

The Altered Nature of Human Action

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All previous ethics—whether in the form of issuing direct enjoinders to do and not to do certain things, or in the form of defining principles for such enjoinders, or in the form of establishing the ground of obligation for obeying such principles—had these interconnected tacit premises in common: that the human condition, determined by the nature of man and the nature of things, was given once for all; that the human good on that basis was readily determinable; and that the range of human action and therefore responsibility was narrowly circumscribed. It will be the burden of the present argument to show that these premises no longer hold, and to reflect on the meaning of this fact for our moral condition. More specifically, it will be my contention that with certain developments of our powers the *nature of human action* has changed, and, since ethics is concerned with action, it should follow that the changed nature of human action calls for a change in ethics as well: this not merely in the sense that new objects of action have added to the case material on which received rules of conduct are to be applied, but in the more radical sense that the qualitatively novel nature of certain of our actions has opened up a whole new dimension of ethical relevance for which there is no precedent in the standards and canons of traditional ethics.

The novel powers I have in mind are, of course, those of modern *technology*. My first point, accordingly, is to ask how this technology affects the nature of our acting, in what ways it makes acting under its dominion *different* from what it has been through the ages. Since throughout those ages man was never without technology, the question involves the human difference of *modern* from previous technology.

1 The Example of Antiquity

Let us start with an ancient voice on man's powers and deeds which in an archetypal sense itself strikes, as it were, a technological note—the famous Chorus from Sophocles' *Antigone*.

Many the wonders but nothing more wondrous than man.

This thing crosses the sea in the winter's storm,
making his path through the roaring waves.
And she, the greatest of gods, the Earth—
deathless she is, and unwearied—he wears her away
as the ploughs go up and down from year to year
and his mules turn up the soil.

The tribes of the lighthearted birds he ensnares, and the races
of all the wild beasts and the salty brood of the sea,
with the twisted mesh of his nets, he leads captive, this clever
man.

He controls with craft the beasts of the open air,
who roam the hills. The horse with his shaggy mane
he holds and harnesses, yoked about the neck,
and the strong bull of the mountain.

Speech and thought like the wind
and the feelings that make the town,
he has taught himself, and shelter against the cold,
refuge from rain. Ever resourceful is he.
He faces no future helpless. Only against death
shall he call for aid in vain. But from baffling maladies
has he contrived escape.

Clever beyond all dreams
the inventive craft that he has
which may drive him one time or another to well or ill.
When he honors the laws of the land and the gods' sworn right
high indeed is his city; but stateless the man
who dares to do what is shameful.

[Lines 335–370]

1.1 Man and Nature

This awestruck homage to man's powers tells of his violent and violating irruption into the cosmic order, the self-assertive invasion of nature's various domains by his restless cleverness; but also of his building—through the self-taught powers of speech and thought and social sentiment—the home for his very humanity, the artifact of the city. The raping of nature and the civilizing of man go hand in hand. Both are in defiance of the elements, the one by venturing into them and overpowering their creatures, the other by securing an enclave against them in the shelter of the city and its laws. Man is the maker of his life *qua* human, bending circumstances to his will and needs, and except against death he is never helpless.

Yet there is a subdued and even anxious quality about this appraisal of the marvel that is man, and nobody can mistake it for immodest bragging. Unspoken, but self-evident for those times, is the pervading knowledge behind it all that, for all his boundless resourcefulness, man is still small by the measure of the elements: precisely this makes his sallies into them so daring and allows those elements to tolerate his forwardness. Making free with the denizens of land and sea and air, he yet leaves the encompassing nature of those elements unchanged, and their generative powers undiminished. He cannot harm them by carving out his little kingdom from theirs. They last, while his schemes have their short-lived way. Much as he harries Earth, the greatest of gods, year after year with his plough—she is ageless and unwearied; her enduring patience he must and can trust, and to her cycle he must conform. And just as ageless is the sea. With all his netting of the salty brood, the spawning ocean is inexhaustible. Nor is it hurt by the plying of ships, nor sullied by what is jettisoned into its deeps. And no matter how many illnesses he contrives to cure, mortality does not bow to his cunning.

All this holds because before our time man's inroads into nature, as seen by himself, were essentially superficial and powerless to upset its appointed balance. (Hindsight reveals that they were not always so harmless in reality.) Nor is there a hint, in the Antigone chorus or anywhere else, that this is only a beginning and that greater things of artifice and power are yet to come—that man is embarked on an endless course of conquest. He had gone thus far in reducing necessity, had learned by his wits to wrest that much from it for the humanity of his life, and reflecting upon this, he was overcome by awe at his own boldness.

1.2 The Man-Made Island of the "City"

The room he has thus made was filled by the city of men—meant to enclose, and not to expand—and thereby a new balance was struck within the larger balance of the whole. All the good or ill to which man's inventive craft may drive him one time or another is inside the human enclave and does not touch the nature of things.

The immunity of the whole, untroubled in its depth by the importunities of man, that is, the essential immutability of Nature as the cosmic order, was indeed the backdrop to all of mortal man's enterprises, including his intrusions into that order itself. Man's life was played out between the abiding and the changing: the abiding was Nature, the changing his own works. The greatest of these works was the city, and on it he could confer some measure of abiding by the laws he made for it and undertook to honor. But no long-range certainty pertained to this contrived continuity. As a vulnerable artifact, the cultural construct can grow slack or go astray.

Not even within its artificial space, with all the freedom it gives to man's

determination of self, can the arbitrary ever supersede the basic terms of his being. The very inconstancy of human fortunes assures the constancy of the human condition. Chance and luck and folly, the great equalizers in human affairs, act like an entropy of sorts and make all definite designs in the long run revert to the perennial norm. Cities rise and fall, rules come and go, families prosper and decline; no change is there to stay, and in the end, with all the temporary deflections balancing each other out, the state of man is as it always was. So here, too, in his very own artifact, the social world, man's control is small and his abiding nature prevails.

Still, this citadel of his own making, clearly set off from the rest of things and entrusted to him, was the whole and sole domain of man's responsible action. Nature was not an object of human responsibility—she taking care of her elf and, with some coaxing and worrying, also of man: not ethics, only cleverness applied to her. But in the city, the social work of art, where men deal with men, cleverness must be wedded to morality, for this is the soul of its being. It is in this intrahuman frame, then, that all traditional ethics dwells, and it matches the size of action delimited by this frame.

2 Characteristics of Previous Ethics

Let us extract from the above those characteristics of human action which are relevant for a comparison with the state of things today.

1. All dealing with the nonhuman world, that is, the whole realm of *techne* (with the exception of medicine), was ethically neutral—in respect both of the object and the subject of such action: in respect of the object, because it impinged but little on the self-sustaining nature of things and thus raised no question of permanent injury to the integrity of its object, the natural order as a whole; and in respect of the agent subject it was ethically neutral because *techne* as an activity conceived itself as a determinate tribute to necessity and not as an indefinite, self-validating advance to mankind's major goal, claiming in its pursuit man's ultimate effort and concern. The real vocation of man lay elsewhere. In brief, action on nonhuman things did not constitute a sphere of authentic ethical significance.
2. Ethical significance belonged to the direct dealing of man with man, including the dealing with himself: all traditional ethics is *anthropocentric*.
3. For action in this domain, the entity "man" and his basic condition was considered constant in essence and not itself an object of reshaping *techne*.

4. The good and evil about which action had to care lay close to the act, either in the praxis itself or in its immediate reach, and were not matters for remote planning. This proximity of ends pertained to time as well as space. The effective range of action was small, the time span of foresight, goal-setting, and accountability was short, control of circumstances limited. Proper conduct had its immediate criteria and almost immediate consummation. The long run of consequences beyond was left to chance, fate, or providence. Ethics accordingly was of the here and now, of occasions as they arise between men, of the recurrent, typical situations of private and public life. The good man was the one who met these contingencies with virtue and wisdom, cultivating these powers in himself, and for the rest resigning himself to the unknown.

All enjoinders and maxims of traditional ethics, materially different as they may be, show this confinement to the immediate setting of the action. "Love thy neighbor as thyself"; "Do unto others as you would wish them to do unto you"; "Instruct your child in the way of truth"; "Strive for excellence by developing and actualizing the best potentialities of your being *qua* man"; "Subordinate your individual good to the common good": "Never treat your fellow man as a means only but always also as an end in himself"—and so on. Note that in all these maxims the agent and the "other" of his action are sharers of a common present. It is those who are alive now and in some relationship with me who have a claim on my conduct as it affects them by deed or omission. The ethical universe is composed of contemporaries, and its horizon to the future is confined by the foreseeable span of their lives. Similarly confined is its horizon of place, within which the agent and the other meet as neighbor, friend, or foe, as superior and subordinate, weaker and stronger, and in all the other roles in which humans interact with one another. To this proximate range of action all morality was geared.

It follows that the *knowledge* that is required—besides the moral will—to assure the morality of action fitted these limited terms: it was not the knowledge of the scientist or the expert, but knowledge of a kind readily available to all men of good will. Kant went so far as to say that "human reason can, in matters of morality, be easily brought to a high degree of accuracy and completeness even in the most ordinary intelligence"; that "there is no need of science or philosophy for knowing what man has to do in order to be honest and good, and indeed to be wise and virtuous. . . [Ordinary intelligence] can have as good hope of hitting the mark as any philosopher can promise himself"; and again: "I need no elaborate acuteness to find out what I have to do so that my willing be morally good. Inexperienced regarding the course of the world, unable to anticipate all the contingencies that happen in it," I can yet know how to act in accordance with the moral

law.

Not every thinker in ethics, it is true, went so far in discounting the cognitive side of moral action. But even when it received much greater emphasis, as in Aristotle, where the discernment of the situation and what is fitting for it makes considerable demands on experience and judgment, such knowledge has nothing to do with the science of things. It implies, of course, a general conception of the human good as such, a conception' predicated on the presumed invariables of man's nature and condition, which may or may not find expression in a theory of its own. But its' translation into practice requires a knowledge of the here and now, and this is entirely nontheoretical. This "knowledge" proper to virtue (of the "where, when, to whom, and how") stays with the immediate issue, in whose defined context the action as the agent's own takes its course and within which it terminates. The good or bad of the action is wholly decided within that short-term context. Its authorship is unquestioned, and its moral quality shines forth from it, visible to its witnesses. No one was held responsible for the unintended later effects of his well-intentioned, well-considered, and well-performed act. The short arm of human power did not call for a long arm of predictive knowledge; the shortness of the one is as little culpable as that of the other. Precisely because the human good, known in its generality, is the same for all time, its realization or violation takes place at each time, and its complete locus is always the present.

3 New Dimensions of Responsibility

All this has decisively changed. Modern technology has introduced actions of such novel scale, objects, and consequences that the framework of former ethics can no longer contain them. The Antigone chorus on the demotes, the wondrous power, of man would have to read differently now; and its admonition to the individual to honor the laws of the land would no longer be enough. The gods, too, whose venerable right could check the headlong rush of human action, are long gone. To be sure, the old prescriptions of the "neighbor" ethics—of justice, charity, honesty, and so on—still hold in their intimate immediacy for the nearest, day-by-day sphere of human interaction. But this sphere is overshadowed by a growing realm of collective action where doer, deed, and effect are no longer the same as they were in the proximate sphere, and which by the enormity of its powers forces upon ethics a new dimension of responsibility never dreamed of before.

3.1 The Vulnerability of Nature

Take, for instance, as the first major change in the inherited picture, the critical vulnerability of nature to man's technological intervention—unsuspected

before it began to show itself in damage already done. This discovery, whose shock led to the concept and nascent science of ecology, alters the very concept of ourselves as a causal agency in the larger scheme of things. It brings to light, through the effects, that the nature of human action has de facto changed, and that an object of an entirely new order—no less than the whole biosphere of the planet—has been added to what we must be responsible for because of our power over it. And of what surpassing importance an object, dwarfing all previous objects of active man! Nature as a human responsibility is surely a novum to be pondered in ethical theory. What kind of obligation is operative in it? Is it more than a utilitarian concern? Is it just prudence that bids us not to kill the goose that lays the golden eggs, or saw off the branch on which we sit? But the “we” who sit here and who may fall into the abyss—who is it? And what is my interest in its sitting or falling?

Insofar as it is the fate of man, as affected by the condition of nature, which makes our concern about the preservation of nature a moral concern, such concern admittedly still retains the anthropocentric focus of all classical ethics. Even so, the difference is great. The containment of nearness and contemporaneity is gone, swept away by the spatial spread and time span of the cause-effect trains which technological practice sets afoot, even when undertaken for proximate ends. Their irreversibility conjoined to their aggregate magnitude injects another novel factor into the moral equation. Add to this their cumulative character: their effects keep adding themselves to one another, with the result that the situation for later subjects and their choices of action will be progressively different from that of the initial agent and ever more the fated product of what was done before. All traditional ethics reckoned only with noncumulative behavior.’ The basic situation between persons, where virtue must prove and vice expose itself, remains always the same, and every deed begins afresh from this basis. The recurring occasions which pose their appropriate alternatives for human conduct—courage or cowardice, moderation or excess, truth or mendacity, and so on—each time reinstate the primordial conditions from which action takes off. These were never superseded, and thus moral actions were largely “typical,” that is, conforming to precedent. In contrast with this, the cumulative self-propagation of the technological change of the world constantly overtakes the conditions of its contributing acts and moves through none but unprecedented situations, for which the lessons of experience are powerless. And not even content with changing its beginning to the point of unrecognizability, the cumulation as such may consume the basis of the whole series, the very condition of itself. All this would have to be cointended in the will of the single action if this is to be a morally responsible one.

3.2 The New Role of Knowledge in Morality

Knowledge, under these circumstances, becomes a prime duty beyond anything claimed for it heretofore, and the knowledge must be commensurate with the causal scale of our action. The fact that it cannot really be thus commensurate, that is, that the predictive knowledge falls behind the technical knowledge that nourishes our power to act, itself assumes ethical importance. The gap between the ability to foretell and the power to act creates a novel moral problem. With the latter so superior to the former, recognition of ignorance becomes the obverse of the duty to know and thus part of the ethics that must govern the evermore necessary self-policing of our outsized might. No previous ethics had to consider the global condition of human life and the far-off future, even existence, of the race. These now being an issue demands, in brief, a new conception of duties and rights, for which previous ethics and metaphysics provide not even the principles, let alone a ready doctrine.

3.3 Has Nature “Rights” Also?

And what if the new kind of human action would mean that more than the interest of man alone is to be considered—that our duty extends farther, and the anthropocentric confinement of former ethics no longer holds? It is at least not senseless anymore to ask whether the condition of extrahuman nature, the biosphere as a whole and in its parts, now subject to our power, has become a human trust and has something of a moral claim on us not only for our ulterior sake but for its own and in its own right. If this were the case it would require quite some rethinking in basic principles of ethics. It would mean to seek not only the human good but also the good of things extrahuman, that is, to extend the recognition of “ends in themselves” beyond the sphere of man and make the human good include the care for them. No previous ethics (outside of religion) has prepared us for such a role of stewardship—and the dominant, scientific view of Nature has prepared us even less. Indeed, that view emphatically denies us all conceptual means to think of Nature as something to be honored, having reduced it to the indifference of necessity and accident, and divested it of any dignity of ends. But still, a silent plea for sparing its integrity seems to issue from the threatened plenitude of the living world. Should we heed this plea, should we recognize its claim as morally binding because sanctioned by the nature of things, or dismiss it as a mere sentiment on our part, which we may indulge as far as we wish and can afford to do? If the former, it would (if taken seriously in its theoretical implications) push the necessary rethinking beyond the doctrine of action, that is, ethics, into the doctrine of being, that is, meta-physics, in which all ethics must ultimately be grounded. On this speculative subject I will say no more here than that

we should keep ourselves open to the thought that natural science may not tell the whole story about Nature.

4 Technology as the “Calling” of Mankind

4.1 Homo Faber over Homo Sapiens

Returning to strictly intrahuman considerations, there is another ethical aspect to the growth of *techne* as a pursuit beyond the pragmatically limited terms of former times. Then, so we found, *techne* was a measured tribute to necessity, not the road to mankind’s chosen goal—a means with a finite measure of adequacy to well-defined proximate ends. Now, *techne* in the form of modern technology has turned into an infinite forward-thrust of the race, its most significant enterprise, in whose permanent, self-transcending advance to ever greater things the vocation of man tends to be seen, and whose success of maximal control over things and himself appears as the consummation of his destiny. Thus the triumph of *homo faber* over his external object means also his triumph in the internal constitution of *homo sapiens*, of whom he used to be a subsidiary part. In other words, technology, apart from its objective works, assumes ethical significance by the central place it now occupies in human purpose. Its cumulative creation, the expanding artificial environment, continuously reinforces the particular powers in man that created it, by compelling their unceasing inventive employment in its management and further advance, and by rewarding them with additional success—which only adds to the relentless claim. This positive feedback of functional necessity and reward—in whose dynamics pride of achievement must not be forgotten—assures the growing ascendancy of one side of man’s nature over all the others, and inevitably at their expense. If nothing succeeds like success, nothing also entraps like success. Outshining in prestige and starving in resources whatever else belongs to the fullness of man, the expansion of his power is accompanied by a contraction of his self-conception and being. In the image he entertains of himself—the programmatic idea which determines his actual being as much as it reflects it—man now is evermore the maker of what he has made and the doer of what he can do, and most of all the preparer of what he will be able to do next. But who is “he”? Not you or I: it is the aggregate, not the individual doer or deed that matters here: and the indefinite future, rather than the contemporary context of the action, constitutes the relevant horizon of responsibility. This requires imperatives of a new sort. If the realm of making has invaded the space of essential action, then morality must invade the realm of making, from which it has formerly stayed aloof, and must do so in the form of public policy. Public policy has never had to deal before with issues of such inclusiveness and such lengths of anticipation. In fact, the

changed nature of human action changes the very nature of politics.

4.2 The Universal City as a Second Nature

For the boundary between “city” and “nature” has been obliterated: the city of men, once an enclave in the nonhuman world, spreads over the whole of terrestrial nature and usurps its place. The difference between the artificial and the natural has vanished, the natural is swallowed up in the sphere of the artificial, and at the same time the total artifact (the works of man that have become “the world” and as such envelop their makers) generates a “nature” of its own, that is, a necessity with which human freedom has to cope in an entirely new sense.

Once it could be said *Fiat justitia, pereat mundus*, “Let justice be done, and may the world perish”—where “world,” of course, meant the renewable enclave in the imperishable whole. Not even rhetorically can the like be said anymore when the perishing of the whole through the doings of man—be they just or unjust—has become a real possibility. Issues never legislated come into the purview of the laws which the total city must give itself so that there will be a world for the generations of man to come.

4.3 Man’s Presence in the World as an Imperative

That there ought to be through all future time such a world fit for human habitation, and that it ought in all future time to be inhabited by a mankind worthy of the human name, will be readily affirmed as a general axiom or a persuasive desirability of speculative imagination (as persuasive and as undemonstrable as the proposition that there being a world at all is “better” than there being none): but as a moral proposition, namely, a practical obligation toward the posterity of a distant future, and a principle of decision in present action, it is quite different from the imperatives of the previous ethics of contemporaneity; and it has entered the moral scene only with our novel powers and range of prescience.

The presence of man in the world had been a first and unquestionable given, from which all idea of obligation in human conduct started out. Now it has itself become an object of obligation: the obligation namely to ensure the very premise of all obligation, that is, the foothold for a moral universe in the physical world—the existence of mere candidates for a moral order. This entails, among other things, the duty to preserve this physical world in such a state that the conditions for that presence remain intact; which in turn means protecting the world’s vulnerability from what could imperil those very conditions. The difference this makes for ethics may be illustrated in one example.

5 Old and New Imperatives

1. Kant's categorical imperative said: "Act so that you can will that the maxim of your action be made the principle of a universal law." The "can" here invoked is that of reason and its consistency with itself: Given the existence of a community of human agents (acting rational beings), the action must be such that it can without self-contradiction be imagined as a general practice of that community. Mark that the basic reflection of morals here is not itself a moral but a logical one: The "I can will" or "I cannot will" expresses logical compatibility or incompatibility, not moral approbation or revulsion. But there is no self-contradiction in the thought that humanity would once come to an end, therefore also none in the thought that the happiness of present and proximate generations would be bought with the unhappiness or even nonexistence of later ones—as little as, after all, in the inverse thought that the existence or happiness of later generations would be bought with the unhappiness or even partial extinction of present ones. The sacrifice of the future for the present is logically no more open to attack than the sacrifice of the present for the future. The difference is only that in the one case the series goes on, and in the other it does not (or: its future ending is contemplated). But that it ought to go on, regardless of the distribution of happiness or unhappiness, even with a persistent preponderance of unhappiness over happiness, nay, of immorality over morality—this cannot be derived from the rule of self-consistency within the series, long or short as it happens to be: it is a commandment of a very different kind, lying outside and "prior" to the series as a whole, and its ultimate grounding can only be metaphysical.
2. An imperative responding to the new type of human action and addressed to the new type of agency that operates it might run thus: "Act so that the effects of your action are compatible with the permanence of genuine human life"; or expressed negatively: "Act so that the effects of your action are not destructive of the future possibility of such life"; or simply: "Do not compromise the conditions for an indefinite continuation of humanity on earth"; or, again turned positive: "In your present choices, include the future wholeness of Man among the objects of your will."
3. It is immediately obvious that no rational contradiction is involved in the violation of this kind of imperative. I can will the present good with sacrifice of the future good. Just as I can will my own end, I can will that of humanity. Without falling into contradiction with myself, I can prefer a short fireworks display of the most extreme

“self-fulfillment,” for myself or for the world, to the boredom of an endless continuation in mediocrity.

However, the new imperative says precisely that we may risk our own life—but not that of humanity; and that Achilles indeed had the right to choose for himself a short life of glorious deeds over a long life of inglorious security (with the tacit premise that a posterity would be there to know and tell of his deeds), but that we do not have the right to choose, or even risk, nonexistence for future generations on account of a better life for the present one. Why we do not have this right, why on the contrary we have an obligation toward that which does not yet exist and never need exist at all—an obligation not only toward its fortunes in case it happens to exist, but toward its coming to exist in the first place, to which as nonexistent “it” surely has no claim: to underpin this proposition theoretically is by no means easy and without religion perhaps impossible. At present, our imperative simply posits it without proof, as an axiom.

4. It is also evident that the new imperative addresses itself to public policy rather than private conduct, which is not in the causal dimension to which that imperative applies. Kant’s categorical imperative was addressed to the individual, and its criterion was instantaneous. It enjoined each of us to consider what would happen if the maxim of my present action were made, or at this moment already were, the principle of a universal legislation; the self-consistency or inconsistency of such a hypothetical universalization is made the test for my private choice. But it was no part of the reasoning that there is any probability of my private choice in fact becoming universal law, or that it might contribute to its becoming that. Indeed, real consequences are not considered at all, and the principle is one not of objective responsibility but of the subjective quality of my self-determination. The new imperative invokes a different consistency: not that of the act with itself, but that of its eventual effects with the continuance of human agency in times to come. And the “universalization” it contemplates is by no means hypothetical—that is, a purely logical transference from the individual “me” to an imaginary, causally unrelated “all” (“if everybody acted like that”); on the contrary, the actions subject to the new imperative—actions of the collective whole—have their universal reference in their actual scope of efficacy: they “totalize” themselves in the progress of their momentum and thus are bound to terminate in shaping the universal dispensation of things. This adds a time horizon to the moral calculus which is entirely absent from the instantaneous logical operation of the Kantian imperative: whereas the latter extrapolates into an ever-present order of abstract compatibility, our imperative extrapolates into a predictable real future as the

open-ended dimension of our responsibility.

6 Earlier Forms of “Future-oriented Ethics”

Now it may be objected that with Kant we have chosen an extreme example of the ethics of subjective intention (*Gesinnungsethik*), and that our assertion of the present-oriented character of all former ethics, as holding among contemporaries, is contradicted by several ethical forms of the past. The following three examples come to mind: the conduct of earthly life (to the point of sacrificing its entire happiness) with a view to the eternal salvation of the soul; the long-range concern of the legislator and statesman for the future common weal; and the politics of utopia, with its readiness to use those living now as a mere means to a goal that lies in a future after their time, or to exterminate them as obstacles in its way—of which revolutionary Marxism is the prime example.

6.1 The Ethics of Fulfillment in the Life Hereafter

Of these three cases the first and third share the trait of placing the future above the present as the possible locus of absolute value, thus demoting the present to a mere preparation for the future. An important difference is that in the religious case the acting down here is not credited with bringing on the future bliss by its own causality (as revolutionary action is supposed to do), but is merely supposed to qualify the agent for it, namely, in the eyes of God, to whom faith must entrust its realization. That qualification, however, consists in a life pleasing to God, of which in general it may be assumed that it is the best, most worthwhile life in itself anyway, thus worthy to be chosen for its own sake and not merely for that of eventual future bliss. Indeed, when chosen mainly from that reward motive, the life in question would lose in worth and therewith even in its qualifying strength. That is to say, the latter is the greater, the less intended it is. When we then ask what human qualities are held to procure the qualification, that is, to constitute a life pleasing to God, we must look at the life prescriptions of the particular creeds—and these we may often find to be just those prescriptions of justice, charity, purity of heart, etc., which would, or could, be prescribed by an innerworldly ethic of the classical sort as well. Thus in the “moderate” version of the belief in the soul’s salvation (of which, if I am not mistaken, Judaism is an example) we still deal, after all, with an ethics of contemporaneity and immediacy, notwithstanding the transcendent goal; and what ethics it might concretely be in this or that historical case—that is not deducible from the transcendent goal as such (of whose content no idea can be formed anyway), but is told by the way in which the “life pleasing to God,” said to be the precondition for it, was in each instance given material

content.

It may happen, however, that the content is such—and this is the case in the “extreme” forms of the soul salvation doctrine—that its practice, that is, the fulfillment of the “precondition,” can in no way be regarded as of value in itself but is merely the stake in a wager, with whose loss, that is, the failure to attain the eternal reward, all would be lost. For in this case of the dreadful metaphysical bet as elaborated by Pascal, the stake is one’s entire earthly existence with all its possibilities of enjoyment and fulfillment, whose very renunciation is made the price of eternal salvation. In this category belong all those forms of radical mortification of the flesh, of life-denying asceticism, whose practitioners would have cheated themselves out of everything if their expectations were disappointed. This otherworldly wager differs from the calculus of ordinary, this-worldly hedonism, with its considered risks of sometime-renunciations and deferments, merely by the totality of its quid pro quo and the surpassing nature of the chance for which the stakes are risked. But just this surpassing expectation moves the whole undertaking out of the realm of ethics. Between the finite and the infinite, the temporal and the eternal, there is no commensurability and thus no meaningful comparison; that is, there is neither a qualitative nor a quantitative sense in which one is preferable to the other. Concerning the value of the goal, whose informed appraisal ought to form an essential element of ethical decision, there is nothing but the empty assertion that it is the ultimate value. Also lacking is the causal relation—which at least ethical thinking requires—between the action and its (hoped-for) result; that “result,” so we saw, is conceived not as being effected by present renunciation but merely as promised from elsewhere in compensation for it.

If one inquires why the this-worldly renunciation is considered so meritorious that it may dare to expect this kind of indemnification or reward, one answer might be that the flesh is sinful, desire is evil, and the world is impure. In this case (as in the somewhat different case where individuation as such is regarded as bad) asceticism does represent, after all, a genuine instrumentality of action and a path to internal goal-achievement through one’s own performance: the path, namely, from impurity to purity, from sinfulness to sanctity, from bondage to freedom, from selfhood to self-transcendence. Insofar as it is such a “path,” asceticism is already in itself the best sort of life by the metaphysical criteria assumed. But in this case we are dealing again with an ethic of the here and now: a form—albeit a supremely egotistic and individualistic form—of the ethic of self-perfection, whose inward exertions may indeed attain to those peak moments of spiritual illumination, which are a present foretaste of the future reward: a mystical experience of the Absolute.

In sum, we can say that, insofar as this whole complex of otherworldly striving falls within ethics at all (as do, for instance, the aforementioned “moderate” forms in which a life good in itself forms the condition for eter-

nal reward), it too fits our thesis concerning the orientation of all previous ethics to the present.

6.2 The Statesman's Responsibility for the Future

What about the examples of innerworldly future-oriented ethics, which alone do really belong to rational ethics in that they reckon with a known cause-effect pattern? We mentioned in the second place the long-range care of the legislator and statesman for the future good of the commonwealth. Greek political theory is on the whole silent about the time aspect which interests us here; but this silence itself is revealing. Something can be gathered from the praise of great lawgivers like Solon and Lycurgus or from the censure of a statesman like Pericles. The praise of the lawgiver includes, it is true, the durability of his creation, but not his planning ahead of something that is to come about only in aftertimes and not attainable already to his contemporaries. His endeavor is to create a viable political structure, and the test of viability is in the enduring of his creation—a changeless enduring if possible. The best state, so it was thought, is also the best for the future, precisely because the stable equilibrium of its present ensures its future as such; and it will then, of course, be the best state in that future as well, since the criteria of a good order (of which durability is one) do not change. They do not change because human nature does not change, which with its imperfections is included in the conception which the wise lawgiver must have of a viable political order. This conception thus aims not at the ideally perfect state but rather at the realistically best, that is, the best possible state—and this is now just as possible, and just as imperiled, as it will always be. But this very peril, which threatens all order with the disorder of the human passions, makes necessary, in addition to the singular, founding wisdom of the lawgiver, the continuous, governing wisdom of the statesman. The reproach of Socrates against the politics of Pericles, be it noted, is not that, in the end after his death, his grandiose schemes came to nought, but rather that with such grandiose schemes (including their initial successes) he had already in his own time turned the Athenians' heads and corrupted their civic virtues. Athens' current misfortune thus was blamed not on the eventual failure of those policies but on the blemish at their roots, which even "success" in their own terms would not have made better in retrospect. What would have been good at that time would be that still today and would most probably have survived into the present.

The foresight of the statesman thus consists in the wisdom and moderation he devotes to the present. This present is not here for the sake of a future different from (and superior to) it in type, but rather proves itself—luck permitting—in a future still like itself, and so must be as justified already in itself as its succession is hoped to be. Duration, in short, results

as a concomitant of what is good now and at all times. Certainly, political action has a wider time span of effect and responsibility than private action, but its ethics, according to the premodern view, is still none other than the present-oriented one, applied to a life form of longer duration.

6.3 The Modern Utopia

- a) This changes only with what, in my third example, I called the politics of utopia, which is a thoroughly modern phenomenon and presupposes a previously unknown, dynamic eschatology of history. The religious eschatologies of earlier times do not yet represent this case, although they prepare for it. Messianism, for example, does not ordain a messianic politics, but leaves the coming of the Messiah to divine dispensation. Human behavior is implicated in it only in the sense that it can make itself worthy of the event through fulfilling those very norms to which it is subject even without such a prospect. Here we find to hold on the collective scale what we previously found to hold on the personal scale with regard to otherworldly hopes: the here and now is certainly overarched by them, but is not entrusted with their active realization. It serves them the better, the more faithful it remains to its own God-given law, whose fulfillment lies entirely within itself.
- b) Here, too, there did occur the extreme form, where the “urgers of the end” took matters into their own hands and with one last thrust of earthly action tried to bring about the messianic kingdom or millennium, for which they considered the time ripe. In fact, some of the chiliastic movements, especially at the beginning of the modern era, lead into the neighborhood of utopian politics, particularly when they are not content with merely having made a start and clearing the path, but when they make a positive beginning with the Kingdom of God, of whose contents they have a definite conception. Insofar as ideas of social equality and justice play a role in this conception, the characteristic motivation of modern utopian ethics is already there: but not yet the yawning gulf, stretching across generations, between now and later, means and end, action and goal, which marks the modern, secularized eschatology, that is, modern political utopianism. It is still an ethic of the self-vindicating present, not of the retroactively vindicating future: the true man is already there, and even, in the “community of the saints,” the kingdom of God from the moment they realize it in their own midst, as ordained and held to be possible in the dawning fulness of time. The assault, however, against the establishments of the world that still oppose its spreading, is made in the expectation of a Jericho-like miracle, not as a mediated process of

historical causation. The last step to the innerworldly utopian ethic of history is yet to be taken.

- c) Only with the advent of modern progress, both as a fact and as an idea, did the possibility emerge of conceiving everything past as a stepping-stone to the present and of everything present as a stepping-stone to the future. When this notion (which in itself, as unlimited, distinguishes no stage as final and leaves to each the immediacy of its own present) is wed with a secularized eschatology which assigns to the absolute, defined in terms of this world, a finite place in time, and when to this is added a conception of a teleological dynamism which leads to the final state of affairs—then we have the conceptual prerequisites for a utopian politics. “To found the kingdom of heaven already upon earth” (Heinrich Heine) presupposes some idea of what such an earthly kingdom of heaven would look like (or so one would think—but on this point the theory displays a remarkable blank). In any case, even lacking such an idea, the resolute secular eschatology entails a conception of human events that radically demotes to provisional status all that goes before, stripping it of its independent validity and at best making it the vehicle for reaching the promised state of things that is yet to come—a means to the future end which alone is worthy in itself.

Here in fact is a break with the past, and what we have said concerning the present-oriented character of all previous ethics and their common premise of the persistence of human nature is no longer true of the teaching which represents this break most clearly, the Marxist philosophy of history and its corresponding ethic of action. Action takes place for the sake of a future which neither the agent nor the victim nor their contemporaries will live to enjoy. The obligations upon the now issue from that goal, not from the good and ill of the contemporary world; and the norms of action are just as provisional, indeed just as “inauthentic,” as the conditions which it will transmute into the higher state. The ethic of revolutionary eschatology considers itself an ethic of transition, while the consummate, true ethic (essentially still unknown) will only come into its own after the harsh interim morality (which can last a long time) has created the conditions for it and thereby abrogated itself.

Thus there already exists, in Marxism, a future-oriented ethic, with a distance of vision, a time span of affirmed responsibility, a scope of object (= all of future humanity), and a depth of concern (the whole future nature of man)—and, as we might already add, with a sense for the powers of technology—which in all these respects stands comparison with the ethic for which we want to plead here. All the more important it is to determine the relation between these two ethical positions which, as answers to the

unprecedented modern situation and especially to its technology, have so much in common over against premodern ethics and yet are so different from one another. This must wait until we have heard more about the problems and tasks which the ethic here envisaged has to deal with, and which are posed by the colossal progress of technology. For technology's power over human destiny has overtaken even that of communism, which no less than capitalism thought merely to make use of it. We say this much in advance: while both positions concern themselves with the utopian possibilities of this technology, the ethic we are looking for is not eschatological and, in a sense yet to be specified, is anti-utopian.

7 Man as an Object of Technology

Our comparison dealt with the historical forms of the ethics of contemporaneity and immediacy, for which the Kantian case served only as an example. What stands in question is not their validity within their own frame of reference but their sufficiency for those new dimensions of human action which transcend that frame. Our thesis is that the new kinds and dimensions of action require a commensurate ethic of foresight and responsibility which is as novel as the eventualities which it must meet. We have seen that these are the eventualities that arise out of the works of homo faber in the era of technology. But among those novel works we have not mentioned yet the potentially most ominous class. We have considered techne only as applied to the nonhuman realm. But man himself has been added to the objects of technology. Homo faber is turning upon himself and gets ready to make over the maker of all the rest. This consummation of his power, which may well portend the overpowering of man, this final imposition of art on nature, calls upon the utter resources of ethical thought, which never before has been faced with elective alternatives to what were considered the definite terms of the human condition.

7.1 Extension of Life Span

Take, for instance, the most basic of these "givens," man's mortality. Who ever before had to make up his mind on its desirable and eligible measure? There was nothing to choose about the upper limit, the "three-score years and ten, or by reason of strength fourscore." Its inexorable rule was the subject of lament, submission, or vain (not to say foolish) wish-dreams about possible exceptions—strangely enough, almost never of affirmation. The intellectual imagination of a George Bernard Shaw and a Jonathan Swift speculated on the privilege of not having to die, or the curse of not being able to die. (Swift with the latter was the more perspicacious of the two.) Myth and legend toyed with such themes against the acknowledged

background of the unalterable, which made the earnest man rather pray “teach us to number our days that we may get a heart of wisdom” (Psalm 90). Nothing of this was in the realm of doing and effective decision. The question was only how to relate to the stubborn fact.

But lately the dark cloud of inevitability seems to lift. A practical hope is held out by certain advances in cell biology to prolong, perhaps indefinitely extend, the span of life by counteracting biochemical processes of aging. Death no longer appears as a necessity belonging to the nature of life, but as an avoidable, at least in principle tractable and long-delayable, organic malfunction. A perennial yearning of mortal man seems to come nearer fulfillment. And for the first time we have in earnest to ask the questions “How desirable is this? How desirable for the individual, and how for the species?” These questions involve the very meaning of our finitude, the attitude toward death, and the general biological significance of the balance of death and procreation. Even prior to such ultimate questions are the more pragmatic ones of who should be eligible for the boon: Persons of particular quality and merit? Of social eminence? Those who can pay for it? Everybody? The last would seem the only just course. But it would have to be paid for at the opposite end, at the source. For dearly, on a population-wide scale, the price of extended age must be a proportional slowing of replacement, that is, a diminished access of new life. The result would be a decreasing proportion of youth in an increasingly aged population. Flow good or bad would that be for the general condition of man? Would the species gain or lose? And how right would it be to preempt the place of youth? Having to die is bound up with having been born: mortality is but the other side of the perennial spring of “natality” (to use Hannah Arendt’s term). This had always been ordained; now its meaning has to be pondered in the sphere of decision.

To take the extreme (not that it will ever be obtained): if we abolish death, we must abolish procreation as well, for the latter is life’s answer to the former, and so we would have a world of old age with no youth, and of known individuals with no surprises of such that had never been before. But this perhaps is precisely the wisdom in the harsh dispensation of our mortality: that it grants us the eternally renewed promise of the freshness, immediacy, and eagerness of youth, together with the supply of otherness as such. There is no substitute for this in the greater accumulation of prolonged experience: it can never recapture the unique privilege of seeing the world for the first time and with new eyes; never relive the wonder which, according to Plato, is the beginning of philosophy; never the curiosity of the child, which rarely enough lives on as thirst for knowledge in the adult, until it wanes there too. This ever renewed beginning, which is only to be had at the price of ever repeated ending, may well be mankind’s hope, its safeguard against lapsing into boredom and routine, its chance of retaining the spontaneity of life. Also, the role of the memento mori

in the individual's life must be considered, and what its attenuation to indefiniteness may do to it. Perhaps a nonnegotiable limit to our expected time is necessary for each of us as the incentive to number our days and make them count.

So it could be that what by intent is a philanthropic gift of science to man, the partial granting of his oldest wish—to escape the curse of mortality—turns out to be to the detriment of man. I am not indulging in prediction and, in spite of my noticeable bias, not even in valuation. My point is that already the promised gift raises questions that had never to be asked before in terms of practical choice, and that no principle of former ethics, which took the human constants for granted, is competent to deal with them. And yet they must be dealt with ethically and by principle and not merely by the pressure of interests.

7.2 Behavior Control

It is similar with all the other, quasi-utopian possibilities which progress in the biomedical sciences has partly already placed at our disposal and partly holds in prospect for eventual translation into technological know-how. Of these, behavior control is much nearer to practical readiness than the still hypothetical prospect I have just been discussing, and the ethical questions it raises are less profound but have a more direct bearing on the moral conception of man. Here again, the new kind of intervention exceeds the old ethical categories. They have not equipped us to rule, for example, on mental control by chemical means or by direct electrical action on the brain via implanted electrodes—undertaken, let us assume, for defensible and even laudable ends. The mixture of beneficial and' dangerous potentials is obvious, but the lines are not easy to draw. Relief of mental patients from distressing and disabling symptoms seems unequivocally beneficial. But from the relief of the patient, a goal entirely in the tradition of the medical art, there is an easy passage to the relief of society from the inconvenience of difficult individual behavior among its members: that is, the passage from medical to social application; and this opens up an indefinite field with grave potentials. The troublesome problems of rule and unruliness in modern mass society make the extension of such control methods to non-medical categories extremely tempting for social management. Numerous questions of human rights and dignity arise. The difficult question of preempting versus enabling care insists on concrete answers. Shall we induce learning attitudes in schoolchildren by the mass administration of drugs, circumventing the appeal to autonomous motivation? Shall we overcome aggression by electronic pacification of brain areas? Shall we generate sensations of happiness or pleasure or at least contentment through independent stimulation (or tranquilizing) of the appropriate centers—independent, that is, of the objects of happiness, pleasure, or content and their attainment in

personal living and achieving? Candidacies could be multiplied. Business firms might become interested in some of these techniques for performance increase among their employees.

Regardless of the question of compulsion or consent, and regardless also of the question of undesirable side-effects, each time we thus bypass the human way of dealing with human problems, short-circuiting it by an impersonal mechanism, we have taken away something from the dignity of personal selfhood and advanced a further step on the road from responsible subjects to programmed behavior systems. Social functionalism, important as it is, is only one side of the question. Decisive is the question of what kind of individuals the society is composed of—to make its existence valuable as a whole. Somewhere along the line of increasing social manageability at the price of individual autonomy, the question of the worthwhileness of the whole human enterprise must pose itself. Answering it involves the image of man we entertain. We must think it anew in light of the things we can do with it or to it now and could never do before.

7.3 Genetic Manipulation

This holds even more with respect to the last object of a technology applied on man himself—the genetic control of future men. This is too wide a subject for the cursory treatment of these prefatory remarks, and it will have its own chapter in a later “applied part” to succeed this volume. Here I merely point to this most ambitious dream of homo faber, summed up in the phrase that man will take his own evolution in hand, with the aim of not just preserving the integrity of the species but of modifying it by improvements of his own design. Whether we have the right to do it, whether we are qualified for that creative role, is the most serious question that can be posed to man finding himself suddenly in possession of such fateful powers. Who will be the image-makers, by what standards, and on the basis of what knowledge? Also, the question of the moral right to experiment on future human beings must be asked. These and similar questions, which demand an answer before we embark on a journey into the unknown, show most vividly how far our powers to act are pushing us beyond the terms of all former ethics.

8 The “Utopian” Dynamics of Technical Progress and the Excessive Magnitude of Responsibility

The ethically relevant common feature in all the examples adduced is what I like to call the inherently “utopian” drift of our actions under the conditions of modern technology, whether it works on nonhuman or on human nature, and whether the “utopia” at the end of the road be planned or

unplanned. By the kind and size of its snowballing effects, technological power propels us into goals of a type that was formerly the preserve of Utopias. To put it differently, technological power has turned what used and ought to be tentative, perhaps enlightening plays of speculative reason into competing blueprints for projects, and in choosing between them we have to choose between extremes of remote effects. The one thing we can really know of them is their extremism as such—that they concern the total condition of nature on our globe and the very kind of creatures that shall, or shall not, populate it. In consequence of the inevitably “utopian” scale of modern technology, the salutary gap between everyday and ultimate issues, between occasions for common prudence and occasions for illuminated wisdom, is steadily closing. Living now constantly in the shadow of unwanted, built-in, automatic utopianism, we are constantly confronted with issues whose positive choice requires supreme wisdom—an impossible situation for man in general, because he does not possess that wisdom, and in particular for contemporary man, because he denies the very existence of its object, namely, objective value and truth. We need wisdom most when we believe in it least.

If the new nature of our acting then calls for a new ethics of long-range responsibility, coextensive with the range of our power, it calls in the name of that very responsibility also for a new kind of humility—a humility owed, not like former humility to the smallness of our power, but to the excessive magnitude of it, which is the excess of our power to act over our power to foresee and our power to evaluate and to judge. In the face of the quasi-eschatological potentials of our technological processes, ignorance of the ultimate implications becomes itself a reason for responsible restraint—as the second best to the possession of wisdom itself.

One other aspect of the required new ethics of responsibility for and to a distant future is worth mentioning: the doubt it casts on the capacity of representative government, operating by its normal principles and procedures, to meet the new demands. For according to those principles and procedures, only, present interests make themselves heard and felt and enforce their consideration. It is to them that public agencies are accountable, and this is the way in which concretely the respecting of rights comes about (as distinct from their abstract acknowledgment). But the future is not represented, it is not a force that can throw its weight into the scales. The nonexistent has no lobby, and the unborn are powerless. Thus accountability to them has no political reality behind it in present decision-making, and when they can make their complaint, then we, the culprits, will no longer be there.

This raises to an ultimate pitch the old question of the power of the wise, or the force of ideas not allied to self-interest, in the body politic. What force shall represent the future in the present? That is a question for political philosophy, and one on which I dare not voice my woefully

uncertain ideas. They would be premature here anyway. For before that question of enforcement can become practical, the new ethics must find its theory, on which do's and don'ts can be based. That is: before the question of what force comes the question of what insight or value-knowledge will represent the future in the present.

9 The Ethical Vacuum

And here is where I come to a standstill, where we all come to a standstill. For the very same movement which put us in possession of the powers that have now to be regulated by norms—the movement of modern knowledge called science—has by a necessary complementarity eroded the foundations from which norms could be derived; it has destroyed the very idea of norm as such. Not, fortunately, the feeling for norm and even or particular norms. But this feeling becomes uncertain of itself when contradicted by alleged knowledge or at least denied all support by it. It always has a difficult time against the loud clamors of greed and fear. Now it must in addition blush before the frown or smirk of superior knowledge which has certified it as unfounded and incapable of foundation. First it was nature that was “neutralized” with respect to value, then man himself. Now we shiver in the nakedness of a nihilism in which near-omnipotence is paired with near-emptiness, greatest capacity with knowing least for what ends to use it.

It is moot whether, without restoring the category of the sacred, the category most thoroughly destroyed by the scientific enlightenment, we can have an ethics able to cope with the extreme powers which we possess today and constantly increase and are almost compelled to wield. Regarding those consequences that are imminent enough still to hit ourselves, fear can do the job—fear which is so often the best substitute for genuine virtue or wisdom. But this means fails us toward the more distant prospects, which here matter the most, especially as the beginnings seem mostly innocent in their smallness. Only awe of the sacred with its unqualified veto is independent of the computations of mundane fear and the solace of uncertainty about distant consequences. However, religion in eclipse cannot relieve ethics of its task; and while of faith it can be said that as a moving force it either is there or is not, of ethics it is true to say that it must be there.

It must be there because men act, and ethics is for the ordering of actions and for regulating the power to act. It must be there all the more, then, the greater the powers of acting that are to be regulated; and as it must fit their size, the ordering principle must also fit their kind. Thus, novel powers to act require novel ethical rules and perhaps even a new ethics.

“Thou shalt not kill” was enunciated’ because man has the power to kill and often the occasion and even the inclination for it—in short, because

killing is actually done. It is only under the pressure of real habits of action, and generally of the fact that always action already takes place, without this having to be commanded first, that ethics as the ruling of such acting under the standard of the good or the permitted enters the stage. Such a pressure emanates from the novel technological powers of man, whose exercise is given with their existence. If they really are as novel in kind as here contended, and if by the kind of their potential consequences they really have abolished the moral neutrality which the technical commerce with matter hitherto enjoyed—then their pressure bids us to seek for new prescriptions in ethics which are competent to assume their guidance, but which first of all can hold their own theoretically against that very pressure.

In this chapter we have developed our premises, namely, first, that our collective technological practice constitutes a new kind of human action, and this not just because of the novelty of its methods but more so because of the unprecedented nature of some of its objects, because of the sheer magnitude of most of its enterprises, and because of the indefinitely cumulative propagation of its effects. From all three of these traits, our second premise follows: that what we are doing in this manner is, regardless of the particulars of any of its immediate purposes, no longer ethically neutral as a whole. With this exposition of the ethical question, the task of seeking an answer, and first of all a rational principle for it, only begins.