. Each advance leaves him weaker as well as stronger. In every victory, besides being the general who triumphs, he is also the prisoner who follows the triumphal car.

I am not yet considering whether the total result of such ambivalent victories is a good thing or a bad. I am only making clear what Man's conquest of Nature really means and especially that final stage in the conquest, which, perhaps, is not far off. The final stage is come when Man by eugenics, by pre-natal conditioning, and by an education and propaganda based on a perfect applied psychology, has obtained full control over himself. *Human* nature will be the last part of Nature to surrender to Man. The battle will then be won. We shall have 'taken the thread of life out of the hand of Clotho' and be henceforth free to make our species whatever we wish it to be. The battle will indeed be won. But who, precisely, will have won it?

For the power of Man to make himself what he pleases means, as we have seen, the power of some men to make other men what they please. In all ages, no doubt, nurture and instruction have, in some sense, attempted to exercise this power. But the situation to which we must look forward will be novel in two respects. In the first place, the power will be enormously increased. Hitherto the plans of educationalists have achieved very little of what they attempted and indeed, when we read them-how Plato would have every infant 'a bastard nursed in a bureau,' and Elyot would have the boy see no men before the age of seven and, after that, no women,¹ and how Locke wants children to have leaky shoes and no turn for poetry²-we may well thank the beneficent obstinacy of real mothers, real nurses, and (above all) real children for preserving the human race in such sanity as it still possesses. But the man-moulders of the new age will be armed with the powers of an omnicompetent state and an irresistible scientific technique: we shall get at last a race of conditioners who really can cut out all posterity in what shape they please. The second difference is even more important. In the older systems both the kind of man the teachers wished to produce and their motives for producing him were prescribed by the Tao-a norm to which the teachers themselves were subject and from which they claimed no liberty to depart. They did not cut men to some pattern they had chosen. They handed on what they had received: they initiated the young neophyte into the mystery of humanity which over-arched him and them alike. It was but old birds teaching young birds to

¹ The Boke Named the Governour, 1. iv: 'Al men except physitions only shulde be excluded and kepte out of the norisery.' 1. vi: 'After that a childe is come to seuen yeres of age . . . the most sure counsaile is to withdrawe him from all company of women.'

² Some Thoughts concerning Éducation, § 7: 'I will also advise his Feet to be wash'd every Day in cold Water, and to have his Shoes so thin that they might leak and let in Water, whenever he comes near it.' § 174: 'If he have a poetick vein, 'tis to me the strangest thing in the World that the Father should desire or suffer it to be cherished or improved. Methinks the Parents should labour to have it stifled and suppressed as much as may be.' Yet Locke is one of our most sensible writers on education. fly. This will be changed. Values are now mere natural phenomena. Judgements of value are to be produced in the pupil as part of the conditioning. Whatever *Tao* there is will be the product, not the motive, of education. The conditioners have been emancipated from all that. It is one more part of Nature which they have conquered. The ultimate springs of human action are no longer, for them, something given. They have surrendered—like electricity: it is the function of the Conditioners to control, not to obey them. They know how to *produce* conscience and decide what kind of conscience they will produce. They themselves are outside, above. For we are assuming the last stage of Man's struggle with Nature. The final victory has been won. Human nature has been conquered—and, of course, has conquered, in whatever sense those words may now bear.

The Conditioners, then, are to choose what kind of artificial Tao they will, for their own good reasons, produce in the Human race. They are the motivators, the creators of motives. But how are they going to be motivated themselves? For a time, perhaps, by survivals, within their own minds, of the old 'natural' $\hat{T}ao$. Thus at first they may look upon themselves as servants and guardians of humanity and conceive that they have a 'duty' to do it 'good.' But it is only by confusion that they can remain in this state. They recognize the concept of duty as the result of certain processes which they can now control. Their victory has consisted precisely in emerging from the state in which they were acted upon by those processes to the state in which they use them as tools. One of the things they now have to decide is whether they will, or will not, so condition the rest of us that we can go on having the old idea of duty and the old reactions to it. How can duty help them to decide that? Duty itself is up for trial: it cannot also be the judge. And 'good' fares no better. They know quite well how to produce a dozen different conceptions of good in us. The question is which, if any, they should produce. No conception of good can help them to decide. It is absurd to fix on one of the things they are comparing and make it the standard of comparison.

To some it will appear that I am inventing a factitious difficulty for my Conditioners. Other, more simple-minded, critics may ask 'Why should you suppose they will be such bad men?' But I am not supposing them to be bad men. They are, rather, not men (in the old sense) at all. They are, if you like, men who have sacrificed their own share in traditional humanity in order to devote themselves to the task of deciding what 'Humanity' shall henceforth mean. 'Good' and 'bad,' applied to them, are words without content: for it is from them that the content of these words is henceforward to be derived. Nor is their difficulty factitious. We might suppose that it was possible to say 'After all, most of us want more or less the same things-food and drink and sexual intercourse, amusement, art, science, and the longest possible life for individuals and for the species. Let them simply say, This is what we happen to like, and go on to condition men in the way most likely to produce it. Where's the trouble?' But this will not answer. In the first place, it is false that we all really like the same things. But even if we did, what motive is to impel the Conditioners to scorn delights and live laborious days in order that we, and posterity, may have what we like? Their duty? But that is only the Tao, which they may decide to impose on us, but which cannot be valid for them. If they accept it, then they are no longer the makers of conscience but still its subjects, and their final conquest over Nature has not really happened. The preservation of the species? But why should the species be preserved? One of the questions before them is whether this feeling for posterity (they know well how it is produced) shall be continued or not. However far they go back, or down, they can find no ground to stand on. Every motive they try to act on becomes at once a *petitio*. It is not that they are bad men. They are not men at all. Stepping outside the *Tao*, they have stepped into the void. Nor are their subjects necessarily unhappy men. They are not men at all: they are artefacts. Man's final conquest has proved to be the abolition of Man.

Yet the Conditioners will act. When I said just now that all motives fail them, I should have said all motives except one. All motives that claim any validity other than that of their felt emotional weight at a given moment have failed them. Everything except the sic volo, sic jubeo has been explained away. But what never claimed objectivity cannot be destroyed by subjectivism. The impulse to scratch when I itch or to pull to pieces when I am inquisitive is immune from the solvent which is fatal to my justice, or honour, or care for posterity. When all that says 'it is good' has been debunked, what says 'I want' remains. It cannot be exploded or 'seen through' because it never had any pretensions. The Conditioners, therefore, must come to be motivated simply by their own pleasure. I am not here speaking of the corrupting influence of power nor expressing the fear that under it our Conditioners will degenerate. The very words corrupt and degenerate imply a doctrine of value and are therefore meaningless in this context. My point is that those who stand outside all judgements of value cannot have any ground for preferring one of their own impulses to another except the emotional strength of that impulse. We may legitimately hope that among the impulses which arise in minds thus emptied of all 'rational' or 'spiritual' motives, some will be benevolent. I am very doubtful myself whether the benevolent impulses, stripped of that preference and encouragement which the Tao teaches us to give them and left to their merely natural strength and frequency as psychological events, will have much influence. I am very doubtful whether history shows us one example of a man who, having stepped outside traditional morality and attained power, has used that power benevolently. I am inclined to think that the Conditioners will hate the conditioned. Though regarding as an illusion the artificial conscience which they produce in us their subjects, they will yet perceive that it creates in us an illusion of meaning for our lives which compares favourably with the futility of their own: and they will envy us as eunuchs envy men. But I do not insist on this, for it is mere conjecture. What is not conjecture is that our hope even of a 'conditioned' happiness rests on what is ordinarily called 'chance'-the chance that benevolent impulses may on the whole predominate in our Conditioners. For without the judgement 'Benevolence is good'-that is, without re-entering the Tao-they can have no ground for promoting or stabilizing their benevolent impulses rather than any others. By the logic of their position they must just take their impulses as they come, from chance. And Chance here means Nature. It is from heredity, digestion, the weather, and the association of ideas, that the motives of the Conditioners will spring. Their extreme rationalism, by 'seeing through' all 'rational' motives, leaves them creatures of wholly irrational behaviour. If you will not obey the Tao, or else commit suicide, obedience to impulse (and therefore, in the long run, to mere 'nature') is the only course left open.

At the moment, then, of Man's victory over Nature, we find the whole human race subjected to some individual men, and those individuals subjected to that in themselves which is purely 'natural'—to their irrational impulses. Nature, untrammelled by values, rules the Conditioners and, through

them, all humanity. Man's conquest of Nature turns out, in the moment of its consummation, to be Nature's conquest of Man. Every victory we seemed to win has led us, step by step, to this conclusion. All Nature's apparent reverses have been but tactical withdrawals. We thought we were beating her back when she was luring us on. What looked to us like hands held up in surrender was really the opening of arms to enfold us for ever. If the fully planned and conditioned world (with its Tao a mere product of the planning) comes into existence, Nature will be troubled no more by the restive species that rose in revolt against her so many millions of years ago, will be vexed no longer by its chatter of truth and mercy and beauty and happiness. Ferum victorem cepit: and if the eugenics are efficient enough there will be no second revolt, but all snug beneath the Conditioners, and the Conditioners beneath her, till the moon falls or the sun grows cold.

My point may be clearer to some if it is put in a different form. Nature is a word of varying meanings, which can best be understood if we consider its various opposites. The Natural is the opposite of the Artificial, the Civil, the Human, the Spiritual, and the Supernatural. The Artificial does not now concern us. If we take the rest of the list of opposites, however, I think we can get a rough idea of what men have meant by Nature and what it is they oppose to her. Nature seems to be the spatial and temporal, as distinct from what is less fully so or not so at all. She seems to be the world of quantity, as against the world of quality: of objects as against consciousness: of the bound, as against the wholly or partially autonomous: of that which knows no values as against that which both has and perceives value: of efficient causes (or, in some modern systems, of no causality at all) as against final causes. Now I take it that when we understand a thing analytically and then dominate and use it for our own convenience we reduce it to the level of 'Nature' in the sense that we suspend our judgements of value about it, ignore its final cause (if any), and treat it in terms of quantity. This repression of elements in what would otherwise be our total reaction to it is sometimes very noticeable and even painful: something has to be overcome before we can cut up a dead man or a live animal in a dissecting room. These objects resist the movement of the mind whereby we thrust them into the world of mere Nature. But in other instances too, a similar price is exacted for our analytical knowledge and manipulative power, even if we have ceased to count it. We do not look at trees either as Dryads or as beautiful objects while we cut them into beams: the first man who did so may have felt the price keenly, and the bleeding trees in Virgil and Spenser may be far-off echoes of that primeval sense of impiety. The stars lost their divinity as astronomy developed, and the Dying God has no place in chemical agriculture. To many, no doubt, this process is simply the gradual discovery that the real world is different from what we expected, and the old opposition to Galileo or to 'bodysnatchers' is simply obscurantism. But that is not the whole story. It is not the greatest of modern scientists who feel most sure that the object, stripped of its qualitative properties and reduced to mere quantity, is wholly real. Little scientists, and little unscientific followers of science, may think so. The great minds know very well that the object, so treated, is an artificial abstraction, that something of its reality has been lost.

From this point of view the conquest of Nature appears in a new light. We reduce things to mere Nature *in order that* we may 'conquer' them. We are always conquering Nature, because 'Nature' is the name for what we have, to some extent, conquered. The price of conquest is to treat a thing as mere Nature. Every conquest over Nature increases her domain. The stars do not become Nature till we can weigh and measure them: the soul does not become Nature till we can psycho-analyse her. The wresting of powers from Nature is also the surrendering of things to Nature. As long as this process stops short of the final stage we may well hold that the gain outweighs the loss. But as soon as we take the final step of reducing our own species to the level of mere Nature, the whole process is stultified, for this time the being who stood to gain and the being who has been sacrificed are one and the same. This is one of the many instances where to carry a principle to what seems its logical conclusion produces absurdity. It is like the famous Irishman who found that a certain kind of stove reduced his fuel bill by half and thence concluded that two stoves of the same kind would enable him to warm his house with no fuel at all. It is the magician's bargain: give up our soul, get power in return. But once our souls, that is, our selves, have been given up, the power thus conferred will not belong to us. We shall in fact be the slaves and puppets of that to which we have given our souls. It is in Man's power to treat himself as a mere 'natural object' and his own judgements of value as raw material for scientific manipulation to alter at will. The objection to his doing so does not lie in the fact that this point of view (like one's first day in a dissecting room) is painful and shocking till we grow used to it. The pain and the shock are at most a warning and a symptom. The real objection is that if man chooses to treat himself as raw material, raw material he will be: not raw material to be manipulated, as he fondly imagined, by himself, but by mere appetite, that is, mere Nature, in the person of his dehumanized Conditioners.

We have been trying, like Lear, to have it both ways: to lay down our human prerogative and yet at the same time to retain it. It is impossible. Either we are rational spirit obliged for ever to obey the absolute values of the Tao, or else we are mere nature to be kneaded and cut into new shapes for the pleasures of masters who must, by hypothesis, have no motive but their own 'natural' impulses. Only the Tao provides a common human law of action which can over-arch rulers and ruled alike. A dogmatic belief in objective value is necessary to the very idea of a rule which is not tyranny or an obedience which is not slavery.

I am not here thinking solely, perhaps not even chiefly, of those who are our public enemies at the moment. The process which, if not checked, will abolish Man, goes on apace among Communists and Democrats no less than among Fascists. The methods may (at first) differ in brutality. But many a mildeyed scientist in pince-nez, many a popular dramatist, many an amateur philosopher in our midst, means in the long run just the same as the Nazi rulers of Germany. Traditional values are to be 'debunked' and mankind to be cut out into some fresh shape at the will (which must, by hypothesis, be an arbitrary will) of some few lucky people in one lucky generation which has learned how to do it. The belief that we can invent 'ideologies' at pleasure, and the consequent treatment of mankind as mere υλη, specimens, preparations, begins to affect our very language. Once we killed bad men: now we liquidate unsocial elements. Virtue has become integration and diligence dynamism, and boys likely to be worthy of a commission are 'potential officer material.' Most wonderful of all, the virtues of thrift and temperance, and even of ordinary intelligence, are sales-resistance.

The true significance of what is going on has been concealed by the use of the abstraction Man. Not that the word Man is necessarily a pure abstraction. In the *Tao* itself, as long as we remain within it, we find the concrete reality in which to participate is to be truly human: the real common will and common reason of humanity, alive, and growing like a tree, and branching out, as the situation varies, into ever new beauties and dignities of application. While we speak from within the *Tao* we can speak of Man having power over himself in a sense truly analogous to an individual's self-control. But the moment we step outside and regard the *Tao* as a mere subjective product, this possibility has disappeared. What is now common to all men is a mere abstract universal, an H.C.F., and Man's conquest of himself means simply the rule of the Conditioners over the conditioned human material, the world of post-humanity which, some knowingly and some unknowingly, nearly all men in all nations are at present labouring to produce.

Nothing I can say will prevent some people from describing this lecture as an attack on science. I deny the charge, of course: and real Natural Philosophers (there are some now alive) will perceive that in defending value I defend inter alia the value of knowledge, which must die like every other when its roots in the Tao are cut. But I can go further than that. I even suggest that from Science herself the cure might come. I have described as a 'magician's bargain' that process whereby man surrenders object after object, and finally himself, to Nature in return for power. And I meant what I said. The fact that the scientist has succeeded where the magician failed has put such a wide contrast between them in popular thought that the real story of the birth of Science is misunderstood. You will even find people who write about the sixteenth century as if Magic were a medieval survival and Science the new thing that came in to sweep it away. Those who have studied the period know better. There was very little magic in the Middle Ages: the sixteenth and seventeenth centuries are the high noon of magic. The serious magical endeavour and the serious scientific endeavour are twins: one was sickly and died, the other strong and throve. But they were twins. They were born of the same impulse. I allow that some (certainly not all) of the early scientists were actuated by a pure love of knowledge. But if we consider the temper of that age as a whole we can discern the impulse of which I speak. There is something which unites magic and applied science while separating both from the 'wisdom' of earlier ages. For the wise men of old the cardinal problem had been how to conform the soul to reality, and the solution had been knowledge, self-discipline, and virtue. For magic and applied science alike the problem is how to subdue reality to the wishes of men: the solution is a technique; and both, in the practice of this technique, are ready to do things hitherto regarded as disgusting and impious-such as digging up and mutilating the dead. If we compare the chief trumpeter of the new era (Bacon) with Marlowe's Faustus, the similarity is striking. You will read in some critics that Faustus has a thirst for knowledge. In reality, he hardly mentions it. It is not truth he wants from his devils, but gold and guns and girls. 'All things that move between the quiet poles shall be at his command' and 'a sound magician is a mighty god.' 3 In the same spirit Bacon condemns those who value knowledge as an end in itself: this, for him, is to use as a mistress for pleasure what ought to be a spouse for fruit.4 The true object is to extend Man's power to the performance of all things possible. He rejects magic because it does not work,⁵ but his goal is that of the magician. In Paracelsus the characters of magician and scientist are combined. No doubt those who really founded modern science were usually those whose love of

⁸ Dr. Faustus, 77-90.

⁴ Advancement of Learning, Bk. I (p. 60 in Ellis and Spedding, 1905; p. 35 in Everyman Edn.).

⁵ Filum Labyrinthi, i.

truth exceeded their love of power; in every mixed movement the efficacy comes from the good elements not from the bad. But the presence of the bad elements is not irrelevant to the direction the efficacy takes. It might be going too far to say that the modern scientific movement was tainted from its birth: but I think it would be true to say that it was born in an unhealthy neighbourhood and at an inauspicious hour. Its triumphs may have been too rapid and purchased at too high a price: reconsideration, and something like repentance, may be required.

Is it, then, possible to imagine a new Natural Philosophy, continually conscious that the 'natural object' produced by analysis and abstraction is not reality but only a view, and always correcting the abstraction? I hardly know what I am asking for. I hear rumours that Goethe's approach to nature deserves fuller consideration-that even Dr. Steiner may have seen something that orthodox researchers have missed. The regenerate science which I have in mind would not do even to minerals and vegetables what modern science threatens to do to man himself. When it explained it would not explain away. When it spoke of the parts it would remember the whole. While studying the It it would not lose what Martin Buber calls the Thou-situation. The analogy between the Tao of Man and the instincts of an animal species would mean for it new light cast on the unknown thing, Instinct, by the inly known reality of conscience and not a reduction of conscience to the category of Instinct. Its followers would not be free with the words only and merely. In a word, it would conquer Nature without being at the same time conquered by her and buy knowledge at a lower cost than that of life.

Perhaps I am asking impossibilities. Perhaps, in the nature of things, analytical understanding must always be a basilisk which kills what it sees and only sees by killing. But if the scientists themselves cannot arrest this process before it reaches the common Reason and kills that too, then someone else must arrest it. What I most fear is the reply that I am 'only one more' obscurantist, that this barrier, like all previous barriers set up against the advance of science, can be safely passed. Such a reply springs from the fatal serialism of the modern imagination-the image of infinite unilinear progression which so haunts our minds. Because we have to use numbers so much we tend to think of every process as if it must be like the numeral series, where every step, to all eternity, is the same kind of step as the one before. I implore you to remember the Irishman and his two stoves. There are progressions in which the last step is sui generis-incommensurable with the others-and in which to go the whole way is to undo all the labour of your previous journey. To reduce the Tao to a mere natural product is a step of that kind. Up to that point, the kind of explanation which explains things away may give us something, though at a heavy cost. But you cannot go on 'explaining away' for ever: you will find that you have explained explanation itself away. You cannot go on 'seeing through' things for ever. The whole point of seeing through something is to see something through it. It is good that the window should be transparent, because the street or garden beyond it is opaque. How if you saw through the garden too? It is no use trying to 'see through' first principles. If you see through everything, then everything is transparent. But a wholly transparent world is an invisible world. To 'see through' all things is the same as not to see.