

The notion that our existence within the world is programmed, and that the world itself is programmed, is a new one. It is much newer than the notions that both our existence and the world are determined or predestined. This is why we have not yet succeeded in grasping all the aspects which the new notion entails. One of the tasks of the present situation is to try and digest existentially the full meaning of "program".

Our religious traditions, which stem from the very bottom of our history, have rooted the notion of "destiny" deep into our thinking. Thus to aim at something, though both purpose and aim are obscure. On the other hand science has familiarized us with the notion of "cause". Thus every event is seen to be the effect of some causes and the cause of some effects though each concrete event may not immediately display its "deep causes" and its "ultimate effects". But at present a whole series of consideration suggests that the notion of "program" is better suited to explain the world and our existence than are the notions of "destiny" and "causality". However this implies that we change our whole outlook.

The "finalistic" outlook implies a cosmology for which the universe is a stage on the way toward a last situation. The "causalistic" outlook implies a cosmology for which the universe is the result of the interplay of causes. The "programmatic" outlook implies a cosmology for which the universe is the realization of some of the virtualities it contained from its beginning. The finalistic outlook implies an anthropology for which man is as yet imperfect being. The causalistic outlook implies an anthropology for which man is the most highly developed of organisms. The programmatic outlook implies an anthropology for which man is one among the possible variations of the genetic information contained in every living matter. The finalistic outlook implies an ethics for which human behavior is either submission to destiny or rebellion against it. The causalistic outlook implies an ethics for which human behavior is the effect of very complex causes. The programmatic outlook implies an ethics for which human behavior is the manifestation of inherent tendencies. And it is easy to show the implications of the three outlooks in other fields.

Programmatic cosmology is based on the second principle of thermodynamics. The universe is a process of transformation of all forms of energy into heat, which means that it tends to get ever more uniform, (to "lose information"). This may be interpreted as meaning that the universe is a process of realization of an initial program. Programmatic anthropology is based on molecular biology. Evolution is a process of combining the possibilities contained in the structure of nucleic acids. This may be interpreted to mean that evolution is the realization of a program contained within

those acids. Programmatic ethics is based on analytic psychology. Human behavior is the realization of tendencies contained within the unconscious. This may be interpreted as meaning that human behavior is programmed by the unconscious. Similar interpretations suggest themselves in other fields: in linguistics, in sociology, in economy, in aesthetics. The notion of "program" seems to be inescapable for any future explanation of the world around us, and of our being-in-the-world.

What is characteristic of programs is that accident and necessity can no longer be usefully distinguished. Given a sufficiently large number of elements within a program, and a sufficiently long period to combine them, any accidental combination becomes necessary. Such highly improbable structures as are planetary systems must necessarily happen by accident during the entropic process. Such absurdly improbable structures as is the human brain must necessarily happen by accident in the course of evolution, although the genetic information of the embryo, which contains the possibility of the human brain, shows that such a possibility is so remote that it cannot be taken into consideration. Such unique structures as is the "Marriage of Figaro" must necessarily happen by what must be called "accident" in the course of Western civilization, although nobody in his right mind would look for it in the original "project" of that civilization, which however contains the possibility of it. The fact is that it is only after such accidents like planetary systems and the Marriage of Figaro have happened that one can see that they were "within a program", but then one sees that they were bound to happen at one point. In short: programs are games which render the most improbable combination necessary by accident, if they are played long enough.

Now it is difficult for us to digest existentially that accident and necessity are identical, because we this threatens our concept of freedom. We know what freedom means within a finalistic outlook. One of the horizons of such an outlook is fatalism: there is no freedom. The other horizon is licence: there is no freedom. In between those two extremes there is "sin": man may oppose the overall purpose. We also know what freedom means within a causalistic outlook. One of the horizons of such an outlook is determinism: there is no freedom. The other horizon is statistical chaos: there is no freedom. In between those two extremes there is "subjective freedom": causal chains are so complex and super-imposed that we cannot know all the causes and all their effects, and thus act as if we were free. Thus we can elaborate various concepts of freedom within the finalistic and the causalistic outlooks. We can do no such thing within the programmatic outlook: we do not even know with certainty the capacity to integrate

the programmatic outlook. So far it has been possible to live with both the finalistic and the causalistic outlooks without insoluble conflicts? Causality explains the world and man from the past, destiny explains them from the future, but both explanations have the same structure. They both form necessary chains, and they both preclude accidents. What seems to be an accident may be explained causally, (it has causes which are not apparent). And it may be explained finalistically, (it has purposes which are not apparent). By eliminating accidents both outlooks are thus compatible. But programmatic explanations have a different structure. Programs, it seen "from here toward the back", look like causes. And it seen "from here toward the front", they look like purposes. But both those ways to look at them are naive: they "mythify" programs. In fact programs are neither causes nor purposes, but accidental configurations. Thus the programmatic outlook, by "overcoming" both the finalistic and the causalistic outlook, renders both of them untenable.

It would be naive to interpret the original "big bang" as the creative purpose of the universe. It just happened. Equally naive would it be to interpret it as the primal cause of the universe. The present state of the universe is just one of the possibilities the "big bang" contained, and one may imagine quite different states instead. The present state is accidental. It would be naive to interpret the original genetic information as the creative purpose of life. The nucleic acids happened by accident. Equally naive would it be to interpret it as the cause of life as we know it. Other organisms could have perfectly resulted from it, and those we know happened by accident. The absurd stupidity of each and every accident becoming necessary at one point is the very basis of reality, and both causal and final explanations are shown to be attempts to mythify this.

Now a world in which ~~is~~ accidental, and in which human life is accidentally programmed, does not seem to permit even the formulation of the concept of freedom. To conceive freedom, we must eliminate the concept of accident: we must have necessity, (something which may be foreseen), and we must have decision, (several foreseeable situations). Where there is no cause and no purpose, there seems to be no room whatsoever for freedom.

If this were our sole problem, will still could live with it. Ours would then be the following dilemma: On the one hand we would have programmatic explanations which show that freedom is an "ideology". On the other hand we would have the concrete experience of free action. But since this concrete experience is so strong that it cannot be attained by theoretical considerations, we would still act freely. But such it not our situation. We have concrete experience that the programmatic outlook is not a theoretical one, but that it works in practice.

Our paradox is this: If we are interested in the survival of politics we must learn how to think post-politically. Or: If we are interested in the survival of freedom, we must learn how to reformulate freedom in the survival of freedom context. We must learn how to inject purposes into an absurdly accidental context. This is our challenge. We may be unable to meet it. In that case post-industrial man will be a programmed robot. Or we may succeed in giving freedom a new meaning. In that case man may become a free agent in a sense which is as yet quite beyond our present imagination.

of the programmers.
point of view of those programmed looks like cause from the point of view are themselves programmed to program us. What looks like purpose from the purpose, but are accidents become necessary. The programmers who program us fly them. Political thinking has become native: the apparatus follow no political purpose), we shall never get rid of them, because we shall mythically follow a capitalistic purpose, or the internationalists follow some anticapitalistic purpose in doing so, (for instance: the multinationalists finalistically). If we continue to believe that the apparatus which program us have some purpose in doing so, (for instance: the multinationalists follow a capitalistic purpose, or the internationalists follow some anticapitalistic purpose), we shall never get rid of them, because we shall mythically follow no political purpose. The programmers who program us are themselves programmed to program us. What looks like purpose from the point of view of those programmed looks like cause from the point of view of the programmers.

The question is: how can we give "freedom" a meaning within a context in which the programmatic outlook is being applied? In other words how is politics possible in post-industrial society? One thing is certain: politics will not be possible if we continue to think politically, (meanwhile finalistically). If we continue to believe that the apparatus which program us have some purpose in doing so, (for instance: the multinationalists follow a capitalistic purpose, or the internationalists follow some anticapitalistic purpose), we shall never get rid of them, because we shall mythically follow no political purpose. The programmers who program us are themselves programmed to program us. What looks like purpose from the point of view of those programmed looks like cause from the point of view of the programmers.

and we cannot help to recognize our own behavior within them. The fact is that the programmatic outlook is no longer a theoretical one, but that it is being applied in practice with ever increasing success. We are no longer governed by politicians, (who think finalistically), nor by traditional scientists, (who think causally), but by technocrats, (who think program-matically). Thus the problem to formulate the question of freedom is not a theoretical one only, but one which touches on our very living.

We experience concretely in every day life how our individual and social behavior is being programmed. How it is being manipulated by the programs of various apparatus, of which the media are only the most obvious one. And we are beginning to experience concretely the function of "intelligent tools", of robots. We know those tools are programmed, and we cannot help to recognize our own behavior within them. The fact is that the programmatic outlook is no longer a theoretical one, but that it is being applied in practice with ever increasing success. We are no longer governed by politicians, (who think finalistically), nor by traditional scientists, (who think causally), but by technocrats, (who think program-matically). Thus the problem to formulate the question of freedom is not a theoretical one only, but one which touches on our very living.