

SURVIVAL VALUE

by Stephen C. Pepper

I am raising the subject of survival value in this paper because it is a source of value most commonly neglected in contemporary discussions. In the nineteenth century when the biological theory of evolution was fresh in men's minds, there was a lot of emphasis on survival value, stimulated particularly by Darwin's pregnant phrase "the survival of the fittest." The term "fittest" clearly had the form of value significance. Darwin himself led in calling attention to its bearing on human affairs in ways which I find still deserving of serious consideration.

Conceptions of value based on biological evolution later fell into neglect, partly on account of a shift of interest among philosophers to other phases of value, but mainly, I think, on account of errors of interpretation that gained currency during the subsequent decades. I shall mention a few of the principal ones.

SOME MISINTERPRETATIONS OF "SURVIVAL VALUE"

The most serious was an interpretation draining the term "fittest" completely of value significance. It was affirmed that the term was simply a technical biological term to distinguish the organisms that survive in the course of evolution from those that perish. One could as well speak of the "survival of the survivors." That some organisms sur-

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vived was just an observed fact, and calling them "fittest" was logically a tautology, having no value significance and certainly having nothing to do with the concept of "ethically best." It was like distinguishing the snow that fell on mountain tops and settled in deep packs from that which fell in the valleys and melted with the first sun. This interpretation seemed utterly convincing to almost a whole generation of men in the period of reaction to Darwinism. Of course, what is left out is the description of the selective process and the nature of the material selected. It just happens to be living organisms that are being selected in respect to their capacities of adaption.

A second erroneous interpretation is not quite so drastic and is almost acceptable. It is the commonest way today, I think, by which writers dismiss survival value in their development of value theory. They admit that biological survival in its stress on adaptation to one's environment is relevant to human values, but only as a *condition* for values, not as itself a value. Again what is neglected is the dynamic process of natural selection which actively brings into being some value activities and blocks off others in ways hardly consonant with its being regarded as a valueless condition of human valuing.

A third erroneous interpretation comes from accepting as representative of survival value certain theories which place it in distorted or exaggerated prominence and so are easily refuted. Bertrand Russell, in his *Authority and the Individual* ([Boston: Simon & Schuster, 1949], p. 74) conveniently telescopes several such theories in the following passage:

What might be called the biological theory is derived from a contemplation of evolution. The struggle for existence is supposed to have gradually led to more and more complex organisms culminating (so far) in Man. In this view survival is the supreme end, or rather survival of one's own species. Whatever increases the human population of the globe, if this theory is right, is to count as good and whatever diminishes the population is to count as bad.

Russell here mixes up three exaggerated and oversimplified views of survival value: (1) the view of a progressive complexity of biological structure culminating in man as the value ideal; (2) the view that mere survival itself is the supreme end; and (3) the view that life (at least within one's own species) is "good," so that the more life (that is, the greater the population), the better.

The first view has indeed been seriously developed. Its best known proponent is Julian Huxley. With certain modifications it can, I think, be partially justified. Its weakness is that some of the simplest organisms are still surviving beautifully and bid fair to outsurvive man. But

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Russell drops this view and concentrates on the last two, which are caricatures of any biological value theories within my reading. His refutation is: "It would be easy to find a simple acre containing more ants than there are human beings in the whole world, but we do not on that account acknowledge the superior excellence of ants. And what humane person would prefer a large population living in poverty and squalor to a smaller population living happily with a sufficiency of comfort?"

After realizing the inconclusiveness of such supposed refutations of the value of survival value, one may become more receptive to the idea that it may well be an effective source of value. If so, it would seemingly be most sympathetically developed in the framework of an empirical value theory. I shall now undertake to show how survival value may be not only consistent with such an approach but even required for completeness of treatment.

SELECTION AS THE SOURCE OF VALUES

The most detailed and thorough empirical treatment of value in recent time I find in R. B. Perry's and John Dewey's writings and, may I add, in my own *Sources of Value*. These all agree in finding the locus of value in certain activities of the organism in relation to its environment. Rollo Handy, in his recent book summarizing such theories (*Value Theory and the Behavioral Sciences* [Springfield, Ill.: Charles C Thomas, 1969]) calls these activities "transactions." Ervin Laszlo, in a forthcoming book, calls them "feedback circuits." My name for them is "selective systems."

Purposive behavior furnishes an excellent example of a selective system. Here a dynamic agency (call it a need, a drive, a desire, or an interest, arising either from changes within the organism, like hunger or thirst, or from external stimulation, like a sudden downpour of rain or a nail in your shoe) presents a pattern of tensions with accompanying conditions of satisfaction. In appetitions these acts lead to instrumental and terminal goals and often a consummatory act yielding pleasure. In aversions there are acts of avoidance of objects of apprehension and actual pain terminating when there is relief from these tensions.

Here is a dynamic structure of activities. The structure institutes a norm on the basis of the conditions of satisfaction intrinsic to the specific need or drive or desire. Acts and objects are selected as correct or incorrect in proportion as they serve toward the attainment of the conditions of satisfaction for the dynamics of the purposive structure. It is a selective system. And values of various kinds spread out along the route of these transactions. There are positive and negative conative

values—and as goal objects are anticipated these are potential objects of value—and there are also objects of potential value instituted in the environment. There are frustrations and achievements and pains and pleasures, all closely bound up with the intensification or relaxation of tensions in the patterns of the purposive transactions. And in the process of achievement the purposive dynamics selects toward the shortest path.

There is no question that such a selective system institutes values and sets up norms for the good and the bad, the better and the worse, within its range of application. Questions arise only when different purposes with different ends converge, and particularly when these purposes and their diverse ends are held by different persons. My view is that such convergence of purposive activities among a number of persons gives rise to a social situation constituting another selective system which supervenes over the various individual purposive activities that enter into it. I find Dewey's writings most illuminating about the dynamics of social situations. In principle I believe that the normative selective action of a social situation is no different in form from individual purposive achievement. The dynamic agent now is the resultant action of all the persons involved in a social situation, and, as Dewey makes plain, the dynamic structure of the situation itself in relation to its environmental setting gives implicitly the conditions of satisfaction and so the norm for the selective actions of the group in resolving any problematic tensions.

There are also selective systems for social institutions and cultural patterns which have their influence on social situations. In fact, they also constitute part of the environment which any personal or social situation must often take account of. In all these levels of selective systems, as I have described them so far, their dynamics goes back to and comes out of the needs and drives and interests of individual organisms and their combination in social groups.

My argument is that biological natural selection is also a selective system instituting norms out of its dynamics which bear on human life and behavior and so yielding human values just as do the other selective systems described earlier. In fact the other selective systems themselves—the needs and drives and interests of organisms—may be said to be the products of natural selection.

NATURAL SELECTION IN CULTURAL EVOLUTION

But one very important difference is to be noted, that is, the difference between the basic dynamics and aims of the purposive selective systems

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and those of biological natural selection. The dynamics of the purposive systems is based on individual needs, drives, and impulses, and the overall aim is toward individual and social satisfaction. The dynamics of biological selection is based on the reproductive activity of interbreeding populations (that is, of biological species), and the overall aim is toward adaptive survival of the species. Ultimately the biological dynamics lies in the genes and chromosomes which control the patterns of growth and behavior of a species of interbreeding organisms. The science of genetics studies the mechanisms of heredity which determine the general pattern of the species and the variations of organisms within the general pattern. The science of taxonomy studies the diversity of species, classifies the various species, and describes the ways in which the diversification comes about.

Biological selection develops from the competition of the diverse individuals of a species for the most advantageous conditions of survival and propagation within the environment where they are placed. Those more adapted to their life zone survive and propagate, or at least survive longer and propagate more prolifically than the less adapted. Thus the pattern of the interbreeding population becomes progressively more securely and fully adapted to its living conditions. And when diverse species are competing for a particular life zone, biological selection operates upon the patterns of the species themselves, and a species unable to adapt to this sort of environmental confrontation may become extinct—or alternatively it may through genetic variations develop into a new species capable of maintaining itself competitively in its life zone.

Now, man is a biological species and has been and still is subject to biological natural selection. But the way in which biological selection operates upon man is somewhat unique. As a biological species, man inherits two traits that have given him extraordinary survival capacity. One of these is the trait of docility or learning capacity which produces purposive behavior. The superiority of purposive behavior over pure reflex or instinctive behavior is that a docile animal can learn to adapt to a great variety of environmental conditions, even to invent tools to serve his needs, while other animals are bound to their single instinctive mode of adaptation. The other trait is man's social capacity. Except for man, all the other highly developed social species, like the ants and the bees, inherit their social structures bodily as instinctive patterns embedded in their organisms. Man is the only highly socialized docile animal. This combination of intense social needs with extraordinary powers of learning and invention, including language, has rendered

man almost immune to serious competition from any other biological species.

It has, however, introduced another kind of biological competition almost entirely novel to evolutionary history. This is the competition between diverse social groups within the same species. It is the competition of tribe with tribe and nation with nation for dominance over certain areas or certain social patterns. Such human groups differ from one another (sometimes widely) in their cultural patterns. Thus, in the human life zone, cultural competition has taken the place of strictly biological competition among biological species. But it should not be thought that the competition is any less severe. As more powerful forms of cultural organization develop, the less powerful forms unadapted to the ensuing competition are either extinguished or put at great disadvantage. This is clearly visible today in the fate awaiting all barely surviving primitive societies in the surge of modern scientific-industrial forms of organization.

As we hear constantly repeated nowadays, man has only man to fear, and there is now unfortunately plenty of cause for fear. Through man's own superiority of biological traits for the survival of his species, he has invented the means that may well lead to the total annihilation of his species and a lot of other living species besides. It can easily happen if one of the present competing cultural groups should seek to dominate another one by employing this destructive instrument and precipitating a general atomic war.

Man is thus caught up in biological natural selection. A cultural pattern of social organization is just another biological species emerging on a higher plane. But this higher plane rests on the lower plane of the dynamics of the species through genetic inheritance. For the genetic pattern of the human species, with its characteristic traits of socialization and learning capacity, underlies the varieties of cultural patterns which constitute the biological-cultural species that compete on the cultural level.

Incidentally, through the agency of social tradition the cultural species also gained the extraordinary power of transmitting acquired characteristics, a power not available to species on the lower biological level. Through the process of transmission by tradition, a cultural pattern can endure a long time, as long, in fact, as it continues to be adapted to its life zone in competition with other human societies and other forms of life within the physical conditions of its environment.

Biological survival through cultural organization is the human mode of natural selection, and the various species of cultural patterns spread

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their values throughout the populations acculturated to them. Once this outcome is fully realized, the significance of survival value will hardly be in question any longer. Indeed, most anthropologists equate values with the system of values exhibited in a cultural pattern. What I have been pointing out is simply that such systems of values embedded in a population acculturated to them constitute a biological species on the cultural level—"an interthinking population" George Simpson calls them in distinction from "an interbreeding population," which would be the whole human species. But note that a cultural species also interbreeds, propagating its specific cultural pattern.

Thus, though existing on the cultural level, the competing cultural value systems do not escape from the process of biological natural selection. The survival of the fittest still applies to them in full force. They are subject to the demands of adaptation in the human life zone. The better adapted cultural patterns displace the less well adapted. And if ever the principle of cultural adaptation should fail in the human environment, the human species would inevitably perish and join the company of such other extinct species as the mammoth and the dinosaur. Adaptive selection is definitely an evaluative selection bearing on human actions, as intimately and pervasively as purposive selections. Moreover, adaptive selection is just what survival value means.

A CONFLICT OF SURVIVAL WITH PURPOSIVE VALUES?

One most important point for our theory still remains to be made in the relation of survival value to purposive values. For their aims are quite different and often opposed. As we have said, the overall aim of survival value is adaptation, while that of the purposive values is satisfaction. Now adaptation in the human life zone entails socialization to a cultural pattern and often drastic sacrifice of satisfactions. It leads into the domain of duties that may completely overshadow satisfactions. I know only two philosophers who seem to me to have fully grasped this point. They are Kant and C. I. Lewis. Lewis makes the point most clearly because he is sympathetic toward an empirical treatment of value in relation to satisfactions. These are not to be disparaged, as Kant tends to do. Yet Lewis senses that satisfactions will never meet by their own dynamics the ultimate demands which man as a social species makes for superindividual security and harmony. In his perplexity Lewis plunges for an a priori to clinch the realm of moral obligation and social duties. But what a weak sanction is the logical a priori (or even Kant's "good will") to offset the threat of human annihilation which the dynamics of biological survival value holds over the human species!

As I read the evidence for an empirical theory of value, there are two opposite dynamic poles for the generation of value—the maximization of individual satisfactions through prudence and intelligent social cooperation, and the continuous necessity of biological adaptation, whatever it may cost in the sacrifice of satisfactions in periods of emergency. Through social intelligence men may keep the impact of the sanctions for survival at a distance and so allow satisfactions a wide range of freedom to expand. But if this social intelligence lags and fails, the penalties of biological maladaptation to the life zone man himself has largely brought into being will inexorably take its toll.

And the most dangerous way by which our social intelligence could fail today would be a persistent blindness to, and denial of, the existence and sanctioning power of survival value and its polar opposition in periods of emergency to the values of satisfaction.

I must stop here with the bare stressing of this point. For the ramifications of this bipolar interaction of human values would lead us on very far.

CONCLUSION

My main points in this paper are, first, that values are generated from the transactions of selective systems in the manner earlier described, and, second, that there are two distinct main dynamic sources for human values, that of the purposive selection system and its derivatives generated from human needs, drives, etc., and that of the adaptive selective system generated from the patterning processes of the genes through inheritance and its human derivative, acculturation. The characteristic values of the first are individual satisfactions, of the second the overindividual imperatives of social security and survival. They have a sort of polar opposition to each other. But both are essential to the existence of human values at all and have a share in the dynamics of all selective systems intervening between the immediate purposive consummatory aesthetic satisfaction of pleasure for its own sake and the ultimate biological selective system of the adaptive preservation of the species. In short, survival value is essential to the complete adequacy of an empirical value theory.¹

NOTES

1. An expansion of the views expressed in this paper may be found in Stephen C. Pepper, *The Sources of Value* (Berkeley: University of California Press, 1958), chaps. 20–21, and Stephen C. Pepper, *Ethics* (New York: Appleton-Century-Crofts, 1960), chaps. 10, 13.