

Work

18

THE DURABILITY OF THE WORLD

The work of our hands, as distinguished from the labor of our bodies—*homo faber* who makes and literally “works upon”¹ as distinguished from the *animal laborans* which labors and “mixes with”—fabricates the sheer unending variety of things whose sum total constitutes the human artifice. They are mostly, but not exclusively, objects for use and they possess the durability Locke needed for the establishment of property, the “value” Adam Smith needed for the exchange market, and they bear testimony to productivity, which Marx believed to be the test of human nature. Their proper use does not cause them to disappear and they give the human artifice the stability and solidity without which it could not be relied upon to house the unstable and mortal creature which is man.

The durability of the human artifice is not absolute; the use we make of it, even though we do not consume it, uses it up. The life process which permeates our whole being invades it, too, and if we do not use the things of the world, they also will eventually decay, return into the over-all natural process from which they were

1. The Latin word *faber*, probably related to *facere* (“to make something” in the sense of production), originally designated the fabricator and artist who works upon hard material, such as stone or wood; it also was used as translation for the Greek *tekton*, which has the same connotation. The word *fabri*, often followed by *tignarii*, especially designates construction workers and carpenters. I have been unable to ascertain when and where the expression *homo faber*, certainly of modern, postmedieval origin, first appeared. Jean Leclercq (“Vers la société basée sur le travail,” *Revue du travail*, Vol. LI, No. 3 [March, 1950]) suggests that only Bergson “threw the concept of *homo faber* into the circulation of ideas.”

Work

drawn and against which they were erected. If left to itself or discarded from the human world, the chair will again become wood, and the wood will decay and return to the soil from which the tree sprang before it was cut off to become the material upon which to work and with which to build. But though this may be the unavoidable end of all single things in the world, the sign of their being products of a mortal maker, it is not so certainly the eventual fate of the human artifice itself, where all single things can be constantly replaced with the change of generations which come and inhabit the man-made world and go away. Moreover, while usage is bound to use up these objects, this end is not their destiny in the same way as destruction is the inherent end of all things for consumption. What usage wears out is durability.

It is this durability which gives the things of the world their relative independence from men who produced and use them, their “objectivity” which makes them withstand, “stand against”² and endure, at least for a time, the voracious needs and wants of their living makers and users. From this viewpoint, the things of the world have the function of stabilizing human life, and their objectivity lies in the fact that—in contradiction to the Heraclitean saying that the same man can never enter the same stream—men, their ever-changing nature notwithstanding, can retrieve their sameness, that is, their identity, by being related to the same chair and the same table. In other words, against the subjectivity of men stands the objectivity of the man-made world rather than the sublime indifference of an untouched nature, whose overwhelming elementary force, on the contrary, will compel them to swing relentlessly in the circle of their own biological movement, which fits so closely into the over-all cyclical movement of nature’s household. Only we who have erected the objectivity of a world of our own from what nature gives us, who have built it into the environment of nature so that we are protected from her, can look upon nature as something “objective.” Without a world between men and nature, there is eternal movement, but no objectivity.

Although use and consumption, like work and labor, are not the

2. This is implied in the Latin verb *obicere*, from which our “object” is a late derivation, and in the German word for object, *Gegenstand*. “Object” means, literally, “something thrown” or “put against.”

same, they seem to overlap in certain important areas to such an extent that the unanimous agreement with which both public and learned opinion have identified these two different matters seems well justified. Use, indeed, does contain an element of consumption, in so far as the wearing-out process comes about through the contact of the use object with the living consuming organism, and the closer the contact between the body and the used thing, the more plausible will an equation of the two appear. If one construes, for instance, the nature of use objects in terms of wearing apparel, he will be tempted to conclude that use is nothing but consumption at a slower pace. Against this stands what we mentioned before, that destruction, though unavoidable, is incidental to use but inherent in consumption. What distinguishes the most flimsy pair of shoes from mere consumer goods is that they do not spoil if I do not wear them, that they have an independence of their own, however modest, which enables them to survive even for a considerable time the changing moods of their owner. Used or unused, they will remain in the world for a certain while unless they are wantonly destroyed.

A similar, much more famous and much more plausible, argument can be raised in favor of an identification of work and labor. The most necessary and elementary labor of man, the tilling of the soil, seems to be a perfect example of labor transforming itself into work in the process, as it were. This seems so because tilling the soil, its close relation to the biological cycle and its utter dependence upon the larger cycle of nature notwithstanding, leaves some product behind which outlasts its own activity and forms a durable addition to the human artifice: the same task, performed year in and year out, will eventually transform the wilderness into cultivated land. The example figures prominently in all ancient and modern theories of laboring precisely for this reason. Yet, despite an undeniable similarity and although doubtless the time-honored dignity of agriculture arises from the fact that tilling the soil not only procures means of subsistence but in this process prepares the earth for the building of the world, even in this case the distinction remains quite clear: the cultivated land is not, properly speaking, a use object, which is there in its own durability and requires for its permanence no more than ordinary care in preservation; the tilled

soil, if it is to remain cultivated, needs to be labored upon time and again. A true reification, in other words, in which the produced thing in its existence is secured once and for all, has never come to pass; it needs to be reproduced again and again in order to remain within the human world at all.

19

REIFICATION

Fabrication, the work of *homo faber*, consists in reification. Solidity, inherent in all, even the most fragile, things, comes from the material worked upon, but this material itself is not simply given and there, like the fruits of field and trees which we may gather or leave alone without changing the household of nature. Material is already a product of human hands which have removed it from its natural location, either killing a life process, as in the case of the tree which must be destroyed in order to provide wood, or interrupting one of nature's slower processes, as in the case of iron, stone, or marble torn out of the womb of the earth. This element of violation and violence is present in all fabrication, and *homo faber*, the creator of the human artifice, has always been a destroyer of nature. The *animal laborans*, which with its body and the help of tame animals nourishes life, may be the lord and master of all living creatures, but he still remains the servant of nature and the earth; only *homo faber* conducts himself as lord and master of the whole earth. Since his productivity was seen in the image of a Creator-God, so that where God creates *ex nihilo*, man creates out of given substance, human productivity was by definition bound to result in a Promethean revolt because it could erect a man-made world only after destroying part of God-created nature.³

3. This interpretation of human creativity is medieval, whereas the notion of man as lord of the earth is characteristic of the modern age. Both are in contradiction to the spirit of the Bible. According to the Old Testament, man is the master of all living creatures (Gen. 1), which were created to help him (2:19). But nowhere is he made the lord and master of the earth; on the contrary, he was put into the garden of Eden to serve and preserve it (2:15). It is interesting to note that Luther, consciously rejecting the scholastic compromise with Greek and Latin antiquity, tries to eliminate from human work and labor all elements of production and making. Human labor according to him is only "finding" the

different in principle from the repetition which is the mark of labor. This repetition is urged upon and remains subject to the biological cycle; the needs and wants of the human body come and go, and though they reappear again and again at regular intervals, they never remain for any length of time. Multiplication, in distinction from mere repetition, multiplies something that already possesses a relatively stable, relatively permanent existence in the world. This quality of permanence in the model or image, of being there before fabrication starts and remaining after it has come to an end, surviving all the possible use objects it continues to help into existence, had a powerful influence on Plato's doctrine of eternal ideas. In so far as his teaching was inspired by the word *idea* or *eidos* ("shape" or "form"), which he used for the first time in a philosophical context, it rested on experiences in *poiēsis* or fabrication, and although Plato used his theory to express quite different and perhaps much more "philosophical" experiences, he never failed to draw his examples from the field of making when he wanted to demonstrate the plausibility of what he was saying.⁷

7. Aristotle's testimony that Plato introduced the term *idea* into philosophic terminology occurs in the first book of his *Metaphysics* (987b8). An excellent account of the earlier usage of the word and of Plato's teaching is Gerard F. Else, "The Terminology of Ideas," *Harvard Studies in Classical Philology*, Vol. XLVII (1936). Else rightly insists that "what the doctrine of Ideas was in its final and complete form is something we cannot learn from the dialogues." We are equally uncertain about the doctrine's origin, but there the safest guide may still be the word itself which Plato so strikingly introduced into philosophic terminology, even though the word was not current in Attic speech. The words *eidos* and *idea* doubtlessly relate to visible forms or shapes, especially of living creatures; this makes it unlikely that Plato conceived the doctrine of ideas under the influence of geometrical forms. Francis M. Cornford's thesis (*Plato and Parmenides* [Liberal Arts ed.], pp. 69-100) that the doctrine is probably Socratic in origin, in so far as Socrates sought to define justice in itself or goodness in itself, which cannot be perceived with the senses, as well as Pythagorean, in so far as the doctrine of the ideas' eternal and separate existence (*chōrismos*) from all perishable things involves "the separate existence of a conscious and knowing soul, apart from the body and the senses," sounds to me very convincing. But my own presentation leaves all such assumptions in abeyance. It relates simply to the tenth book of the *Republic*, where Plato himself explains his doctrine by taking "the common instance" of a craftsman who makes beds and tables "in accordance with [their] idea," and then adds, "that is our way of speaking in this and similar instances." Obviously, to Plato the very word *idea* was suggestive,

The one eternal idea presiding over a multitude of perishable things derives its plausibility in Plato's teachings from the permanence and oneness of the model according to which many and perishable objects can be made.

The process of making is itself entirely determined by the categories of means and end. The fabricated thing is an end product in the twofold sense that the production process comes to an end in it ("the process disappears in the product," as Marx said) and that it is only a means to produce this end. Labor, to be sure, also produces for the end of consumption, but since this end, the thing to be consumed, lacks the worldly permanence of a piece of work, the end of the process is not determined by the end product but rather by the exhaustion of labor power, while the products themselves, on the other hand, immediately become means again, means of subsistence and reproduction of labor power. In the process of making, on the contrary, the end is beyond doubt: it has come when an entirely new thing with enough durability to remain in the world as an independent entity has been added to the human artifice. As far as the thing, the end product of fabrication, is concerned, the process need not be repeated. The impulse toward repetition comes from the craftsman's need to earn his means of subsistence, in which case his working coincides with his laboring; or it comes from a demand for multiplication in the market, in which case the craftsman who wishes to meet this demand has added, as Plato would have said, the art of earning money to his craft. The point here is that in either case the process is repeated for reasons outside itself and is unlike the compulsory repetition inherent in laboring, where one must eat in order to labor and must labor in order to eat.

To have a definite beginning and a definite, predictable end is the mark of fabrication, which through this characteristic alone dis-

and he wanted it to suggest "the craftsman who makes a couch or a table not by looking . . . at another couch or another table, but by looking at the idea of the couch" (Kurt von Fritz, *The Constitution of Athens* [1950], pp. 34-35). Needless to say, none of these explanations touches the root of the matter, that is, the specifically philosophic experience underlying the concept of ideas on the one hand, and their most striking quality on the other—their illuminating power, their being to *phanotaton* or *ekphanestaton*.

tinguishes itself from all other human activities. Labor, caught in the cyclical movement of the body's life process, has neither a beginning nor an end. Action, though it may have a definite beginning, never, as we shall see, has a predictable end. This great reliability of work is reflected in that the fabrication process, unlike action, is not irreversible: every thing produced by human hands can be destroyed by them, and no use object is so urgently needed in the life process that its maker cannot survive and afford its destruction. *Homo faber* is indeed a lord and master, not only because he is the master or has set himself up as the master of all nature but because he is master of himself and his doings. This is true neither of the *animal laborans*, which is subject to the necessity of its own life, nor of the man of action, who remains in dependence upon his fellow men. Alone with his image of the future product, *homo faber* is free to produce, and again facing alone the work of his hands, he is free to destroy.

20

INSTRUMENTALITY AND *Animal Laborans*

From the standpoint of *homo faber*, who relies entirely on the primordial tools of his hands, man is, as Benjamin Franklin said, a "tool-maker." The same instruments, which only lighten the burden and mechanize the labor of the *animal laborans*, are designed and invented by *homo faber* for the erection of a world of things, and their fitness and precision are dictated by such "objective" aims as he may wish to invent rather than by subjective needs and wants. Tools and instruments are so intensely worldly objects that we can classify whole civilizations using them as criteria. Nowhere, however, is their worldly character more manifest than when they are used in labor processes, where they are indeed the only tangible things that survive both the labor and the consumption process itself. For the *animal laborans*, therefore, as it is subject to and constantly occupied with the devouring processes of life, the durability and stability of the world are primarily represented in the tools and instruments it uses, and in a society of laborers, tools

are very likely to assume a more than mere instrumental character or function.

The frequent complaints we hear about the perversion of ends and means in modern society, about men becoming the servants of the machines they themselves invented and of being "adapted" to their requirements instead of using them as instruments for human needs and wants, have their roots in the factual situation of laboring. In this situation, where production consists primarily in preparation for consumption, the very distinction between means and ends, so highly characteristic of the activities of *homo faber*, simply does not make sense, and the instruments which *homo faber* invented and with which he came to the help of the labor of the *animal laborans* therefore lose their instrumental character once they are used by it. Within the life process itself, of which laboring remains an integral part and which it never transcends, it is idle to ask questions that presuppose the category of means and end, such as whether men live and consume in order to have strength to labor or whether they labor in order to have the means of consumption.

If we consider this loss of the faculty to distinguish clearly between means and ends in terms of human behavior, we can say that the free disposition and use of tools for a specific end product is replaced by rhythmic unification of the laboring body with its implement, the movement of laboring itself acting as the unifying force. Labor but not work requires for best results a rhythmically ordered performance and, in so far as many laborers gang together, needs a rhythmic co-ordination of all individual movements.⁸ In

8. Karl Bücher's well-known compilation of rhythmic labor songs in 1897 (*Arbeit und Rhythmus* [6th ed.; 1924]) has been followed by a voluminous literature of a more scientific nature. One of the best of these studies (Joseph Schopp, *Das deutsche Arbeitslied* [1935]) stresses that there exist only labor songs, but no work songs. The songs of the craftsmen are social; they are sung after work. The fact is, of course, that there exists no "natural" rhythm for work. The striking resemblance between the "natural" rhythm inherent in every laboring operation and the rhythm of the machines is sometimes noticed, apart from the repeated complaints about the "artificial" rhythm which the machines impose upon the laborer. Such complaints, characteristically, are relatively rare among the laborers themselves, who, on the contrary, seem to find the same amount of pleasure in repetitive machine work as in other repetitive labor (see, for instance, Georges Friedmann, *Où va le travail humain?* [2d ed.; 1953], p. 233, and Hendrik de Man, *op. cit.*, p. 213). This confirms observations which were already made in

this motion, the tools lose their instrumental character, and the clear distinction between man and his implements, as well as his ends, becomes blurred. What dominates the labor process and all work processes which are performed in the mode of laboring is neither man's purposeful effort nor the product he may desire, but the motion of the process itself and the rhythm it imposes upon the laborers. Labor implements are drawn into this rhythm until body and tool swing in the same repetitive movement, that is, until, in the use of machines, which of all implements are best suited to the performance of the *animal laborans*, it is no longer the body's movement that determines the implement's movement but the machine's movement which enforces the movements of the body. The point is that nothing can be mechanized more easily and less artificially than the rhythm of the labor process, which in its turn corresponds to the equally automatic repetitive rhythm of the life process and its metabolism with nature. Precisely because the *animal laborans*

the Ford factories at the beginning of our century. Karl Bücher, who believed that "rhythmic labor is highly spiritual labor" (*vergeistigt*), already stated: "Aufreibend werden nur solche einförmigen Arbeiten, die sich nicht rhythmisch gestalten lassen" (*op. cit.*, p. 443). For though the speed of machine work undoubtedly is much higher and more repetitive than that of "natural" spontaneous labor, the fact of a rhythmic performance as such makes that machine labor and pre-industrial labor have more in common with each other than either of them has with work. Hendrik de Man, for instance, is well aware that "diese von Bücher . . . gepriesene Welt weniger die des . . . handwerksmässig schöpferischen Gewerbes als die der einfachen, schieren . . . Arbeitsfront [ist]" (*op. cit.*, p. 244).

All these theories appear highly questionable in view of the fact that the workers themselves give an altogether different reason for their preference for repetitive labor. They prefer it because it is mechanical and does not demand attention, so that while performing it they can think of something else. (They can "geistig wegtreten," as Berlin workers formulated it. See Thielicke and Pentzlin, *Mensch und Arbeit im technischen Zeitalter: Zum Problem der Rationalisierung* [1954], pp. 35 ff., who also report that according to an investigation of the *Max Planck Institut für Arbeitspsychologie*, about 90 per cent of the workers prefer monotonous tasks.) This explanation is all the more noteworthy, as it coincides with very early Christian recommendations of the merits of manual labor, which, because it demands less attention, is less likely to interfere with contemplation than other occupations and professions (see Étienne Delaruelle, "Le travail dans les règles monastiques occidentales du 4e au 9e siècle," *Journal de psychologie normale et pathologique*, Vol. XLI, No. 1 [1948]).

does not use tools and instruments in order to build a world but in order to ease the labors of its own life process, it has lived literally in a world of machines ever since the industrial revolution and the emancipation of labor replaced almost all hand tools with machines which in one way or another supplanted human labor power with the superior power of natural forces.

The decisive difference between tools and machines is perhaps best illustrated by the apparently endless discussion of whether man should be "adjusted" to the machine or the machines should be adjusted to the "nature" of man. We mentioned in the first chapter the chief reason why such a discussion must be sterile: if the human condition consists in man's being a conditioned being for whom everything, given or man-made, immediately becomes a condition of his further existence, then man "adjusted" himself to an environment of machines the moment he designed them. They certainly have become as inalienable a condition of our existence as tools and implements were in all previous ages. The interest of the discussion, from our point of view, therefore, lies rather in the fact that this question of adjustment could arise at all. There never was any doubt about man's being adjusted or needing special adjustment to the tools he used; one might as well have adjusted him to his hands. The case of the machines is entirely different. Unlike the tools of workmanship, which at every given moment in the work process remain the servants of the hand, the machines demand that the laborer serve them, that he adjust the natural rhythm of his body to their mechanical movement. This, certainly, does not imply that men as such adjust to or become the servants of their machines; but it does mean that, as long as the work at the machines lasts, the mechanical process has replaced the rhythm of the human body. Even the most refined tool remains a servant, unable to guide or to replace the hand. Even the most primitive machine guides the body's labor and eventually replaces it altogether.

As is so frequently the case with historical developments, it seems as though the actual implications of technology, that is, of the replacement of tools and implements with machinery, have come to light only in its last stage, with the advent of automation. For our purposes it may be useful to recall, however briefly, the

main stages of modern technology's development since the beginning of the modern age. The first stage, the invention of the steam engine, which led into the industrial revolution, was still characterized by an imitation of natural processes and the use of natural forces for human purposes, which did not differ in principle from the old use of water and wind power. Not the principle of the steam engine was new but rather the discovery and use of the coal mines to feed it.⁹ The machine tools of this early stage reflect this imitation of naturally known processes; they, too, imitate and put to more powerful use the natural activities of the human hand. But today we are told that "the greatest pitfall to avoid is the assumption that the design aim is reproduction of the hand movements of the operator or laborer."¹⁰

The next stage is chiefly characterized by the use of electricity, and, indeed, electricity still determines the present stage of technical development. This stage can no longer be described in terms of a gigantic enlargement and continuation of the old arts and crafts, and it is only to this world that the categories of *homo faber*, to whom every instrument is a means to achieve a prescribed end, no longer apply. For here we no longer use material as nature yields it to us, killing natural processes or interrupting or imitating them. In all these instances, we changed and denaturalized nature for our own worldly ends, so that the human world or artifice on one hand and nature on the other remained two distinctly separate entities. Today we have begun to "create," as it were, that is, to unchain natural processes of our own which would never have happened without us, and instead of carefully surrounding the human artifice with defenses against nature's elementary forces, keeping them as

9. One of the important material conditions of the industrial revolution was the extinction of the forests and the discovery of coal as a substitute for wood. The solution which R. H. Barrow (in his *Slavery in the Roman Empire* [1928]) proposed to "the well-known puzzle in the study of the economic history of the ancient world that industry developed up to a certain point, but stopped short of making progress which might have been expected," is quite interesting and rather convincing in this connection. He maintains that the only factor that "hindered the application of machinery to industry [was] . . . the absence of cheap and good fuel, . . . no abundant supply of coal [being] close at hand" (p. 123).

10. John Diebold, *Automation: The Advent of the Automatic Factory* (1952), p. 67.

far as possible outside the man-made world, we have channeled these forces, along with their elementary power, into the world itself. The result has been a veritable revolution in the concept of fabrication; manufacturing, which always had been "a series of separate steps," has become "a continuous process," the process of the conveyor belt and the assembly line.¹¹

Automation is the most recent stage in this development, which indeed "illuminates the whole history of machinism."¹² It certainly will remain the culminating point of the modern development, even if the atomic age and a technology based upon nuclear discoveries puts a rather rapid end to it. The first instruments of nuclear technology, the various types of atom bombs, which, if released in suf-

11. *Ibid.*, p. 69.

12. Friedmann, *Problèmes humains du machinisme industriel*, p. 168. This, in fact, is the most obvious conclusion to be drawn from Diebold's book: The assembly line is the result of "the concept of manufacturing as a continuous process," and automation, one may add, is the result of the machinization of the assembly line. To the release of human labor power in the earlier stage of industrialization, automation adds the release of human brain power, because "the monitoring and control tasks now humanly performed will be done by machines" (*op. cit.*, p. 140). The one as well as the other releases labor, and not work. The worker or the "self-respecting craftsman," whose "human and psychological values" (p. 164) almost every author in the field tries desperately to save—and sometimes with a grain of involuntary irony, as when Diebold and others earnestly believe that repair work, which perhaps will never be entirely automatic, can inspire the same contentment as fabrication and production of a new object—does not belong in this picture for the simple reason that he was eliminated from the factory long before anybody knew about automation. The workers in a factory have always been laborers, and though they may have excellent reasons for self-respect, it certainly cannot arise from the work they do. One can only hope that they themselves will not accept the social substitutes for contentment and self-respect offered them by labor theorists, who by now really believe that the interest in work and the satisfaction of craftsmanship can be replaced by "human relations" and by the respect workers "earn from their fellow workers" (p. 164). Automation, after all, should at least have the advantage of demonstrating the absurdities of all "humanisms of labor"; if the verbal and historical meaning of the word "humanism" is at all taken into account, the very term "humanism of labor" is clearly a contradiction in terms. (For an excellent criticism of the vogue of "human relations" see Daniel Bell, *Work and Its Discontents* [1956], ch. 5, and R. P. Genelli, "Facteur humain ou facteur social du travail," *Revue française du travail*, Vol. VII, Nos. 1-3 [January-March, 1952], where one also finds a very determined denunciation of the "terrible illusion" of the "joy of labor.")

ficient and not even very great quantities, could destroy all organic life on earth, present sufficient evidence for the enormous scale on which such a change might take place. Here it would no longer be a question of unchaining and letting loose elementary natural processes, but of handling on the earth and in everyday life energies and forces such as occur only outside the earth, in the universe; this is already done, but only in the research laboratories of nuclear physicists.¹³ If present technology consists of channeling natural forces into the world of the human artifice, future technology may yet consist of channeling the universal forces of the cosmos around us into the nature of the earth. It remains to be seen whether these future techniques will transform the household of nature as we have known it since the beginning of our world to the same extent or even more than the present technology has changed the very worldliness of the human artifice.

The channeling of natural forces into the human world has shattered the very purposefulness of the world, the fact that objects are the ends for which tools and implements are designed. It is characteristic of all natural processes that they come into being without the help of man, and those things are natural which are not "made" but grow by themselves into whatever they become. (This is also the authentic meaning of our word "nature," whether we derive it from its latin root *nasci*, to be born, or trace it back to its Greek origin, *physis*, which comes from *phyein*, to grow out of, to appear by itself.) Unlike the products of human hands, which must be realized step by step and for which the fabrication process is entirely distinct from the existence of the fabricated thing itself, the natural thing's existence is not separate but is somehow identical with the process through which it comes into being: the seed contains and, in a certain sense, already *is* the tree, and the tree stops being if the process of growth through which it came into existence

13. Günther Anders, in an interesting essay on the atom bomb (*Die Antiquiertheit des Menschen* [1956]), argues convincingly that the term "experiment" is no longer applicable to nuclear experiments involving explosions of the new bombs. For it was characteristic of experiments that the space where they took place was strictly limited and isolated against the surrounding world. The effects of the bombs are so enormous that "their laboratory becomes co-extensive with the globe" (p. 260).

stops. If we see these processes against the background of human purposes, which have a willed beginning and a definite end, they assume the character of automatism. We call automatic all courses of movement which are self-moving and therefore outside the range of wilful and purposeful interference. In the mode of production ushered in by automation, the distinction between operation and product, as well as the product's precedence over the operation (which is only the means to produce the end), no longer make sense and have become obsolete.¹⁴ The categories of *homo faber* and his world apply here no more than they ever could apply to nature and the natural universe. This is, incidentally, why modern advocates of automation usually take a very determined stand against the mechanistic view of nature and against the practical utilitarianism of the eighteenth century, which were so eminently characteristic of the one-sided, single-minded work orientation of *homo faber*.

The discussion of the whole problem of technology, that is, of the transformation of life and world through the introduction of the machine, has been strangely led astray through an all-too-exclusive concentration upon the service or disservice the machines render to men. The assumption here is that every tool and implement is primarily designed to make human life easier and human labor less painful. Their instrumentality is understood exclusively in this anthropocentric sense. But the instrumentality of tools and implements is much more closely related to the object it is designed to produce, and their sheer "human value" is restricted to the use the *animal laborans* makes of them. In other words, *homo faber*, the toolmaker, invented tools and implements in order to erect a world, not—at least, not primarily—to help the human life process. The question therefore is not so much whether we are the masters or the slaves of our machines, but whether machines still serve the world and its things, or if, on the contrary, they and the automatic motion of their processes have begun to rule and even destroy world and things.

One thing is certain: the continuous automatic process of manufacturing has not only done away with the "unwarranted assumption" that "human hands guided by human brains represent the

14. Diebold, *op. cit.*, pp. 59–60.

optimum efficiency,"¹⁵ but with the much more important assumption that the things of the world around us should depend upon human design and be built in accordance with human standards of either utility or beauty. In place of both utility and beauty, which are standards of the world, we have come to design products that still fulfil certain "basic functions" but whose shape will be primarily determined by the operation of the machine. The "basic functions" are of course the functions of the human animal's life process, since no other function is basically necessary, but the product itself—not only its variations but even the "total change to a new product"—will depend entirely upon the capacity of the machine.¹⁶

To design objects for the operational capacity of the machine instead of designing machines for the production of certain objects would indeed be the exact reversal of the means-end category, if this category still made any sense. But even the most general end, the release of manpower, that was usually assigned to machines, is now thought to be a secondary and obsolete aim, inadequate to and limiting potential "startling increases in efficiency."¹⁷ As matters stand today, it has become as senseless to describe this world of machines in terms of means and ends as it has always been senseless to ask nature if she produced the seed to produce a tree or the tree to produce the seed. By the same token it is quite probable that the continuous process pursuant to the channeling of nature's never-ending processes into the human world, though it may very well destroy the world *qua* world as human artifice, will as reliably and limitlessly provide the species man-kind with the necessities of life as nature herself did before men erected their artificial home on earth and set up a barrier between nature and themselves.

For a society of laborers, the world of machines has become a substitute for the real world, even though this pseudo world cannot fulfil the most important task of the human artifice, which is to offer mortals a dwelling place more permanent and more stable than themselves. In the continuous process of operation, this world of machines is even losing that independent worldly character which the tools and implements and the early machinery of the

15. *Ibid.*, p. 67. 16. *Ibid.*, pp. 38–45. 17. *Ibid.*, pp. 110 and 157.

modern age so eminently possessed. The natural processes on which it feeds increasingly relate it to the biological process itself, so that the apparatuses we once handled freely begin to look as though they were "shells belonging to the human body as the shell belongs to the body of a turtle." Seen from the vantage point of this development, technology in fact no longer appears "as the product of a conscious human effort to enlarge material power, but rather like a biological development of mankind in which the innate structures of the human organism are transplanted in an ever-increasing measure into the environment of man."¹⁸

21

INSTRUMENTALITY AND *Homo Faber*

The implements and tools of *homo faber*, from which the most fundamental experience of instrumentality arises, determine all work and fabrication. Here it is indeed true that the end justifies the means; it does more, it produces and organizes them. The end justifies the violence done to nature to win the material, as the wood justifies killing the tree and the table justifies destroying the wood. Because of the end product, tools are designed and implements invented, and the same end product organizes the work process itself, decides about the needed specialists, the measure of co-operation, the number of assistants, etc. During the work process, everything is judged in terms of suitability and usefulness for the desired end, and for nothing else.

The same standards of means and end apply to the product itself. Though it is an end with respect to the means by which it was produced and is the end of the fabrication process, it never becomes, so to speak, an end in itself, at least not as long as it remains an object for use. The chair which is the end of carpentering can show its usefulness only by again becoming a means, either as a thing whose durability permits its use as a means for comfortable living or as a means of exchange. The trouble with the utility standard inherent in the very activity of fabrication is that the relationship between means and end on which it relies is very much like a chain whose every end can serve again as a means in some

18. Werner Heisenberg, *Das Naturbild der heutigen Physik* (1955), pp. 14–15.

other context. In other words, in a strictly utilitarian world, all ends are bound to be of short duration and to be transformed into means for some further ends.¹⁹

This perplexity, inherent in all consistent utilitarianism, the philosophy of *homo faber* par excellence, can be diagnosed theoretically as an innate incapacity to understand the distinction between utility and meaningfulness, which we express linguistically by distinguishing between "in order to" and "for the sake of." Thus the ideal of usefulness permeating a society of craftsmen—like the ideal of comfort in a society of laborers or the ideal of acquisition ruling commercial societies—is actually no longer a matter of utility but of meaning. It is "for the sake of" usefulness in general that *homo faber* judges and does everything in terms of "in order to." The ideal of usefulness itself, like the ideals of other societies, can no longer be conceived as something needed in order to have something else; it simply defies questioning about its own use. Obviously there is no answer to the question which Lessing once put to the utilitarian philosophers of his time: "And what is the use of use?" The perplexity of utilitarianism is that it gets caught in the unending chain of means and ends without ever arriving at some principle which could justify the category of means and end, that is, of utility itself. The "in order to" has become the content of the "for the sake of"; in other words, utility established as meaning generates meaninglessness.

Within the category of means and end, and among the experiences of instrumentality which rules over the whole world of use objects and utility, there is no way to end the chain of means and ends and prevent all ends from eventually being used again as means, except to declare that one thing or another is "an end in itself." In the world of *homo faber*, where everything must be of some use, that is, must lend itself as an instrument to achieve something else, meaning itself can appear only as an end, as an "end in itself" which actually is either a tautology applying to all ends or a contradiction in terms. For an end, once it is attained, ceases to be an end and loses its capacity to guide and justify the

19. About the endlessness of the means-end chain (the "*Zweckprogressus in infinitum*") and its inherent destruction of meaning, compare Nietzsche, Aph. 666 in *Wille zur Macht*.

choice of means, to organize and produce them. It has now become an object among objects, that is, it has been added to the huge arsenal of the given from which *homo faber* selects freely his means to pursue his ends. Meaning, on the contrary, must be permanent and lose nothing of its character, whether it is achieved or, rather, found by man or fails man and is missed by him. *Homo faber*, in so far as he is nothing but a fabricator and thinks in no terms but those of means and ends which arise directly out of his work activity, is just as incapable of understanding meaning as the *animal laborans* is incapable of understanding instrumentality. And just as the implements and tools *homo faber* uses to erect the world become for the *animal laborans* the world itself, thus the meaningfulness of this world, which actually is beyond the reach of *homo faber*, becomes for him the paradoxical "end in itself."

The only way out of the dilemma of meaninglessness in all strictly utilitarian philosophy is to turn away from the objective world of use things and fall back upon the subjectivity of use itself. Only in a strictly anthropocentric world, where the user, that is, man himself, becomes the ultimate end which puts a stop to the unending chain of ends and means, can utility as such acquire the dignity of meaningfulness. Yet the tragedy is that in the moment *homo faber* seems to have found fulfilment in terms of his own activity, he begins to degrade the world of things, the end and end product of his own mind and hands; if man the user is the highest end, "the measure of all things," then not only nature, treated by *homo faber* as the almost "worthless material" upon which to work, but the "valuable" things themselves have become mere means, losing thereby their own intrinsic "value."

The anthropocentric utilitarianism of *homo faber* has found its greatest expression in the Kantian formula that no man must ever become a means to an end, that every human being is an end in himself. Although we find earlier (for instance, in Locke's insistence that no man can be permitted to possess another man's body or use his bodily strength) an awareness of the fateful consequences which an unhampered and unguided thinking in terms of means and ends must invariably entail in the political realm, it is only in Kant that the philosophy of the earlier stages of the modern age frees itself entirely of the common sense platitudes which we

always find where *homo faber* rules the standards of society. The reason is, of course, that Kant did not mean to formulate or conceptualize the tenets of the utilitarianism of his time, but on the contrary wanted first of all to relegate the means-end category to its proper place and prevent its use in the field of political action. His formula, however, can no more deny its origin in utilitarian thinking than his other famous and also inherently paradoxical interpretation of man's attitude toward the only objects that are not "for use," namely works of art, in which he said we take "pleasure without any interest."²⁰ For the same operation which establishes man as the "supreme end" permits him "if he can [to] subject the whole of nature to it,"²¹ that is, to degrade nature and the world into mere means, robbing both of their independent dignity. Not even Kant could solve the perplexity or enlighten the blindness of *homo faber* with respect to the problem of meaning without turning to the paradoxical "end in itself," and this perplexity lies in the fact that while only fabrication with its instrumentality is capable of building a world, this same world becomes as worthless as the employed material, a mere means for further ends, if the standards which governed its coming into being are permitted to rule it after its establishment.

Man, in so far as he is *homo faber*, instrumentalizes, and his instrumentalization implies a degradation of all things into means, their loss of intrinsic and independent value, so that eventually not only the objects of fabrication but also "the earth in general and all forces of nature," which clearly came into being without the help of man and have an existence independent of the human world, lose their "value because [they] do not present the reification which comes from work."²² It was for no other reason than this attitude of *homo faber* to the world that the Greeks in their classical period declared the whole field of the arts and crafts, where men work with instruments and do something not for its own sake but

20. Kant's term is "ein Wohlgefallen ohne alles Interesse" (*Kritik der Urteils-kraft* [Cassirer ed.], V, 272).

21. *Ibid.*, p. 515.

22. "Der Wasserfall, wie die Erde überhaupt, wie alle Naturkraft hat keinen Wert, weil er keine in ihm vergegenständlichte Arbeit darstellt" (*Das Kapital*, III [Marx-Engels Gesamtausgabe, Abt. II, Zürich, 1933], 698).

in order to produce something else, to be *banausic*, a term perhaps best translated by "philistine," implying vulgarity of thinking and acting in terms of expediency. The vehemence of this contempt will never cease to startle us if we realize that the great masters of Greek sculpture and architecture were by no means excepted from the verdict.

The issue at stake is, of course, not instrumentality, the use of means to achieve an end, as such, but rather the generalization of the fabrication experience in which usefulness and utility are established as the ultimate standards for life and the world of men. This generalization is inherent in the activity of *homo faber* because the experience of means and end, as it is present in fabrication, does not disappear with the finished product but is extended to its ultimate destination, which is to serve as a use object. The instrumentalization of the whole world and the earth, this limitless devaluation of everything given, this process of growing meaninglessness where every end is transformed into a means and which can be stopped only by making man himself the lord and master of all things, does not directly arise out of the fabrication process; for from the viewpoint of fabrication the finished product is as much an end in itself, an independent durable entity with an existence of its own, as man is an end in himself in Kant's political philosophy. Only in so far as fabrication chiefly fabricates use objects does the finished product again become a means, and only in so far as the life process takes hold of things and uses them for its purposes does the productive and limited instrumentality of fabrication change into the limitless instrumentalization of everything that exists.

It is quite obvious that the Greeks dreaded this devaluation of world and nature with its inherent anthropocentrism—the "absurd" opinion that man is the highest being and that everything else is subject to the exigencies of human life (Aristotle)—no less than they despised the sheer vulgarity of all consistent utilitarianism. To what extent they were aware of the consequences of seeing in *homo faber* the highest human possibility is perhaps best illustrated by Plato's famous argument against Protagoras and his apparently self-evident statement that "man is the measure of all use things (*chrēmata*), of the existence of those that are, and of the non-

existence of those that are not."²³ (Protagoras evidently did not say: "Man is the measure of all things," as tradition and the standard translations have made him say.) The point of the matter is that Plato saw immediately that if one makes man the measure of all things for use, it is man the user and instrumentalizer, and not man the speaker and doer or man the thinker, to whom the world is being related. And since it is in the nature of man the user and instrumentalizer to look upon everything as means to an end—upon every tree as potential wood—this must eventually mean that man becomes the measure not only of things whose existence depends upon him but of literally everything there is.

In this Platonic interpretation, Protagoras in fact sounds like the earliest forerunner of Kant, for if man is the measure of all things, then man is the only thing outside the means-end relationship, the only end in himself who can use everything else as a means. Plato knew quite well that the possibilities of producing use objects and of treating all things of nature as potential use objects are as limitless as the wants and talents of human beings. If one permits the standards of *homo faber* to rule the finished world as they must necessarily rule the coming into being of this world, then *homo faber* will eventually help himself to everything and consider everything that is as a mere means for himself. He will judge every thing as though it belonged to the class of *chrēmata*, of use objects, so that, to follow Plato's own example, the wind will no longer be understood in its own right as a natural force but will be considered exclusively in accordance with human needs for warmth or refreshment—which, of course, means that the wind as something objectively given has been eliminated from human experience. It is because of these consequences that Plato, who at the end of his life recalls once more in the *Laws* the saying of Protagoras, replies with an almost paradoxical formula: not man—who because of his

23. *Theaetetus* 152, and *Cratylus* 385E. In these instances, as well as in other ancient quotations of the famous saying, Protagoras is always quoted as follows: *pantōn chrēmātōn metron estin anthrōpos* (see Diels, *Fragmente der Vorsokratiker* [4th ed.; 1922], frag. B1). The word *chrēmata* by no means signifies "all things," but specifically things used or needed or possessed by men. The supposed Protagorean saying, "Man is the measure of all things," would be rendered in Greek rather as *anthrōpos metron pantōn*, corresponding for instance to Heraclitus' *polemos patrōn* ("strife is the father of all things").

wants and talents wishes to use everything and therefore ends by depriving all things of their intrinsic worth—but "the god is the measure [even] of mere use objects."²⁴

THE EXCHANGE MARKET

Marx—in one of many asides which testify to his eminent historical sense—once remarked that Benjamin Franklin's definition of man as a toolmaker is as characteristic of "Yankeeedom," that is, of the modern age, as the definition of man as a political animal was for antiquity.²⁵ The truth of this remark lies in the fact that the modern age was as intent on excluding political man, that is, man who acts and speaks, from its public realm as antiquity was on excluding *homo faber*. In both instances the exclusion was not a matter of course, as was the exclusion of laborers and the propertyless classes until their emancipation in the nineteenth century. The modern age was of course perfectly aware that the political realm was not always and need not necessarily be a mere function of "society," destined to protect the productive, social side of human nature through governmental administration; but it regarded everything beyond the enforcement of law and order as "idle talk" and "vain-glory." The human capacity on which it based its claim of the natural innate productivity of society was the unquestionable productivity of *homo faber*. Conversely, antiquity knew full well types of human communities in which not the citizen of the *polis* and not the *res publica* as such established and determined the content of the public realm, but where the public life of the ordinary man was restricted to "working for the people" at large, that is, to being a *dēmiourgos*, a worker for the people as distinguished from an *oiketēs*, a household laborer and therefore a slave.²⁶

24. *Laws* 716D quotes the saying of Protagoras textually, except that for the word "man" (*anthrōpos*), "the god" (*ho theos*) appears.

25. *Capital* (Modern Library ed.), p. 358, n. 3.

26. Early medieval history, and particularly the history of the craft guilds, offers a good illustration of the inherent truth in the ancient understanding of laborers as household inmates, as against craftsmen, who were considered workers for the people at large. For the "appearance [of the guilds] marks the second

The hallmark of these non-political communities was that their public place, the *agora*, was not a meeting place of citizens, but a market place where craftsmen could show and exchange their products. In Greece, moreover, it was the ever-frustrated ambition of all tyrants to discourage the citizens from worrying about public affairs, from idling their time away in unproductive *agoreuein* and *politeuesthai*, and to transform the *agora* into an assemblage of shops like the bazaars of oriental despotism. What characterized these market places, and later characterized the medieval cities' trade and craft districts, was that the display of goods for sale was accompanied by a display of their production. "Conspicuous production" (if we may vary Veblen's term) is, in fact, no less a trait of a society of producers than "conspicuous consumption" is a characteristic of a laborers' society.

Unlike the *animal laborans*, whose social life is worldless and herdlike and who therefore is incapable of building or inhabiting a public, worldly realm, *homo faber* is fully capable of having a public realm of his own, even though it may not be a political realm, properly speaking. His public realm is the exchange market, where he can show the products of his hand and receive the esteem which is due him. This inclination to showmanship is closely connected with and probably no less deeply rooted than the "propensity to truck, barter and exchange one thing for another," which, according to Adam Smith, distinguishes man from animal.²⁷ The point is that *homo faber*, the builder of the world and the producer of things, can find his proper relationship to other people only by exchanging his products with theirs, because these products them-

stage in the history of industry, the transition from the family system to the artisan or guild system. In the former there was no class of artisans properly so called . . . because all the needs of a family or other domestic groups . . . were satisfied by the labours of the members of the group itself" (W. J. Ashley, *An Introduction to English Economic History and Theory* [1931], p. 76).

In medieval German, the word *Störer* is an exact equivalent to the Greek word *dēmiourgos*. "Der griechische *dēmiourgos* heisst 'Störer', er geht beim Volk arbeiten, er geht auf die Stör." *Stör* means *dēmos* ("people"). (See Jost Trier, "Arbeit und Gemeinschaft," *Studium Generale*, Vol. III, No. 11 [November, 1950].)

27. He adds rather emphatically: "Nobody ever saw a dog make a fair and deliberate exchange of one bone for another with another dog" (*Wealth of Nations* [Everyman's ed.], I, 12).

selves are always produced in isolation. The privacy which the early modern age demanded as the supreme right of each member of society was actually the guaranty of isolation, without which no work can be produced. Not the onlookers and spectators on the medieval market places, where the craftsman in his isolation was exposed to the light of the public, but only the rise of the social realm, where the others are not content with beholding, judging, and admiring but wish to be admitted to the company of the craftsman and to participate as equals in the work process, threatened the "splendid isolation" of the worker and eventually undermined the very notions of competence and excellence. This isolation from others is the necessary life condition for every mastership which consists in being alone with the "idea," the mental image of the thing to be. This mastership, unlike political forms of domination, is primarily a mastery of things and material and not of people. The latter, in fact, is quite secondary to the activity of craftsmanship, and the words "worker" and "master"—*ouvrier* and *maître*—were originally used synonymously.²⁸

The only company that grows out of workmanship directly is in the need of the master for assistants or in his wish to educate others in his craft. But the distinction between his skill and the unskilled help is temporary, like the distinction between adults and children. There can be hardly anything more alien or even more destructive to workmanship than teamwork, which actually is only a variety of the division of labor and presupposes the "breakdown of operations into their simple constituent motions."²⁹ The team, the multi-

28. E. Levasseur, *Histoire des classes ouvrières et de l'industrie en France avant 1789* (1900): "Les mots maître et ouvrier étaient encore pris comme synonymes au 14^e siècle" (p. 564, n. 2), whereas "au 15^e siècle . . . la maîtrise est devenue un titre auquel il n'est permis à tous d'aspirer" (p. 572). Originally, "le mot ouvrier s'appliquait d'ordinaire à quiconque ouvrait, faisait ouvrage, maître ou valet" (p. 309). In the workshops themselves and outside them in social life, there was no great distinction between the master or the owner of the shop and the workers (p. 313). (See also Pierre Brizon, *Histoire du travail et des travailleurs* [4th ed.; 1926], pp. 39 ff.)

29. Charles R. Walker and Robert H. Guest, *The Man on the Assembly Line* (1952), p. 10. Adam Smith's famous description of this principle in pin-making (*op. cit.*, I, 4 ff.) shows clearly how machine work was preceded by the division of labor and derives its principle from it.

headed subject of all production carried out according to the principle of division of labor, possesses the same togetherness as the parts which form the whole, and each attempt of isolation on the part of the members of the team would be fatal to the production itself. But it is not only this togetherness which the master and workman lacks while actively engaged in production; the specifically political forms of being together with others, acting in concert and speaking with each other, are completely outside the range of his productivity. Only when he stops working and his product is finished can he abandon his isolation.

Historically, the last public realm, the last meeting place which is at least connected with the activity of *homo faber*, is the exchange market on which his products are displayed. The commercial society, characteristic of the earlier stages of the modern age or the beginnings of manufacturing capitalism, sprang from this "conspicuous production" with its concomitant hunger for universal possibilities of truck and barter, and its end came with the rise of labor and the labor society which replaced conspicuous production and its pride with "conspicuous consumption" and its concomitant vanity.

The people who met on the exchange market, to be sure, were no longer the fabricators themselves, and they did not meet as persons but as owners of commodities and exchange values, as Marx abundantly pointed out. In a society where exchange of products has become the chief public activity, even the laborers, because they are confronted with "money or commodity owners," become proprietors, "owners of their labor power." It is only at this point that Marx's famous self-alienation, the degradation of men into commodities, sets in, and this degradation is characteristic of labor's situation in a manufacturing society which judges men not as persons but as producers, according to the quality of their products. A laboring society, on the contrary, judges men according to the functions they perform in the labor process; while labor power in the eyes of *homo faber* is only the means to produce the necessarily higher end, that is, either a use object or an object for exchange, laboring society bestows upon labor power the same higher value it reserves for the machine. In other words, this society is only seemingly more "humane," although it is true that

under its conditions the price of human labor rises to such an extent that it may seem to be more valued and more valuable than any given material or matter; in fact, it only foreshadows something even more "valuable," namely, the smoother functioning of the machine whose tremendous power of processing first standardizes and then devaluates all things into consumer goods.

Commercial society, or capitalism in its earlier stages when it was still possessed by a fiercely competitive and acquisitive spirit, is still ruled by the standards of *homo faber*. When *homo faber* comes out of his isolation, he appears as a merchant and trader and establishes the exchange market in this capacity. This market must exist prior to the rise of a manufacturing class, which then produces exclusively for the market, that is, produces exchange objects rather than use things. In this process from isolated craftsmanship to manufacturing for the exchange market, the finished end product changes its quality somewhat but not altogether. Durability, which alone determines if a thing can exist as a thing and endure in the world as a distinct entity, remains the supreme criterion, although it no longer makes a thing fit for use but rather fit to "be stored up beforehand" for future exchange.³⁰

This is the change in quality reflected in the current distinction between use and exchange value, whereby the latter is related to the former as the merchant and trader is related to the fabricator and manufacturer. In so far as *homo faber* fabricates use objects, he not only produces them in the privacy of isolation but also for the privacy of usage, from which they emerge and appear in the public realm when they become commodities in the exchange market. It has frequently been remarked and unfortunately as frequently been forgotten that value, being "an idea of proportion between the possession of one thing and the possession of another in the conception of man,"³¹ "always means value in exchange."³² For it is only in the exchange market, where everything can be exchanged for something else, that all things, whether they are products of labor

30. Adam Smith, *op. cit.*, II, 241.

31. This definition was given by the Italian economist Abbey Galiani. I quote from Hannah R. Sewall, *The Theory of Value before Adam Smith* (1901) ("Publications of the American Economic Association," 3d Ser., Vol. II, No. 3), p. 92.

32. Alfred Marshall, *Principles of Economics* (1920), I, 8.

or work, consumer goods or use objects, necessary for the life of the body or the convenience of living or the life of the mind, become "values." This value consists solely in the esteem of the public realm where the things appear as commodities, and it is neither labor, nor work, nor capital, nor profit, nor material, which bestows such value upon an object, but only and exclusively the public realm where it appears to be esteemed, demanded, or neglected. Value is the quality a thing can never possess in privacy but acquires automatically the moment it appears in public. This "marketable value," as Locke very clearly pointed out, has nothing to do with "the intrinsic natural worth of anything"³³ which is an objective quality of the thing itself, "outside the will of the individual purchaser or seller; something attached to the thing itself, existing whether he liked it or not, and that he ought to recognize."³⁴ This intrinsic worth of a thing can be changed only through the change of the thing itself—thus one ruins the worth of a table by depriving it of one of its legs—whereas "the marketable value" of a commodity is altered by "the alteration of some proportion which that commodity bears to something else."³⁵

Values, in other words, in distinction from things or deeds or ideas, are never the products of a specific human activity, but come into being whenever any such products are drawn into the ever-changing relativity of exchange between the members of society.

33. "Considerations upon the Lowering of Interest and Raising the Value of Money," *Collected Works* (1801), II, 21.

34. W. J. Ashley (*op. cit.*, p. 140) remarks that "the fundamental difference between the medieval and modern point of view . . . is that, with us, value is something entirely subjective; it is what each individual cares to give for a thing. With Aquinas it was something objective." This is true only to an extent, for "the first thing upon which the medieval teachers insist is that value is not determined by the intrinsic excellence of the thing itself, because, if it were, a fly would be more valuable than a pearl as being intrinsically more excellent" (George O'Brien, *An Essay on Medieval Economic Teaching* [1920], p. 109). The discrepancy is resolved if one introduces Locke's distinction between "worth" and "value," calling the former *valor naturalis* and the latter *pretium* and also *valor*. This distinction exists, of course, in all but the most primitive societies, but in the modern age the former disappears more and more in favor of the latter. (For medieval teaching, see also Slater, "Value in Theology and Political Economy," *Irish Ecclesiastical Record* [September, 1901].)

35. Locke, *Second Treatise of Civil Government*, sec. 22.

Nobody, as Marx rightly insisted, seen "in his isolation produces values," and nobody, he could have added, in his isolation cares about them; things or ideas or moral ideals "become values only in their social relationship."³⁶

The confusion in classical economics,³⁷ and the worse confusion arising from the use of the term "value" in philosophy, were originally caused by the fact that the older word "worth," which we still find in Locke, was supplanted by the seemingly more scientific term, "use value." Marx, too, accepted this terminology and, in line with his repugnance to the public realm, saw quite consistently in the change from use value to exchange value the original sin of capitalism. But against these sins of a commercial society, where indeed the exchange market is the most important public place and where therefore every thing becomes an exchangeable value, a commodity, Marx did not summon up the "intrinsic" objective worth of the thing in itself. In its stead he put the function things have in the consuming life process of men which knows neither objective and intrinsic worth nor subjective and socially determined value. In the socialist equal distribution of all goods to all who labor, every tangible thing dissolves into a mere function in the regeneration process of life and labor power.

However, this verbal confusion tells only one part of the story. The reason for Marx's stubborn retention of the term "use value," as well as for the numerous futile attempts to find some objective source—such as labor, or land, or profit—for the birth of values, was that nobody found it easy to accept the simple fact that no "absolute value" exists in the exchange market, which is the proper sphere for values, and that to look for it resembled nothing so much as the attempt to square the circle. The much deplored devaluation of all things, that is, the loss of all intrinsic worth, begins with their transformation into values or commodities, for from this moment on they exist only in relation to some other thing which can

36. *Das Kapital*, III, 689 (*Marx-Engels Gesamtausgabe*, Part II [Zürich, 1933]).

37. The clearest illustration of the confusion is Ricardo's theory of value especially his desperate belief in an absolute value. (The interpretations in Gunnar Myrdal, *The Political Element in the Development of Economic Theory* [1953], pp. 66 ff., and Walter A. Weisskopf, *The Psychology of Economics* [1955], ch. 3, are excellent.)

be acquired in their stead. Universal relativity, that a thing exists only in relation to other things, and loss of intrinsic worth, that nothing any longer possesses an "objective" value independent of the ever-changing estimations of supply and demand, are inherent in the very concept of value itself.³⁸ The reason why this development, which seems inevitable in a commercial society, became a deep source of uneasiness and eventually constituted the chief problem of the new science of economics was not even relativity as such, but rather the fact that *homo faber*, whose whole activity is determined by the constant use of yardsticks, measurements, rules, and standards, could not bear the loss of "absolute" standards or yardsticks. For money, which obviously serves as the common denominator for the variety of things so that they can be exchanged for each other, by no means possesses the independent and objective existence, transcending all uses and surviving all manipulation, that the yardstick or any other measurement possesses with regard to the things it is supposed to measure and to the men who handle them.

It is this loss of standards and universal rules, without which no world could ever be erected by man, that Plato already perceived in the Protagorean proposal to establish man, the fabricator of things, and the use he makes of them, as their supreme measure. This shows how closely the relativity of the exchange market is connected with the instrumentality arising out of the world of the craftsman and the experience of fabrication. The former, indeed, develops without break and consistently from the latter. Plato's reply, however—not man, a "god is the measure of all things"

38. The truth of Ashley's remark, which we quoted above (n. 34), lies in the fact that the Middle Ages did not know the exchange market, properly speaking. To the medieval teachers the value of a thing was either determined by its worth or by the objective needs of men—as for instance in Buridan: *valor rerum aestimatur secundum humanam indigentiam*—and the "just price" was normally the result of the common estimate, except that "on account of the varied and corrupt desires of man, it becomes expedient that the medium should be fixed according to the judgment of some wise men" (Gerson *De contractibus* i. 9, quoted from O'Brien, *op. cit.*, pp. 104 ff.). In the absence of an exchange market, it was inconceivable that the value of one thing should consist solely in its relationship or proportion to another thing. The question, therefore, is not so much whether value is objective or subjective, but whether it can be absolute or indicates only the relationship between things.

—would be an empty, moralizing gesture if it were really true, as the modern age assumed, that instrumentality under the disguise of usefulness rules the realm of the finished world as exclusively as it rules the activity through which the world and all things it contains came into being.

23

THE PERMANENCE OF THE WORLD AND THE WORK OF ART

Among the things that give the human artifice the stability without which it could never be a reliable home for men are a number of objects which are strictly without any utility whatsoever and which, moreover, because they are unique, are not exchangeable and therefore defy equalization through a common denominator such as money; if they enter the exchange market, they can only be arbitrarily priced. Moreover, the proper intercourse with a work of art is certainly not "using" it; on the contrary, it must be removed carefully from the whole context of ordinary use objects to attain its proper place in the world. By the same token, it must be removed from the exigencies and wants of daily life, with which it has less contact than any other thing. Whether this uselessness of art objects has always pertained or whether art formerly served the so-called religious needs of men as ordinary use objects serve more ordinary needs does not enter the argument. Even if the historical origin of art were of an exclusively religious or mythological character, the fact is that art has survived gloriously its severance from religion, magic, and myth.

Because of their outstanding permanence, works of art are the most intensely worldly of all tangible things; their durability is almost untouched by the corroding effect of natural processes, since they are not subject to the use of living creatures, a use which, indeed, far from actualizing their own inherent purpose—as the purpose of a chair is actualized when it is sat upon—can only destroy them. Thus, their durability is of a higher order than that which all things need in order to exist at all; it can attain permanence throughout the ages. In this permanence, the very stability of the human artifice, which, being inhabited and used by mortals,

can never be absolute, achieves a representation of its own. Nowhere else does the sheer durability of the world of things appear in such purity and clarity, nowhere else therefore does this thing-world reveal itself so spectacularly as the non-mortal home for mortal beings. It is as though worldly stability had become transparent in the permanence of art, so that a premonition of immortality, not the immortality of the soul or of life but of something immortal achieved by mortal hands, has become tangibly present, to shine and to be seen, to sound and to be heard, to speak and to be read.

The immediate source of the art work is the human capacity for thought, as man's "propensity to truck and barter" is the source of exchange objects, and as his ability to use is the source of use things. These are capacities of man and not mere attributes of the human animal like feelings, wants, and needs, to which they are related and which often constitute their content. Such human properties are as unrelated to the world which man creates as his home on earth as the corresponding properties of other animal species, and if they were to constitute a man-made environment for the human animal, this would be a non-world, the product of emanation rather than of creation. Thought is related to feeling and transforms its mute and inarticulate despondency, as exchange transforms the naked greed of desire and usage transforms the desperate longing of needs—until they all are fit to enter the world and to be transformed into things, to become reified. In each instance, a human capacity which by its very nature is world-open and communicative transcends and releases into the world a passionate intensity from its imprisonment within the self.

In the case of art works, reification is more than mere transformation; it is transfiguration, a veritable metamorphosis in which it is as though the course of nature which wills that all fire burn to ashes is reverted and even dust can burst into flames.³⁹ Works of

39. The text refers to a poem by Rilke on art, which under the title "Magic," describes this transfiguration. It reads as follows: "Aus unbeschreiblicher Verwandlung stammen / solche Gebilde—: Fühl! und glaub! / Wir leidens oft: zu Asche werden Flammen, / doch, in der Kunst: zur Flamme wird der Staub. / Hier ist Magie. In das Bereich des Zaubers / scheint das gemeine Wort hinaufgestuft . . . / und ist doch wirklich wie der Ruf des Taubers, / der nach der unsichtbaren Taube ruft" (in *Aus Taschen-Büchern und Merk-Blättern* [1950]).

art are thought things, but this does not prevent their being things. The thought process by itself no more produces and fabricates tangible things, such as books, paintings, sculptures, or compositions, than usage by itself produces and fabricates houses and furniture. The reification which occurs in writing something down, painting an image, modeling a figure, or composing a melody is of course related to the thought which preceded it, but what actually makes the thought a reality and fabricates things of thought is the same workmanship which, through the primordial instrument of human hands, builds the other durable things of the human artifice.

We mentioned before that this reification and materialization, without which no thought can become a tangible thing, is always paid for, and that the price is life itself: it is always the "dead letter" in which the "living spirit" must survive, a deadness from which it can be rescued only when the dead letter comes again into contact with a life willing to resurrect it, although this resurrection of the dead shares with all living things that it, too, will die again. This deadness, however, though somehow present in all art and indicating, as it were, the distance between thought's original home in the heart or head of man and its eventual destination in the world, varies in the different arts. In music and poetry, the least "materialistic" of the arts because their "material" consists of sounds and words, reification and the workmanship it demands are kept to a minimum. The young poet and the musical child prodigy can attain a perfection without much training and experience—a phenomenon hardly matched in painting, sculpture, or architecture.

Poetry, whose material is language, is perhaps the most human and least worldly of the arts, the one in which the end product remains closest to the thought that inspired it. The durability of a poem is produced through condensation, so that it is as though language spoken in utmost density and concentration were poetic in itself. Here, remembrance, *Mnēmosynē*, the mother of the muses, is directly transformed into memory, and the poet's means to achieve the transformation is rhythm, through which the poem becomes fixed in the recollection almost by itself. It is this closeness to living recollection that enables the poem to remain, to retain its durability, outside the printed or the written page, and though the "quality" of a poem may be subject to a variety of

standards, its "memorability" will inevitably determine its durability, that is, its chance to be permanently fixed in the recollection of humanity. Of all things of thought, poetry is closest to thought, and a poem is less a thing than any other work of art; yet even a poem, no matter how long it existed as a living spoken word in the recollection of the bard and those who listened to him, will eventually be "made," that is, written down and transformed into a tangible thing among things, because remembrance and the gift of recollection, from which all desire for imperishability springs, need tangible things to remind them, lest they perish themselves.⁴⁰

Thought and cognition are not the same. Thought, the source of art works, is manifest without transformation or transfiguration in all great philosophy, whereas the chief manifestation of the cognitive processes, by which we acquire and store up knowledge, is the sciences. Cognition always pursues a definite aim, which can be set by practical considerations as well as by "idle curiosity"; but once this aim is reached, the cognitive process has come to an end. Thought, on the contrary, has neither an end nor an aim outside itself, and it does not even produce results; not only the utilitarian philosophy of *homo faber* but also the men of action and the lovers of results in the sciences have never tired of pointing out how entirely "useless" thought is—as useless, indeed, as the works of art it inspires. And not even to these useless products can thought lay claim, for they as well as the great philosophic systems can hardly be called the results of pure thinking, strictly speaking, since it is precisely the thought process which the artist or writing philosopher must interrupt and transform for the materializing reification

40. The idiomatic "make a poem" or *faire des vers* for the activity of the poet already relates to this reification. The same is true for the German *dichten*, which probably comes from the Latin *dictare*: "das ausgesonnene geistig Geschaffene niederschreiben oder zum Niederschreiben vorsagen" (Grimm's *Wörterbuch*); the same would be true if the word were derived, as is now suggested by the *Etymologisches Wörterbuch* (1951) of Kluge/Görze, from *tichen*, an old word for *schaffen*, which is perhaps related to the Latin *ingere*. In this case, the poetic activity which produces the poem before it is written down is also understood as "making." Thus Democritus praised the divine genius of Homer, who "framed a cosmos out of all kinds of words"—*επεὶν κόσμον ἐκτεκνᾷτο πάντοϊον* (Diels, *op. cit.*, B21). The same emphasis on the craftsmanship of poets is present in the Greek idiom for the art of poetry: *tektōnes hymnōn*.

of his work. The activity of thinking is as relentless and repetitive as life itself, and the question whether thought has any meaning at all constitutes the same unanswerable riddle as the question for the meaning of life; its processes permeate the whole of human existence so intimately that its beginning and end coincide with the beginning and end of human life itself. Thought, therefore, although it inspires the highest worldly productivity of *homo faber*, is by no means his prerogative; it begins to assert itself as his source of inspiration only where he overreaches himself, as it were, and begins to produce useless things, objects which are unrelated to material or intellectual wants, to man's physical needs no less than to his thirst for knowledge. Cognition, on the other hand, belongs to all, and not only to intellectual or artistic work processes; like fabrication itself, it is a process with a beginning and end, whose usefulness can be tested, and which, if it produces no results, has failed, like a carpenter's workmanship has failed when he fabricates a two-legged table. The cognitive processes in the sciences are basically not different from the function of cognition in fabrication; scientific results produced through cognition are added to the human artifice like all other things.

Both thought and cognition, furthermore, must be distinguished from the power of logical reasoning which is manifest in such operations as deductions from axiomatic or self-evident statements, subsumption of particular occurrences under general rules, or the techniques of spinning out consistent chains of conclusions. In these human faculties we are actually confronted with a sort of brain power which in more than one respect resembles nothing so much as the labor power the human animal develops in its metabolism with nature. The mental processes which feed on brain power we usually call intelligence, and this intelligence can indeed be measured by intelligence tests as bodily strength can be measured by other devices. Their laws, the laws of logic, can be discovered like other laws of nature because they are ultimately rooted in the structure of the human brain, and they possess, for the normally healthy individual, the same force of compulsion as the driving necessity which regulates the other functions of our bodies. It is in the structure of the human brain to be compelled to admit that two and two equal four. If it were true that man is an *animal rationale* in

the sense in which the modern age understood the term, namely, an animal species which differs from other animals in that it is endowed with superior brain power, then the newly invented electronic machines, which, sometimes to the dismay and sometimes to the confusion of their inventors, are so spectacularly more "intelligent" than human beings, would indeed be *homunculi*. As it is, they are, like all machines, mere substitutes and artificial improvers of human labor power, following the time-honored device of all division of labor to break down every operation into its simplest constituent motions, substituting, for instance, repeated addition for multiplication. The superior power of the machine is manifest in its speed, which is far greater than that of human brain power; because of this superior speed, the machine can dispense with multiplication, which is the pre-electronic technical device to speed up addition. All that the giant computers prove is that the modern age was wrong to believe with Hobbes that rationality, in the sense of "reckoning with consequences," is the highest and most human of man's capacities, and that the life and labor philosophers, Marx or Bergson or Nietzsche, were right to see in this type of intelligence, which they mistook for reason, a mere function of the life process itself, or, as Hume put it, a mere "slave of the passions." Obviously, this brain power and the compelling logical processes it generates are not capable of erecting a world, are as worldless as the compulsory processes of life, labor, and consumption.

One of the striking discrepancies in classical economics is that the same theorists who prided themselves on the consistency of their utilitarian outlook frequently took a very dim view of sheer utility. As a rule, they were well aware that the specific productivity of work lies less in its usefulness than in its capacity for producing durability. By this discrepancy, they tacitly admit the lack of realism in their own utilitarian philosophy. For although the durability of ordinary things is but a feeble reflection of the permanence of which the most worldly of all things, works of art, are capable, something of this quality—which to Plato was divine because it approaches immortality—is inherent in every thing as a thing, and it is precisely this quality or the lack of it that shines forth in its shape and makes it beautiful or ugly. To be sure, an ordinary use object is not and should not be intended to be beautiful; yet what-

ever has a shape at all and is seen cannot help being either beautiful, ugly, or something in-between. Everything that is, must appear, and nothing can appear without a shape of its own; hence there is in fact no thing that does not in some way transcend its functional use, and its transcendence, its beauty or ugliness, is identical with appearing publicly and being seen. By the same token, namely, in its sheer worldly existence, every thing also transcends the sphere of pure instrumentality once it is completed. The standard by which a thing's excellence is judged is never mere usefulness, as though an ugly table will fulfil the same function as a handsome one, but its adequacy or inadequacy to what it should look like, and this is, in Platonic language, nothing but its adequacy or inadequacy to the *eidos* or *idea*, the mental image, or rather the image seen by the inner eye, that preceded its coming into the world and survives its potential destruction. In other words, even use objects are judged not only according to the subjective needs of men but by the objective standards of the world where they will find their place, to last, to be seen, and to be used.

The man-made world of things, the human artifice erected by *homo faber*, becomes a home for mortal men, whose stability will endure and outlast the ever-changing movement of their lives and actions, only inasmuch as it transcends both the sheer functionalism of things produced for consumption and the sheer utility of objects produced for use. Life in its non-biological sense, the span of time each man has between birth and death, manifests itself in action and speech, both of which share with life its essential futility. The "doing of great deeds and the speaking of great words" will leave no trace, no product that might endure after the moment of action and the spoken word has passed. If the *animal laborans* needs the help of *homo faber* to ease his labor and remove his pain, and if mortals need his help to erect a home on earth, acting and speaking men need the help of *homo faber* in his highest capacity, that is, the help of the artist, of poets and historiographers, of monument-builders or writers, because without them the only product of their activity, the story they enact and tell, would not survive at all. In order to be what the world is always meant to be, a home for men during their life on earth, the human artifice must be a place fit for action and speech, for activities not only entirely

The Human Condition

useless for the necessities of life but of an entirely different nature from the manifold activities of fabrication by which the world itself and all things in it are produced. We need not choose here between Plato and Protagoras, or decide whether man or a god should be the measure of all things; what is certain is that the measure can be neither the driving necessity of biological life and labor nor the utilitarian instrumentalism of fabrication and usage.

CHAPTER V



Action

All sorrows can be borne if you put them into a story or tell a story about them.

ISAK DINESEN

Nam in omni actione principaliter intenditur ab agente, sive necessitate naturae sive voluntarie agat, propriam similitudinem explicare; unde fit quod omne agens, in quantum huiusmodi, delectatur, quia, cum omne quod est appetat suum esse, ac in agendo agentis esse modammodo ampliatur, sequitur de necessitate delectatio. . . . Nihil igitur agit nisi tale existens quale patiens fieri debet.

(For in every action what is primarily intended by the doer, whether he acts from natural necessity or out of free will, is the disclosure of his own image. Hence it comes about that every doer, in so far as he does, takes delight in doing; since everything that desires its own being, and since in action the being of the doer is somehow intensified, delight necessarily follows. . . . Thus, nothing acts unless [by acting] it makes patent its latent self.)

DANTE

24

THE DISCLOSURE OF THE AGENT IN SPEECH AND ACTION

Human plurality, the basic condition of both action and speech, has the twofold character of equality and distinction. If men were not equal, they could neither understand each other and those who came before them nor plan for the future and foresee the needs of those who will come after them. If men were not distinct, each human being distinguished from any other who is, was, or will ever be, they would need neither speech nor action to