

WORK, PLAY AND TECHNOLOGY

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This paper has three purposes. First, it intends to make a workable distinction between play and work proper and to indicate which groups in industrial society may be seen as "playing for a living." Second, the paper, following Heidegger and others, attempts to give an account of the dialectically associated complex of attitudes and meanings which characterize the technological conceptions of man, being and value. Finally, it suggests that, for the most part, those in industrial society who play at their jobs, play at the creation of a technological world. In doing this, the managerial elite who can properly be said to play for a living, paradoxically constructs the conditions which preclude other members of society from overcoming their alienation from their own process of labor. That is, the characteristic product of modern technological play is a technological world which assures that only a small portion of the population will be in a position to go beyond the alienated condition of labor:

Work proper can be distinguished from play through two different criteria. Work, in the modern sense, is performed solely for the sake of the product produced and consumed, and not for the sake of the activity itself, as is the case with play. Work proper involves mostly extrinsic satisfaction as opposed to intrinsic satisfaction. Further, the activity involved in work proper produces only the object produced. The activity itself is not a product of the producer, as is the case in play. On the basis of these criteria it can be shown that the managerial elites in technological societies engage, by and large, in play rather than work proper. The intrinsic satisfaction that this group finds in its own labor, however, is technological. That is, that for the sake of which their products are produced is production itself and the activity of this production is valued

also for the sake of itself *as* production. In this circle of production humanity itself, both one's own and the humanity of others, comes to be seen as both the ultimate means of production and the processless consumer of production but not as the aim or foundation of production.

I.

Why do people work? People work in order to live, to eat, to survive. This is immediately apparent and self-evident. This self-evident fact, however, is still an interesting one. After all, what is work? Work is a human activity which takes existing conditions and transforms them so that the new conditions more completely satisfy our needs and desires. Work, or labor, "goes beyond" what is for the sake of a possible future. In working, the human being remakes the world in terms of some desired end, so that that end can be realized. If, for example, I am hungry, I desire food. But unfortunately, I live at a place and a time where there is little fruit to be picked, where it is difficult to catch game, and where, in general, there is no food naturally available. If I were an animal, it is likely that I would die. Being human, however, I transform the natural environment by planting seeds where there naturally are no seeds, bringing water to where there is no water, pulling up other plants for which I have no use. In short, I satisfy my natural desire for food by becoming a farmer. My labor *is* the activity of changing the world so that I can use it. The product of my work is a humanly produced object or state that fulfills my requirements. Quite literally, I work in order to live.

In the complex circumstances in which we live, this simple model of the intimate relations among work, the product produced, and the satisfaction of desire is not directly applicable. The world has been so greatly transformed by generations of human labor that these relations have become indirect and socially mediated. Very few of us directly produces the means of his subsistence. Rather, society as a whole works together in an incredibly complex and interrelated fashion. The given conditions are now not only natural, but also historical products. The products of society's labor do not only provide for physical existence, but in a sophisticated way fulfill a variety of needs, some natural, but many of which are themselves the product of human historical labor. Further, there is no direct connection among the act of laboring, the product made, and the conditions of survival. If a worker at a textile mill received only what he produced, he might be very warm, but he would also be very hungry. If I received only what I produced, I'd be both hungry and cold. Clearly, in one way or another, society takes away the immediate product of our

labor and replaces it with an abstract token, money, which can then be used to obtain what we need. In fact, the indirect monetary relation between labor and satisfaction is one of man's most impressive products, as it allows for an enormous multiplication of humanity's ability to transform and recreate the world. But the basic model remains appropriate. We, as well as the primitive farmer, still work so that we can change the world in order to live more successfully and comfortably.

This notion of work, however, is incomplete. There is a very real sense in which all human activities, and not only work, are negations of present conditions in terms of a potential, and desired, future. A child playing at putting together a puzzle, for example, can also be understood according to this same model. He is confronted with a variety of pieces, all separate from each other. If he understands that he is dealing with a puzzle, the child *sees* the pieces as demanding to be put together. The present situation gets its meaning from the goal that the child is moving towards. The act of playing with the puzzle *is* the movement from the present to future; the rearrangement of the pieces is the re-creation of the world for the sake of a goal. A child experiences and interacts with his environment primarily in the mode of negation of what is, through the movement of desire towards a future. Similarly, the activity of an author writing a novel, or an artist painting a picture, can be comprehended according to the same model. The painter begins with canvas and paints, and a more or less confused idea of what it is he would like to draw. The act of painting transforms the relation between paint and canvas, it goes beyond the initial conditions towards a new reality. Further, as anyone who has ever written or painted knows, the act of creation *also* transforms the indefinite idea of the work of art which precedes the actual creation. The act of creation *itself* makes the idea concrete and determinate, where it had been abstract and indefinite. The movement of the idea to actual definiteness is not added on to the process of painting. Rather, the act of painting *is* the movement from abstract present conception to fully embodied realization. Here too, we find that same conceptual scheme appropriate. The act of creation is itself a movement from present to future through human activity for the sake of a goal which is realized by that activity.

The fact that his model of human activity is applicable not only to labor but also to play, artistic production, and many if not all other forms of human enterprise, indicates the central role of re-creation of the environment for the sake of the future in human being. This fact, however, also signifies a second truth. It is through such future-oriented activity that man comes to find and see himself in the world. That is, as a self-conscious being, man is conscious of himself *in* the world. The world, which for us is primarily social and produced, mirrors man to himself; in

being conscious of the humanly constructed environment, we are also conscious of ourselves as the ground and foundation of that environment. The world we know is the product of human activity, and in knowing and being in that world we come to know that human activity in itself. The child at play comes to see *who* he is, through seeing the result of what he does. There are certainly forms of human and animal behavior which do not know themselves, which are not self-conscious, but in so far as human being is self-conscious, it depends upon a recognition of our activity in the object produced. In a sense, this recognition of ourselves in our constructed object is our specifically human characteristic. Given this, labor itself (in the broadest sense which includes play, artistic creation, understanding, etc.), as the movement towards the future through a negation of the present, is that through which man becomes man. It is not only true that man creates the means of his survival through labor. Only in and through such labor can man be for-himself, that is, man. We work in order to live, but our transformation of the present towards a future, our work, is also our life itself, it is what we are.

We have not yet distinguished labor in this broad generic sense which includes play etc., from work in the specific sense, however. We all know that there are significant differences between play, art, understanding, and work proper. But what are those differences? If we contrast work proper with play, certain distinguishing characteristics of work itself become immediately apparent. If we go back to the example of the child with a puzzle we can note the first major difference between work and play. The child does not put the puzzle together solely for the sake of seeing the completed picture. The goal of the project, the completed puzzle, is not the only source of value for the child. Rather, the activity is also performed for its own sake. If the goal were the only thing desired, then it would make no difference to the child whether he made the puzzle or if it were made by his parent. In fact, of course, the child doing it himself makes all of the difference. Unless the child is engaged in manipulating the parent, in which case the primary activity is the negation of the present parent for the sake of a controlled parent and not the making of the puzzle, the child at play is interested in *making* the puzzle as well as having it made. In the light of our previous reflections on self-consciousness, this makes perfect sense. It is only through the child's own activity that he can come to realize himself in the world. Hence, the puzzle is of interest only in so far as it is a possible region for the activity of the child himself. The child sees himself in, and desires, the activity itself, as well as the product of the activity. In the normal work context of not only our society but of many historical societies, this is clearly not the case for most people. It is more or less irrelevant to the primitive farmer or the mill worker whether

or not he desires the activity of laboring itself. It is the physical necessity of obtaining the goal, the means of survival and enjoyment, which determines the laboring activity and not the desire for the activity for its own sake. The labor is performed under the compulsion to obtain the necessary or desired object.

There is a second fundamental way in which play is distinguished from what we have come to accept as the normal work situation. The child at play or the artist in his studio finds himself in the finished product. Even if what is produced is determined by the community involved, the manner of completing the task is produced by the actor. The actor produces not only the end product, but also determines the strategy and techniques through which the goal is accomplished. The producer produces his activity itself through solving the problem which has been set for him. Because of this the producer possesses the finished product in a way other than physical ownership. A painter who is commissioned to paint a portrait, for example, is given a set project which he has not determined. He must paint a portrait of *this* woman. The one who commissioned the portrait receives the finished painting and in exchange the painter receives money through which he can continue to eat. In another sense, however, the painting is still the painter's. As the artist determined the manner and nature of the activity through which he fulfilled his task, and thus determined the nature of the painting, he sees himself in the painting, regardless of who possesses it and can use it. In seeing the *Mona Lisa* we see Leonardo. The painting *is* Leonardo's existence as object for us and for himself. Since the artist determines the manner of the activity, the end of the activity realizes the artist in the objective world. This is true in the full sense only because the artist produces the nature of his activity, as well as what that activity produces. In the standard work context, however, this is clearly not the case. By and large a modern factory worker, for example, is not only given a fixed task to accomplish through his labor, he is also given the manner in which it is to be accomplished. Either other human beings or the exigencies of production itself determine how the product is produced. Instead of solving the problem himself, and thus producing the activity as well as the product, the modern worker produces merely the product. The product thus is not his in a double sense. He neither owns it, nor can he see himself in it. A Ford auto worker sees very little of himself in a Ford car. In exchange for his labor the worker is given money, the ability to survive and enjoy, that is, to consume.

Thus most work is distinguished from other forms of human activity in at least two significant ways. First, in work proper the work is performed solely for the sake of the product, and not for the activity itself. Second, in most forms of modern work, the laboring activity itself, what is done

and how it is done, is not determined by the worker. Because of this the worker does not see himself in the product, he is not self-conscious in his product. Rather, the worker sees himself solely in his being as consumer. Instead of being what he does, he is what he eats. There is clearly a good reason why work has taken these forms. It has been discovered, indeed this discovery itself is a fundamental human product, that the efficient production of the goods that are necessary for physical survival and enjoyment requires the massive organization of human labor. In such organized production, efficiency demands a hierarchical structure of activity, in which what is done and how it is done is ordinarily determined by someone other than the person who actually does the work. Only thus, apparently, can the primary goal, survival and enjoyment in consumption, be accomplished. The means for attaining this goal, however, result in the alienation of the worker from his work activity and from his own self-consciousness in the object produced. The worker finds himself neither in his activity, which is not done for its own sake, nor in the product, which is not his product. He finds himself only in the object consumed, in his leisure. Instead of man as producer we find man as consumer.

This alienation of man from the laboring process is certainly not a new phenomenon. The alienation of man from his laboring activity is probably as old as man himself. (Note God telling Adam that he must labor with the sweat of his brow). While craft labor and, to some extent, some forms of agriculture preserved man's initiative in regard to the manner of production, alienation from the manner of production is at least as old as mass organization labor. These forms of alienation, however, present a peculiar problem for the industrial twentieth century. When Marx and Hegel analyzed the process of labor in the nineteenth century, they were certainly aware of the alienation from the laboring process which I have described. The condition of the nineteenth and all previous centuries, however, demanded that primary attention be paid to the physical alienation of the product. The worker labored all day, produced miraculous quantities of goods, but, paradoxically, still did not have enough to eat. Marx clearly could not and did not conceive the enormous multiplication of productive power in the twentieth century, however. While it is still the case that there are great and remarkable differences between the consumptive power of the rich and poor in our society, the expansion of production itself has generally led to an amelioration of the physical condition of the worker in industrial nations. This general expansion, however, has also led to the amelioration of alienation from the laboring process. This gain, on the other hand, has been shared quite unequally. Two new classes now confront each other, and they only roughly correspond to the classes of rich and poor. On one side stand the industrial workers, service and

secretarial classes, who do not perform their labor for its own sake, but only for money. Further, the manner of this labor is determined by the machine and their superiors. As a consequence, they can not be self-conscious in the product of this labor, but only in the consumption of the product. On the other side stands the managerial, bureaucratic, and professional classes. It is remarkable that the conditions of labor for these classes only partially, if at all, fulfill the conditions for work proper that we have delineated. No matter how much I may or may not resent teaching a class or writing this paper, the activity involved in doing these tasks, doing philosophy, is desired for its own sake as well as for the money it earns me. Further, to a considerable extent the work I do, how I do it, is determined by myself. I thus see myself in my products, my students, and my papers. In a serious sense, as members of the managerial and professional classes, people do not work at all in the same way a mill worker does. Rather, such people play. It is serious play, as physical survival depends upon it, and in many cases it degenerates into work proper, but what this class does is not alienated in the same way as what is done by the other class.

The expansion of the possibilities for fulfillment in the laboring process, no matter how slight, in the twentieth century, has generated a severe problem. The same conditions which allow for the overcoming of alienation from the laboring process among some groups in our society, has equally necessitated a deepening of this form of alienation among the other members of society. Industry is so organized and mechanized that little interest in or initiative towards his labor is possible for the worker. At the same time, the worker sees a fairly large class of people for whom this is not the case. It is interesting that many of the workers' movements in the twentieth century against society as it is already structured, have not been solely or even primarily economic in character. Rather, in many cases the basis for the industrial workers' resentment towards other classes has been social. The phenomenon of many blue-collar laborers voting for George Wallace, for example, is only marginally related to economic issues. It is clear that the class antagonism that Wallace represented is focused upon the bureaucrats, the pointy-headed intellectuals, and the paper pushers, but not at the rich as such. Similarly, the characteristic attacks upon managerial elites that have marked such widely diversified movements as Nazism and Maoism demonstrate the same type of class resentments. The focus of worker distrust and dislike is precisely those people who are perceived as not being alienated from their labor. This distrust, significantly enough, is often compatible with the desire by these same workers that their children join the managerial elite.

If my analysis of work has been accurate, this resentment has two

causes or motivating factors. First, it is quite natural for people who work for extrinsic satisfaction, solely for the sake of consumption, to envy and thus resent those whose life activity is "meaningful," that is, those who perform their activities for their own sake and so as to realize themselves in their labor. Second, the workers perceive this other group in society, correctly, as determining the direction, meaning, and value of the workers' labor. What is produced is determined by executives and a nameless public. How it is produced is determined by technologists and engineers. Perhaps most importantly, the human value of the laboring process itself, work, is determined, *even for the worker himself*, by those who do not work in the same sense he does, by the intellectuals and those who work in the media. The worker comes to accept the significance given to his labor by the evaluation of it by the managerial class. The worker, for himself, is as he is an object for the manager. In so far as the worker's labor is solely for the sake of consumption, the worker is tied to his merely natural existence as living thing. In this respect he occupies a position analogous to the slave in Hegel's master-slave dialectic. As with Hegel's slave, the modern worker has been unable to free himself from the conditions of physical survival; his labor merely reproduces his bonds. In that the worker exists for the sake of consumption, he appears for the manager as something not quite human, that is, not self-conscious, but only as thing, as instrument of production. The worker, for the manager, is instrument of production in a double sense. He is both directly the means of production (he makes the goods) and indirectly the occasion of production in his role as consumer. (Marx indicates this aspect of consumption as occasion of production in the *Introduction to a Critique of Political Economy*). For the worker, on the other hand, the manager appears as pure subjectivity, as the ability to control and evaluate nature, both physical nature and the worker's own nature. As technological elite, the manager conditions both what is produced and how it is produced, that is, he conditions the worker's activity. As social superior, the manager identifies and determines what is to be taken as "meaningful" human labor. Thus, as object for managerial subject, the worker comes to see himself as thingly consumer. But, just as with Hegel's slave, the modern worker is also a self-conscious human being. In this respect the worker is in a position to evaluate the evaluator as "inhuman." That is, the manager is seen by the worker to be inhuman in that the manager does not recognize the conditions of his own objectivity, the labor of the workers. The workers thus have a double and alienated self-consciousness. He is both merely thingly consumer, for himself, and equally the resentful consciousness of the manager as parasite. In this second respect, the worker is self-consciously the foundation of society, but this is only dimly and implicitly

understood in the worker's resentment of the manager. For these reasons, the worker becomes alienated not only from the labor process itself but also from those who direct that process, those who are not alienated from their own process of labor.

II.

What is technology? Literally it is the *logos* of *technē*. We know what *logos* has come to mean from words such as biology, or geology. Generally, it now means "the study of." Initially, the Greek word *logos* meant "word," "principle," "statement." Without getting into the origin of our modern usage, we can see that *logos* refers to the principles and the study of the principles of an area. But technology is the study of the principles of *technē*. *Technē*, to quote Heidegger, is "creating, building in the sense of a deliberate producing."¹ Technology, then, is the study of the principles through which results or things are produced by human activity. Having said this, however, we have said very little. We must investigate western man's thinking about technology. One way in which we may approach this investigation is by considering what the principles of *technē*, or production, have been taken to be.

From the time of Aristotle, it has been sound common sense to conceive of human production in terms of two interrelated distinctions. I make something, for example, a pair of shoes. Does this mean that I make the shoes out of nothing? Is there no thing present in the world before I make the shoes and out of which I construct the shoes? Clearly this is not the case. Perhaps God creates *ex nihilo*, but man's production is always construction, a making out of something which is already in the world. Before there were the shoes, there were leather and nails. But what is the relation between the leather and the shoes? The leather does not stop being leather once it is made into a pair of shoes. Rather the shoes are said to be made out of leather; no leather, no shoes. But something has changed. A sheet of leather and a group of nails are not a pair of shoes. What distinguishes the shoes from the materials out of which they are made is not any change in the material, but rather a difference in the manner in which the material is arranged. A shoe is different from a collection of nails and leather because the shoe has the form which it has, the leather does not. Thus to produce something is to shape materials into a specifically different form. The form is added to the matter by our activity; indeed this addition *is* our activity. We now see that production involves the distinction between form and matter. The matter is that out of which the product is produced and that which remains the same in the finished

product. The form is that which defines the product as product through the arrangement of the matter.

Along with the distinction between form and matter, *technē* also involves the distinction between means and end. There is a double sense in which an act of production involves an end or a purpose. Returning to the example of the pair of shoes, we can see that the process of making the shoes is guided by the goal of the process, which is to have a pair of shoes which may be used. All of the activity involved in the process, the cutting of the leather, the hammering of the nails, is regulated towards the end of the process. But this end is itself ambiguous. In one sense it is the idea of the shoes themselves which regulates the activity of the cobbler. The shoemaker must have some notion of what it is that he is making and this notion helps to determine the specific means that he employs. The actual process of production is the means through which the product is brought into existence, the product itself is the end in terms of which the means are seen to be means. In another sense, however, the product, for example a shoe, is itself only a means towards a further purpose. In a manner analogous to the sense in which the leather is cut for the sake of the shoes, the shoes themselves are made to exist for the sake of human comfort or use. If the shoes were not desirable for some human purpose, they would not be produced. Thus *technē* involves a hierarchy of means and ends in which a human value, use, comfort, happiness, etc., is the end which ideally regulates the *technē* as a whole.

As was mentioned above, Western thought about *technē* has historically recognized that the form-matter and means-ends distinctions are essentially involved in the structure of production. It is equally true to say that Western technological practice and activity has been guided by these twin distinctions. But the mere fact that the West has thought that production involves the relations of form-matter and means-end as principles seems to tell us little concerning the effect of the idea of technology on our conception of being. These relations seem to be neutral ones. It is merely asserted that production does allow itself to be understood as a process of bringing a form to a material or as a means towards an end. Technology, however, as the study of the principle of production, has also historically involved thinking about the principles we have discovered, and further, activity in accordance with that thought.

If we consider the first distinction, matter-form, it is apparent that the conjunction of matter and form has been taken to be of importance in other areas aside from technology. Indeed, being itself is often thought of as the union of form and matter. On this view, any substance or thing, regardless of whether it is a physical human product, is considered to be only insofar as it is a specific joining together of a general form with a

particular material. Philosophers as different from each other as Plato, Aristotle and Kant have given this doctrine of being central positions in their systems. Further, the Christian conception that all finite being is created has also historically been connected with this view, even though, for the Christian, God's creation is *ex nihilo* and hence does not involve a *pre-existent* matter. We then see the most obvious way in which our notion of being can be correlated with conceptions of the *logos of technē*. The act of production involves the impression of a form on a matter, this is the nature of the productive act. The product of this act, the thing produced, can therefore be seen as the union of form and matter. But all things have traditionally been understood as being such a union. One could argue that this key conception of being thus arises out of a generalization of a distinction which has its proper employment in technological thought about production. Being is taken to be, the argument continues, analogous to the product of an act of production, regardless of whether or not it is such a product. Thus an illicit extension is given to the form-matter distinction which has had a corruptive influence on our thought concerning the being of things. In fact, Heidegger has argued along these lines. As this supposed influence of technological thought on our conception of being is an ancient one, and an influence which is no more strongly felt today than previously, I do not intend to dwell on it here. It is important to note, however, that this correlation of thought about *technē* and thought about being need not be explained as an influence of technic thought on ontology. It is also possible that there is a dialectical relation between the two spheres, or even, though less plausibly, that ontology has here influenced the *logos of technē*.

For now leaving aside the form-matter distinction, let us consider the way in which the means-ends relation has traditionally been thought. The ambiguity of the end or purpose of production has allowed for an historical development. The end of *technē* has been thought of in two distinct ways. Either the end is the object itself to be produced or it is the fulfillment of the human need or desire which ultimately motivates the production. Corresponding to this difference in the thought about the end of production, a distinction arises concerning the proper means of production. If the product itself is taken as the end and purpose of the production, then the means chosen will be simply those which tend most efficiently and adequately to the existence of the product. If, on the other hand, the fulfillment of the human requirement is taken to be the end, then the means must be such that they themselves are not antagonistic to the fulfillment of human requirements, whatever these are taken to be.

In order to fully understand this point we must make a short digression into value theory. The end of production does not merely regulate the

specific manner in which the end is reached. As it is *for the sake* of the end that the process is carried out, it is the end or purpose of the activity which gives the value to the activity. It is good to engage in making shoes *because* it is good that there *be* shoes. In general, the value of an activity is measured by the end for which the activity takes place. Even when an action is seen to be an end in itself, as, for example, in playing a game, the activity is still evaluated in terms of the action taken as an end. Now, if the end of a process is seen to be a thing, a piece of equipment, then the value is seen to reside in the thing itself. In this case, the value of the process or means through which the thing comes to be is determined solely on the basis of whether or not the thing does come to exist adequately. If the end of a process is the existence of shoes, then the best means of production will be that process which yields the most shoes. On the other hand, if the goal of production is taken to be the fulfillment of a human desire or need, then that which gives value to the process will be a human requirement. Thus the standard of value will be human being or willing, and both processes and things will be measured against human motivation.

I would like to maintain that Western thought and practice has progressively tended towards an orientation in which the end of the process of production is taken to be the thing produced. That is, I am asserting that technology, or the thought about production, has tended to reach the conclusion that the thing itself is the measure of value, and not the human requirement. It might be objected at this point that this statement is nonsense. Certainly, it might be maintained, all production is always determined by human need or desire. Even in my example of the shoes, no one would think of making shoes unless they were useful for people. This objection would state that all production is, has been, and must be, oriented towards human desire or well-being. The problem with this objection is that it is partially, but only partially, accurate. It is certainly true, as the argument states, that ultimately all ends are human needs, the shoes *are* made because people find them useful. Since this is so, it also follows that the thing's orientation towards value is an abstraction. It is possible that to some degree the product comes to be seen as an end in itself, but to assert that the product is seen as *the* end to the exclusion of a human requirement is a logical extension which is impossible. This is certainly true. It does not follow from this, however, that it is impossible that there be a tendency to forget the root of value and end in human requirements and to progressively replace this human root with the notion that the thing itself is valuable. It is certainly true, for example, that a man who is working in order to become wealthy never wholly forgets that money is good for something beyond itself. This ultimate end may be his own comfort, his children's education, or even merely that he likes money.

On the other hand, it is quite possible that the man ordinarily thinks and acts *as if* money were the end itself. By focusing on the product as end, the horizon in terms of which it can be an end, human projects, is forgotten. The product itself then appears to the technical producer as the foundation for its own value. That for the sake of which the product is produced, some possibility of human being, is covered over and the product is treated as if it were the sole goal of the process.

How and why has it come about that technological thought has tended to become centered upon the product as end and standard of value? A beginning of an answer may be found in the nature of *technē* itself. For *technē* or production the end is ordinarily taken as already given and fixed. What concerns the producer is not whether the end ought to be produced, but rather how this production is to be brought about. More accurately we may say that the technician is concerned with the end only in so far as it functions as an end for his activity, not in so far as the product is itself the means for some further end. Given this technical orientation, each producer tends to become solely involved with one part of the means-end hierarchy. The system of ends which supplies the general context for each and all of the technical activities recedes from view and is replaced by concern for the achievement of the specific goal, the particular object. Similarly, the ultimate foundation for the hierarchical system of ends, that they are human ends, tends to become submerged by the products whose value rest upon this foundation.

But if the tendency of Western technological thought and practice has been to emphasize the thing as the end of production at the expense of the fulfillment of the human project as end, what implications does this development have for the notions of utility and value as a whole? We find ourselves in a technological world. For our purposes this means that our world is organized as a system of production. It has, indeed, been maintained that all societies can be defined as technological in this sense. It is at least true, however, that modern industrial society is, in a significant sense, more highly developed as technological than all others. Our world is so structured that almost all human activity is conceived on the model of *technē* or production. Art, religion, education, and scholarship are conceived of as crafts, as technical enterprises which produce products which *have* value. The object and product itself, the particular painting, for example, is thought of as possessing a value inherent in itself. We give it an exchange value, a price, and treat it as a commodity. In this sense, then, our society is an organized system of production, where, at least partially, the products are treated as valuable in themselves. But after all, why are the products of technology valuable? When confronted with this question I suppose most people would assume that the things are valued

for and by man. We are still vaguely aware that use and need value for man is fundamental. But what is the present status of this foundation? What do we now mean when we say that all technical value is founded upon human requirements? In the light of modern technological thought, what do we now normally take "human requirements" to mean?

It is the essence of technological thought to think of the world in terms of means-end relationships. It is also a tendency of this thought to fragment the systematic hierarchy of means-ends relationships, so that the technician comes to see the proximate end, the being of the thing produced, as the ultimate end. In other words, the technical world-view is one that tends to lack self-consciousness of the general context in which production takes place. But human production *does* always go on in such a context; production is finally for the sake of something human. This is the truth of the objection which was raised above. Aristotle, in his *Ethics*, already recognized that an infinite regress of ends is a practical impossibility. If there was no end which justified an entire series of practical activities, and which itself was not the means to some further end, then there would be, strictly, no reason for doing anything. But technical thought has tended to fragment the series of ends in such a way that, ordinarily, we are only conscious of the proximate end of our activity. Our question, however, concerns the final end of modern production, and we have seen that this final end must be in some way related to our conception of man and his needs. We now appear to be at a loss to find such a conception in the modern world. It seems that it is precisely the mark of modern technology to be forgetful, or to lack self-consciousness of such an end. The basic characteristic of Western technology is to replace ultimate ends with proximate ones. This characteristic itself, however, is the beginning of an answer to the question concerning the modern technical conception of man and the final end of production. This forgetfulness and lack of self-consciousness has itself come to be technical man's conception of himself and his own human requirements. Where such a conception ought to stand we find only a void. But practically, as Aristotle pointed out, this void must be filled. The alternative to such a filling is complete non-activity and indifference. We must now look for what has taken place in the modern world of an ultimate end rooted in a conception of man.

In general, modern technical man has attempted to fill the void of an ultimate end in two seemingly mutually exclusive ways. The first may be loosely characterized as business, the second as subjectivity. Arising directly out of technological thought, and existing in a dialectical relationship with it, we find the attempt to throw oneself into the already existing structure of proximate ends and to treat those ends as eternally fixed and

necessary. In so far as we exist in a technically organized system of production, we find ourselves living in an already established world of meanings and values. These values and ends arose in light of previous general conceptions such as Christianity or classical liberalism which we have forgotten or no longer believe in. The proximate ends of such hierarchical systems of thought still exist, however, embodied in the institutional and productive structure of our society. It might be true, for example, as Weber argued, that Capitalism arose in the context of Puritan thought. We are no longer directly Puritans, but the system of proximate ends for fulfilling Puritan requirements still exists in our world. One response to the modern problem of man and the lack of final goals is to accept the already given context and structure as necessary and beyond our power of decision or action. In this case the missing ultimate goal is replaced with the necessity of the proximate ends which are already established. "Why do you go to college? To get a good job. Why do you want a good job? To make money. Why do you want money? To have things. Why do you want things? To make me happy. Will things make you happy? No, but after all this is childish. *Everyone* knows that you must go to college so that you can have things." So the student continues to go to college, even though he knows that he has no ultimate reason for doing so. He does this because he must, or, more properly, he feels that he must. The technical orientation, since it tends towards concern with the proximate end of the being of the thing, also tends towards a conception of the general hierarchy of ends as a thing. That is, alienated man treats his own requirements as if they are filled by the already existing productive structure, never thinking about that structure or his human requirements at all. The fact that a worker is not happy in either his job or his leisure does not affect his activity, because the idea that he might live differently, with a different structure of value and means of achieving this value, never occurs to him as a real possibility. The absence of a final end for *technē* is dealt with by asserting the present and immediate ends as *if* they were final.

The other alternative to the problem of the technologically influenced lack of a general conception of human requirements has been characterized as subjectivity. Indeed, if there is any modern Western ideological notion of man it is man as the individual subject. As opposed to the alienated technical response, it is possible to assert that the means-ends hierarchy reaches its conclusion in the individual decision of a particular subject. All *technē*, all productive activity, is then seen to be justified by the choice of the person engaged in that activity. This would seem to be the polar opposite of the alienated position described above. Here the individual takes upon himself not only the task of discovering the means

for the achievement of human satisfaction, but also the job of defining what this satisfaction will consist of. The essence of man, what man is, is seen to be choice itself; man is thought of as freedom and freedom is thought of as negativity. The void experienced as a lack of ultimate goals is filled with the activity of *creating* such goals freely. An end is a legitimate end because I choose to give legitimately to it. Technology, by focusing attention on immediate ends in things, leaves the ground of all ends open and void of content. This allows for the possibility of the more or less arbitrary filling of this void by *any* chosen content. The problem with modern subjectivity, however, is that there can be no possible basis for determining the concrete content of such a decision. The individual is thought of precisely as the absence of any fixed content. This means, however, that anything is justified. But if all things, if all activities, are allowed and capable of justification then there are no possible grounds or reasons for doing anything in particular. Hamlet prefigures modern subjectivity when he asserts that there is nothing good or bad but thinking makes it so. His indecision, based upon this assertion, is our indecision. Subjectivity fills the void with only the void.

All of this seems quite far removed from technology. What appears to be the polar opposite of technological alienation is, however, merely its dialectical opposite. Thought dominated by the technic model tends to replace final human ends with things as ends. But such thought equally rests implicitly on the assumption that what is done is worth doing. Production is seen as production for an end and the world becomes progressively a world of production. Lacking any ultimate end, technological thought turns back upon itself and makes production itself the goal of the process of production. Man is seen as nothing but that through which production enters the world. As such, man is conceived of as free to produce being, both the being of the world and his own being. Man as the ultimate means of production, but *only* as the means of production, finally comes to take himself to be the end also. Production becomes production for its own sake. In a little known passage, in which he comes very close to this position, Marx recognizes and lauds this fact. "Thus the ancient conception, in which man always appears as the aim of production, seems very much more exalted than the modern world, in which production is the aim of man and wealth the aim of production. . . . What is this [production, however] if not a situation where man does not reproduce himself in any determined form, but produces his totality? Where he does not seek to remain something formed by the past, but *is* in the absolute movement of becoming?"²² Modern subjectivism then, arises out of technological thought as an attempt to fill the vacuum of final ends with *technē* or production itself. Where simple alienation lacks subjectivity

and accepts proximate ends as final, this more complex form of alienation tends to lack substance, confusing production with the end of production.

The dialectical connection between alienated technic thought and modern subjectivism must be further articulated. Both subjectivism and technic thought are essentially abstractly reflective stances in regard to the lived world. The standpoint from which the pure, contentless subject appears is one which has disengaged itself from our ordinary concerns which orient us in our dealings with ourselves and our environment. The reflecting self is other than the reflected self, regardless of the meaning context which is reflected on. The reflecting self is thus the pure negation of all lived content. As long as the reflected and reflecting selves are treated as belonging together in the greater unity of reflected-reflecting, the reflecting self fails to become purely abstract and vacuous. It is only after reflection itself is treated as a pure form of consciousness and isolated from that which it reflects on, that modern transcendental subjectivism becomes possible. This reification of the negativity inherent in reflection is prepared, however, by technic thought and practice. The technic process is one in which a progressive negation, transformation, and control of the given world is exercised through the reflective treatment of the given as negative-in-itself. That is, to consider the world as a means is to treat it in its aspect of possibility, as that which is to be gone beyond through its being negated. As long as this technic transformation remains based in a lived context of meaning which gives direction to the process, the technic negation remains in contact with a lived source of value. At that point, however, at which the ends themselves are seen as mere possibilities in the technic sense, that is, when the values are taken as means to a further end, the technic hierarchy of means and ends loses substantial foundation or seems to lose such a foundation. In both cases, with subjectivism and alienated technic thought, the act of negation, whether reflective or technological, is itself made focal and treated as independent of that upon which it operates. From this perspective the two alternatives can be seen to be different responses to essentially the same difficulty, the impossibility of associating the act of negation or production with any concrete content or end. The difference between the two attitudes lies in their treatment of the already constituted system of ends which they find divorced from the reflectively abstract position they occupy. Reflective subjectivism emphasizes the foundationlessness of the already constituted structure of ends and attempts to supply a foundation from its own reflexivity, it chooses itself and its end. Technic thought, on the other hand, confronted with the same foundationless context emphasizes the impossibility of supplying such a context from a purely abstract subjectivity. It is thus thrown back into the already constituted means ends

hierarchy, but with no hope of finding itself adequately mirrored in it. In both cases the notion of an objective basis for an end with which to orient subjective behavior and production is abandoned.

In the descriptions of alienated technic thought and pure subjectivism which we have just completed, it may seem as if these positions were in some respect chosen by the individuals who occupy these standpoints. Further, it may appear that these descriptions necessarily apply to explicitly self-conscious attitudes on the part of individuals. To read these descriptions in this way, however, would be to repeat the errors of abstract subjectivism. Choice is always choice in situations and reflective self-consciousness is always grounded in life. The technic attitude, for which the world of production appears necessary and fixed in its structure, and for which man is a thing whose projects are *caused* by the already established system of production, is not chosen arbitrarily. Rather, the technic attitude is dialectically imposed by the individual's position within the system of production. In so far as the worker finds himself in a situation in which work lacks intrinsic satisfaction and in which his laboring activity does not produce itself as activity, the world confronts him as a fixed existent in which already established necessities are of paramount importance. The world as lived by the worker, given his real situation in it, is the alienated technic attitude. Similarly, the position of abstract subjectivism is lived by the manager in so far as he finds himself as the pure subject of production. In that the manager plays at work, he lives himself as the pure subject who determines himself and the world absolutely. This subjectivity, however, lacks foundation in that it recognizes itself solely as negativity, the power to transform. Since the manager does not realize his absolute dependence upon the productive order, his projects are void of an ultimate "for the sake of which." As we have already noted, this lack of goal is overcome through the positing of pure production itself as the goal. For neither technic thought nor subjectivism is it necessary that there be any explicit self-consciousness. Such self-consciousness is itself a further modification of these shapes of consciousness resting upon the actual interaction among people.

III.

We are now in a position from which we can examine the dialectical relations between work and play in modern technological society. We can characterize members of the managerial class as "playing for a living." That is, their labor is performed for its own sake as well as for the sake of consumption and they produce, to some degree, their activity itself as well

as their product. But, in technological society, which activities are performed for their own sake? Given the lack of an ultimate goal for production rooted in a concept of man which is characteristic of the technological world, there appears to be a lack of a fundamental value in terms of which activities can be desired for their own sake. That is, which activities are desirable in themselves seems to be left undetermined in the technological world. We have seen, however, that there are two attitudes which fill this vacuum of values. Man is conceived either as the sheer possibility of production or as a processless thing. In that the managerial class lives the abstract subjectivist position, production is seen to be the purpose of production. That is, negativity, the possibility of negating the world through production, is itself that for the sake of which activity occurs. Production is for its own sake is production itself. Production is both the means and the end of labor. The laboring activity at which the managerial class plays, that which is done for its own sake in a technological world, is production. Only in so far as the manager is producing the possibility for more production, is he at home in his labor. The playing for a living which the technological elite performs is the creation of more production. In that production is performed for its own sake, managerial play is also the production of the form of its own activity. The manager determines the manner in which he performs his own job in that he creates the conditions for more production. How this is done is also self-created, in that this how is the possibility for more production. Managerial play thus perpetuates itself. It is an activity performed for its own sake which produces as its product the same activity, i.e., the possibility for more production activity. In so far as the technological elite plays for a living it produces itself as pure subject, the abstract principle of negativity. In so far as it occupies the ideological position of subjectivism, it plays at production for its own sake.

The position of the worker in technological society, however, is radically different from that of the manager. The worker *works* for a living. What he does is not done for its own sake, but rather for the sake of the product consumed. The system of technological production confronts him as an alien entity which necessitates certain activities which are performed for the sake of consumption. The productive system has the force of a natural determination of activities which can neither be influenced nor questioned. It appears over against the worker as a necessary structure of value. Thus, in that the worker works, he occupies the alienated technic position in regard to value which was discussed in section II. Ironically, this system of production which has the status of necessity for the worker is itself produced through the subjectively free, spontaneous activity of the

manager. Indeed, the technological world of production is the activity of the elite, in that this activity is the creation of production for its own sake. The more the elite plays, the more it occupies the standpoint of the freely creating abstract subject, the greater the degree of technological organization of production, and hence the greater the degree of technic alienation in the worker. As the manager more closely approximates the ideal of the pure play of a free abstract subject, the worker more closely approximates the ideal of the pure processless object. But as the objectivity of the worker is determined in and through the value of consumption, the system of production which makes the worker an object is itself taken as necessary for and by the worker.

The technological consciousness of the worker and the manager are, of course, abstract consciousness, and thus incomplete. The manager is not, in himself, the pure abstract subjective producer who produces himself as producer through playing at production. Rather, this appearance of free, contentless production for its own sake is grounded in and depends upon the alienated object being of the worker. It is through the worker's labor that production can take place. Equally, the necessity of the already established system of technological production for the worker, which determines the "for the sake of which" of the worker as consumption, is not an objective necessity rooted in a fact of nature. Rather, this appearance of pure, processless objective being in the worker, is grounded in and depends upon the free, contentless production for its own sake of the manager. This play on the part of the elite, as we have seen, in turn rests upon the labor of the worker, and thus the worker himself produces the system which he finds as a necessity. The manager is therefore not the pure subject of history, but also its object. The worker is thus not the pure object of necessity, but also its subjective producer. This dialectical inversion, however, is merely for us, or in itself, and not for either the worker or the manager. The elite lives the life of playful free subjectivity, the worker that of laboring consumer.

NOTES

1 Martin Heidegger, *An Introduction to Metaphysics* (New York: Doubleday, 1961), p. 14.

2 Karl Marx, *Pre-Capitalist Economic Formations* (New York: International, 1965), p. 85.