

TOWARD A NEW DOCTRINE OF MAN: THE  
RELATIONSHIP OF MAN AND NATURE

by Philip Hefner

## I. INTRODUCTION: EMPIRICAL THEOLOGY AND THE LIFE SCIENCES

The centennial celebration of the Divinity School of The University of Chicago impels us to focus our thinking upon the prospects for *empirical* theology. Just what this "empirical" theology might be is open to question and difference of opinion. One of the leading proponents of such a theology has said that "empirical" theology in the Chicago tradition means simply that what one believes must be authenticated by his experience and that what one experiences is in this sense a norm of theology whose integrity cannot be violated. According to this understanding, the present essay stands clearly in the Chicago tradition of empirical theology.<sup>1</sup> There are others, however, who would insist that the adjective "empirical" refers to a specific stream of Anglo-American philosophy (in which S. C. Alexander, Alfred North Whitehead, William James, and Charles Hartshorne figure most prominently), from which empirical theology takes its roots. Although I have no particular

As of September, 1967, Philip Hefner will be associate professor of systematic theology at the Lutheran School of Theology at Chicago. This paper was given at the University of Chicago Divinity School's centennial conference in 1966 in the field of Christian theology. The collected papers from this conference are to be published by the University of Chicago Press in a volume edited by Bernard Meland as part of an eight-volume centennial series entitled *Essays in Divinity*, edited by Jerald C. Brauer.

interest in repudiating this stream of philosophical thinking, and in fact find it instructive, I would consider it artificial to claim that this stream has a monopoly on experientially honest theology, and I have not consciously tried to derive my insights from this school of thought.

What follows is empirical in the sense that it has tried to listen to the voices of the empirical world in which the theologian lives, and it has tried to listen to the richness and vivacity of those voices in a very concrete manner. I would emphasize the "vivacity" of the voices from the empirical world, because at the root of that word is "life." The importance of doing empirical theology lies in the fact that life resides in the empirical, and the task of theology is to speak from and to that world of life. It is in this sense that the theologizing represented in this essay intends to be empirical.

It is a truism to say that every generation of Christians grapples with God and his revelation in terms of the symbols and categories of knowledge that its age furnishes it. These symbols and categories of the age form the lineaments according to which our knowledge of God and his revelation are cast. Our knowledge of God and his revelation are, therefore, inseparable from the forms of the age. It is improper to imagine that the symbols and categories of our age are somehow inauthentic impositions upon a timeless and authentic revelation of God. Rather, it is in, with, and under the symbols of our time that we know God. We do not deny that our ways of understanding and appropriating God's truth are continuous also with the ways of previous generations, but our integrity demands that we be faithful to our own age's categories and to the contours that they provide for our understanding.

It should be perfectly obvious that the confidence that I have just asserted in the capability of contemporary categories and symbols to be the stuff in, with, and under which God's revelation is borne presupposes a metaphysical structure which allows me to conceive of a certain and close relationship between God and the world. A number of men from the "Chicago" school of theology have devoted considerable effort to the refining of just such a metaphysical structure. At present, there are also other exciting attempts to forge such a metaphysical instrumentality going on in Germany by men like Wolfhart Pannenberg and Juergen Moltmann.<sup>2</sup> I cherish these metaphysical efforts, and I believe that their very existence makes my task easier. However, whatever else an "empirical" approach to theology might mean, it surely implies that in some circumstances the theologian will eschew the metaphysical efforts, at least hold them in abeyance for a time, and devote his attention solely to the empirical categories and symbols which our age pro-

vides for its own self-understanding. In such times, the theologian's confidence that God's revelation is in, with, and under the contours of our age's self-understanding liberates him to devote his efforts single-mindedly to comprehending and probing the empirical categories of his own epoch. His confidence is liberating even if it is not undergirded by an explicit metaphysical structure, although such a structure would serve as a sure foundation for his efforts.

The task here is to indicate what it means for me to take seriously the empirically given categories of our age in regard to one aspect of the doctrine of man, to determine what contours such categories and symbols give to this phase of our faith. I intend to do this by working through the materials which the so-called life sciences provide us. It is safe to say that biology, anthropology, social psychology, sociology, and psychology have given our generation some of its most significant symbols and categories for understanding ourselves as men. It is unthinkable that our generation could come to know God apart from the influence of these disciplines of thought, no matter how indirect their influence may have been. Even the unlearned and inexperienced have been touched by their powerful symbol-engendering presence. In this paper, one important contour of contemporary thought will be before us, the category of man's relationship to nature, as the life sciences have forced us to consider it as an unavoidable factor for any contemporary statement of the doctrine of man.

As we work through the materials from the life sciences that pertain to our theme, we shall be doing an exercise in empirical theology. We shall also be attempting to come to terms with the concrete, empirical challenge of the so-called secular world. And in our conviction that these empirical secular sources demand a restatement of the traditional Christian doctrine of man, we shall be indicating how the secular impinges upon the theological task. The fact that our enterprise does not approach the secular under popular ideological phrases, such as "holy worldliness," "religionless Christianity," or "death of God," should not take away from the earnestness with which we do seek to establish what it means to be Christian in our age.

## II. FIVE NOTIONS FROM THE LIFE SCIENCES

I intend first to focus attention on five aspects of what the life sciences tell us about man's relationship with nature, and then to turn to some observations concerning their implications for a new doctrine of man.

1. *Man as Interaction of Genetic Heritage and Environment* The first important testimony from the evolutionary theorists concerning

## ZYGON

man's relationship to nature describes a basic equation within which man enters this world and in terms of which his later development is spelled out. This equation is composed of two members, the genetic endowment which man receives as his heritage from his ancestors, and the environment within which and over against which that genetic endowment unfolds. The genetic potential of an individual is termed his genotype, and it encompasses all of the theoretical possibilities for his development. It is the wide door of capabilities that are his; it is a wide door, but it is the only door through which he can pass as he lives out his days. The specific path the individual will actually take through that door is determined by the particular demands his environmental transactions place upon his genotype. The particular path he takes corresponds to what the biologist calls his phenotype, the specific configuration of development that an individual has arrived at in any given moment. The genotype is potentiality; the phenotype is the actuality of the individual's development at any given time.<sup>3</sup>

For our purposes in this study, it is important to note that both members of the equation within which man lives out his career are formed by *the stuff of nature*. In this sense, "nature" refers to the physical stuff out of which man and his world are made. Nature is inside man in what we call his genetic endowment. Indeed, this nature is so intimately *inside* man that words can scarcely describe that intimacy. This nature inside man forms him and *informs* him. In this respect it would be better to say nature exists as man, at least insofar as his genetic endowment is concerned. But the direction and shape which that informing takes is determined by the nature *outside* man, his environment. There are only two points of input into the human organism—through his genetic endowment or through his enviroing world—and both of these inputs are comprised of nature, in the most material, earthy sense of that word "nature." This is the hard fact which faces a man at the very outset of his career in the world. Weston La Barre, the anthropologist, has put this point almost epigrammatically in his book *The Human Animal*: "The biologist, then, has two concepts: matter and life (which is a special phase or state of matter). He studies both living organism and material environment, environment being particular aspects of total material reality, but both, organism and environment, being wholly material entities. . . . An organism's "knowledge" is its environment. An organism, so to speak, only knows what it needs to know, or perhaps more correctly needs what it knows to need—needs being purposes. In this sense, *evolution is life learning about matter* (or what amounts to the same thing, *matter learning purposes*)." <sup>4</sup> Evo-

lution is life learning about matter, and this life is itself material in the genetic endowment which gives it its potentialities.

That which we call life, including human life, is a phase of matter. We may say, as Father Teilhard de Chardin does, that this matter in man has been spiritualized or hominized;<sup>5</sup> and if we use those terms "spiritualization" or "hominization" very carefully, they are quite proper and useful. But none of our terminology should divert us from the basic fact that spiritualized or hominized matter is matter, nature, under some particular condition or phase of its evolution. And in this light, if one were inclined to distinguish between man and matter or nature, or between matter and some "spirit," he could do so only with the utmost caution and careful definition of terms.

2. *Culture as Heritage and Environment* The first insight we draw from the life sciences is that the equation within which man spells out his life is composed, in both members, of nature, defined in material terms. The second aspect of our study of the life sciences has to do with a further specification of the world or nature within which man has developed and is developing.

Within the equation that I described above, the career of life is spelled out in the attempts of the organism to survive—survival in this sense means maintaining the organism's life long enough for it to reproduce itself effectively. The fittest in contemporary interpretation of "survival of the fittest" refers to the ability to produce the longest line of descendants.

In prehuman evolution, the information for survival was largely derived from the genotypic heritage which structures the organism and its instinctual behavior in response to its environment. Human evolution, however, increasingly involves a new source of information or instruction for generating adaptive behavior and survival in the environment.

Increasingly supplementing his genetically inherited organs and instinctual behaviors, man responds to his environment by means of socially transmitted tools and patterns of behavior, which we call cultural inheritance.<sup>6</sup> Culture stands as the unique feature in man's evolution, and it is tied, biologically, to the process of fetalization. Fetalization refers to man's unusually long period of maturation, during which he is subject to the nurture of his family and society. This nurture, including education, imparts to man his own peculiar substitute for instincts, namely, culture, which in turn is the impressive new apparatus through which man evolves, through which he responds to his environment, insures his fitness to survive, and fulfils his destiny as an organism.

## ZYGON

The pivotal position which the social nurture of culture holds in man's evolution emphasizes very strongly that man is a social animal, whose development is fundamentally dependent upon society, whether society resides in the family or the educational system or somewhere else. La Barre and others point to man's sociality and culture as the unique features about man. La Barre writes that "the very essence of human nature, then, is its promiscuous and fantastic inter-individuality. This is initially rooted in the biological nature of the human family."<sup>7</sup> In his 1964 Silliman lectures at Yale, René Dubos summarized this whole matter of man's sociality and its decisive importance for man:

If instinct is defined as a specific adaptation to environment that does not have to be learned, then the human infant is singularly ill-equipped at birth and furthermore remains deficient in this respect for several years. Because his instincts are so inadequate, personal relationships are of paramount importance during his long period of development. Man, in fact, continues to require the support and encouragement of other men throughout his life. . . . But biological innovations occur also whenever several members of one species associate to form a population, and this is particularly true of man. The individual organisms within a group interact in a variety of ways, and this interplay brings about the unfolding of potentialities that would remain unexpressed in the isolated state. For better or for worse, the *interplay between individual members of the human species always changes the expression of their morphological and physiological endowments, and of course their behavior.*<sup>8</sup>

Society and its heritage, culture, are integrally and even uniquely a part of man's evolution. More specifically, society and culture are aspects of his adaptation and response to his environment—adaptations which insure his survival as a "fit" creature. Culture has proven to be much more rapid and expansive an adaptive agent for man, moreover, than biological evolution, spoken of in purely physical terms, ever would have been.<sup>9</sup> However, culture embraces a number of other factors that we might not ordinarily associate with evolution. It embraces, perhaps most importantly, man's use of symbols, his morality, and his purposiveness. Man's use of symbols plays an important role here, because man does not simply respond to his environment but, rather, responds to his own symbolization of his environment and its stimuli.<sup>10</sup> This symbolization of the environmental stimuli is what makes it possible for man to transcend what Dubos calls "simple biological urges" and actually respond to himself in the form of the symbolic activities of his mind which interpret the world about him.<sup>11</sup> Man's morality enters into the evolutionary discussion, because his moral structures become extremely significant as means by which a symbol-making so-

cialized animal maintains himself as a social being—that is, by which he lives with other men—and thus enables the evolutionary process to continue in its new cultural form. Finally, culture embraces man's ability to define purposes and decide in accordance with those purposes what his action as an individual in society will be, relative to survival. Man sets himself apart from other forms of life in this very ability, to make decisions thoughtfully and carry them out, and this is one reason why his evolution differs from that of other forms of life.<sup>12</sup> These are only three of the important aspects of culture which enter into man's unique evolutionary development. When put together, they suggest how man's culture provides his unique position among animals and his unique process of evolution. La Barre puts it this way: "Culture is man's adaptation to his humanity."<sup>13</sup> Furthermore, they suggest that even man's psychic and cultural dimensions have an important biological significance. (We must return to this matter later.)

These considerations lead us to conclude that as he develops beyond his genotypic origins *the nature to which man is so inseparably related is increasingly social and cultural*. If we are to take cognizance of this testimony from the life sciences, we must acknowledge that for man nature is not so much the mountains and climate and floods (even though these are to be considered) as it is *people* and the products of people, society and its culture.<sup>14</sup>

But even if the concept of nature is thus reshaped when we consider man's evolution, that nature still resides in a matrix of physical, earthy matter. This social and cultural "nature" may pertain to what we call the psyche, *Geist*, or spirit, but it has still nevertheless emerged from a very earthy creature, whose existence spells itself out in terms of an earthy equation of genes and environment and whose goals are still related to the physical enterprise of survival, however "spiritually" that survival is defined. How do we deal with this sudden (in man) appearance of a "spiritual or psychic" dimension of the material realm? Pierre Teilhard de Chardin (who was a paleontologist) speaks of this dimension as a socialized or hominized phase of matter, which is so complex that it represents a new dimension of life, the noösphere, contrasted with and built upon the biosphere, that is, a complexifying tendency within the sphere of physical life which transmutes that physical life into the psychic sphere which encompasses man's cultural phenomena (morality, politics, philosophy, the arts, etc.). Teilhard writes: "We must enlarge our approach to encompass the formation taking place before our eyes and arising out of this factor of hominization, to a particular biological entity such as has never before existed on earth—

the growth, outside and above the biosphere, of an added planetary layer, an envelope of thinking substance, to which, for the sake of convenience and symmetry, I have given the name of the Noosphere."<sup>15</sup> In other words, as bewildering as the appearance of this psychic dimension of life may be, when compared with the material aspects of pre-human evolution, it does not seem adequate to separate the psychic from the material or to form a dichotomy between them. Rather, it may be more adequate to recognize that matter under certain circumstances has reached a phase of its development that we call cultural, social, or psychic.

These reflections upon the relation between matter and psyche turn our attention further to the relation between biology and the social sciences, particularly sociology and social psychology. Just as man's evolutionary career binds together within itself matter and psyche, so it binds the natural and social sciences. Dubos writes: "Thus, man has evolved a novel, parabiological method for adapting to his environment. He no longer relies exclusively on the forces of natural selection but instead increasingly uses sociocultural means. In final analysis, human evolution is now the resultant of the interaction between biological and sociocultural forces, and it involves a constant feedback between them."<sup>16</sup> This statement provides the basis and the necessity for the interrelationship of biology and sociology and social psychology. Sociocultural "nature" is within and without man as he pursues his evolutionary career—within as the nurturing process has fit him for life; without as the social environment to which he must respond. Sociocultural tools furnish man's arsenal, so to speak, from which he gathers strength to mold his environment. Furthermore, man's future will be determined even more by the success man attains in shaping—socioculturally—the world in which he lives.

3. *Natural Selection in Culture Too* The third aspect of man's relationship to nature, to which we turn now, is simply a footnote to what we have just discussed, namely, that no matter how highly refined the sociocultural dimension of man's evolution becomes, he cannot hope to escape the physical, material impact of evolution in the form of natural selection. Both Theodosius Dobzhansky and Dubos approach this factor through the study of disease—Dobzhansky as a geneticist and Dubos as a microbiologist. Several factors enter in here, only a few of which need to be mentioned as examples.

Man's diseases, we are now quite sure, are intimately related to his patterns of living. Dubos goes so far as to say, "The prevalence and severity of microbial diseases are conditioned more by the ways of life

of the persons afflicted than by the virulence and other properties of the etiological agents."<sup>17</sup> Or, again, disease is an expression of man's "responses to environmental insults and stimuli."<sup>18</sup> Dubos himself uses these observations as the basis for calling for an ecological approach to the practice of medicine.<sup>19</sup> We can refer to Dubos' insights here as biological counterparts to the work that Aarne Siirala has done in psychotherapy in his book *The Voice of Illness*.<sup>20</sup> Both Siirala and the biologists remind us that, since psyche and matter are within the same continuum, psychic phenomena have biological consequences, one of the most obvious consequences being that, as man's sociocultural evolution proceeds, his new ways of adjusting bring with them correlative diseases which throw light on the peculiar nature and problems of man's responses to his world. These diseases become another testimony to the manner in which man is related to nature. They indicate that the fully material and natural processes of natural selection are still crucially operative in determining man's present and future.

Another factor that applies here is the growing awareness that our advances in medicine have reshaped man's evolutionary development by modifying the world that for all practical purposes selects his genotype. These advances have changed the characteristics of the genes existing in our society's over-all gene pool by preserving the lives of persons who otherwise would have perished before they produced offspring. These genes are deleterious or lethal in an environment lacking modern medicine and could one day return to visit destruction upon us.<sup>21</sup> This is another example of the ineradicable relationship in which man stands to material, earthy nature.

4. *Change and Diversity* The phenomenon of change brings before us a fourth aspect of man's relationship to nature which figures prominently in what the life sciences have to tell us about man. In his discussion of the history of Charles Darwin's researches and writing, John Greene elaborates upon the conflict which ensued between Darwin and those of his contemporaries who believed—in harmony with Newtonian physics and conventional theology—that God had created man initially and conserved from the time of origins to the present day the "stability of the fundamental structures of nature."<sup>22</sup> These contemporaries, whose convictions have been labeled "creationism," were unwilling to allow that change was a constitutive factor in nature, specifically in man's nature. Darwin, on the other hand, was deeply impressed by the diversity of life.<sup>23</sup> He was impressed by the diversity he found within the same species. For example, in the months preceding the completion of his *On the Origin of Species*, Darwin was at work examining many

specimens of a certain species of crab. Even though he was an old hand at working in the field, as a naturalist, he noted in a letter to a friend that he never ceased being amazed at the individual differences within the same species.<sup>24</sup> Similarly, in his journeys on the *Beagle*, he found many occasions to wonder at the diversity, not within species, but between geographical areas, noting, for example, that it is geographical nearness and not topographical similarity that is correlated with likeness between species.<sup>25</sup> Faced with the enormous diversity in life that his practical field studies brought before him, Darwin simply could not accept the arguments of the creationists. Indeed, his theory of evolution and natural selection may be looked upon from one angle as an attempt to resolve the problem of diversity or change.<sup>26</sup>

The theory of evolution by natural selection provides such a resolution. Each individual's genetic endowment or genotype provides a particular pattern of adaptation to the environment. The genotype of each individual is different from that of the others in the gene pool of the population. In the processes of life in any particular environment, certain genotypes provide adaptations that fail to leave any descendants. No descendants means that this genotype was selected out, or eliminated from the gene pool. Other genotypes provide responses to this particular environment such that there are many descendants. This is adaptation, and the fact that there are descendants means they have been selected. Since there are always many different subfeatures of an environment and since the environment in any particular place is always undergoing some kind of change, the various genotypes are always being selected by different standards in different times and places. Thus the combination of varied genotypes and varied selecting environments yields diversity and change in patterns of life.

Greene mentions two phases of diversity that impressed Darwin—diversity within species and diversity between geographical areas. Diversity is also built into the biologist's categories of genotype and phenotype, as we discussed them above in II.1. These terms represent diversity within the career of the individual. To speak of a static, final man is impossible. The genotype, which theoretically contains a plan or sketch of all of man's developmental possibilities, cannot even be laid hold of or described. This genotype expresses itself only in the concrete responses to concrete environmental stimuli, that is, in the phenomena or behaviors called the phenotype; and the phenotype changes in every moment. The phenotype of the infant is not that of the adolescent, and neither of these is that of the young adult or the mature man. Yet all four are spun from the same genotype, and all four pertain

to the biography of the same man. Here we hit upon a very significant example of change and diversity.

The most adequate way to deal with this diversity may be to entertain a notion of man as an *event*, that is, as a confluence of *happenings*, whose identity is comprised of a *composite*, which emerges out of the happenings of the evolutionary process, subject to the laws of natural selection. To speak of man as an event and of his identity in a composite of appearances is to accept diversity. The whole realm of physical science has made us familiar with the notion of defining things as events. We are accustomed to working with the composite in the metaphysics of Alexander and Whitehead, in their concepts of process, and in the role-playing school of sociology as represented by Erving Goffman and Peter Berger, as they suggest that the self is a composite of roles in which the person finds himself. So, too, I am suggesting that the life sciences point us toward a view of man who is defined as event—an event that emerges from genes, environment, culture—and a view of man who locates his identity—whether as a species or as an individual—in the composite of appearances that express themselves in his phenotype throughout his career. That is to say, man's being is located in the very stuff of the changing nature in which his life manifests itself. Man so coinheres in his nature that his identity is dependent upon it.

5. *Man's Responsibility* Finally, at least for the purposes of this discussion, we must call attention to the imperative that the life sciences seem to place before man to assume ever more intelligent and responsible control over the nature we have discussed in the preceding four sections, as well as over his own evolutionary process within it. The preceding four sections leave us with two clear testimonies in this matter.

First, the evidence cited there indicates that man is already controlling nature—the nature without and within, the physical nature and the social-cultural nature—but the question is whether he is controlling it well, that is, whether he is controlling it in a manner commensurate with his further survival. Man is controlling his own cultural nurture, for example, but is he controlling it in such a way that produces healthy individuals who can carry on the human enterprise?<sup>27</sup> Every organism inevitably specializes in its development in order to adapt to the stimuli emerging from its own environment. Specialization may lead to extinction if it prevents adaptation to change. Is our culture developing so specialized a configuration that it is in danger of fossilizing? Man can influence the chemical condition within his own body, through drugs and medicines, but is he doing it responsibly?

Similarly, man can control his environment, produce a city, for example. But can he do so in a way that is conducive to survival? These are the kinds of questions the life sciences raise for us today in regard to our control of nature.

Second, the life sciences, particularly as we observed under Section II, are opening our eyes to the fact that psychic, or spiritual, phenomena have biological, evolutionary, significance. That is to say, what we do socioculturally, in politics, government, education, the arts, morality, or religion, has significance for our attempts to control nature for our own advantage. These psychic or spiritual dimensions of our existence have emerged out of the biological matter of life, they have emerged out of the struggle to survive, and they serve an adaptive function.<sup>28</sup> Therefore, it is clear that we do not fully understand these psychic phenomena unless we understand that—besides their other meanings—they have great *biological* significance.

### III. THREE ISSUES FOR A DOCTRINE OF MAN

At the present, we are not in a position to erect a new doctrine of man in the light of the considerations I have sketched here. We have not progressed far enough in our thinking to produce the kind of synthesis that is necessary for such a doctrinal formulation. Despite the primitive stage of our thinking, however, we can uncover some of the basic issues that face us as we contemplate a new doctrine of man, basic issues that theologians, preachers, and all Christians must consider as they go about their work of synthesizing. Here I want to discuss three of these issues, as they grow out of my preceding remarks and point toward a new doctrine of man.

#### 1. *A New Doctrine of Man Must Reassess the Spirit/Nature Dualism*

If evolutionary theory is correct, and for our purposes we are making that assumption, spirit and material nature must be considered within a single continuum rather than as two separate realms of being. Our references to Teilhard de Chardin indicate that spirit ought to be construed as a certain phase of matter, namely, the phase of its extreme complexity.<sup>29</sup> Paul Tillich has been one of the most instructive thinkers among us on this problem. Although he did not go into the problem in enough detail, he asserted very forcefully that man's spirit (here used as a synonym for the German *Geist*) is not a level of his being or a compartment of his self. Rather, Tillich insisted, spirit is a *dimension* of man's total self, which includes his body.<sup>30</sup> Tillich was countering, quite explicitly, a tradition of preaching which separated spirit and matter as a correlate of the separation between good and evil. This tra-

dition has exhorted the individual to remain unspotted by the world of material nature, and it has given that exhortation both moral and ontological justification. Morally, the separation from matter meant refraining from actions that were too earthy or too "worldly"; ontologically, it implied that man's body was the source of his problems, his propensity and vulnerability to evil, whereas his "mind" or "soul" was pure, the seat of faith and goodness, which therefore had to be protected and liberated from evil matter.

The Reformation theological tradition has had a stake in this spirit/nature separation. For example, in his *Loci*, John Gerhard, who was one of the greatest sixteenth- and seventeenth-century Lutheran theologians, quoted Augustine with approval as follows:

The fact that man is said to have been made in the image of God must be understood not according to the body, but according to the mind, or intellect. However, it can be said that even in the body man has a unique property which somehow reflects the image of God. Such a property is the physical constitution of man, whose body stands upright. By this he is warned that he should not seek after earthly things, as the other animals do, whose whole pleasure is out of the earth, and hence they are bent and prostrated towards their belly.<sup>81</sup>

This spirit/matter dualism has its roots in the New Testament, including the writings of St. Paul and the spirit/flesh opposition which he represents. St. Paul's concern is to designate the seat of sin's power over man, and he did so by calling that seat of power "flesh." For Paul, flesh is not synonymous with matter, but it is not difficult to understand why it was often interpreted as if it were. So, for example, it requires a sophisticated and subtle exegesis to avoid drawing justification for a spirit/nature or spirit/body dualism from Rom. 8:5-8: "For those who live according to the flesh set their minds on the things of the flesh, but those who live according to the Spirit set their minds on the things of the Spirit. To set the mind on the flesh is death, but to set the mind on the Spirit is life and peace. For the mind that is set on the flesh is hostile to God; it does not submit to God's law, indeed it cannot; and those who are in the flesh cannot please God." Although it is commonplace today to assert that flesh does not equal matter or nature in this passage,<sup>82</sup> there are several ways to account for our persisting temptation to misinterpret Paul. R. G. Collingwood roots the propensity in the rise of the modern science in the seventeenth century, in which nature had to be considered lifeless, as dead matter that could be worked upon by man for his own ends.<sup>83</sup> Of course, life and spirit were to be seen everywhere, in contrast to lifeless nature, and their very presence made

the spirit/nature dualism a serious problem that could not be ignored by the philosophers and theologians. It may well be that our own American traditions were particularly congenial to this Renaissance mode of thinking, since those traditions were wielded by men whose first task it was to subdue a nature so as to make it malleable for nation-building; a nature that is lifeless, inert, devoid of spirit, is more easily twisted and subdued than a living, dynamic nature. Reinhold Niebuhr roots this propensity not so much in the secular spirit as in heretical Christianity itself, pointing his finger at the Pelagian influence, which sought to exonerate man's will from sin and therefore placed responsibility for evil upon nature itself.<sup>34</sup>

Whatever the precise historical provenance of the modern theological holdovers that still subscribe to the spirit/nature dualism, contemporary Protestant theology's commitment to existentialism and the Kantianism which underlies existentialism has tended to reinforce this spirit/nature dualism. Existentialism, like its Kantian precursors, is essentially a type of phenomenology of the human consciousness; it describes the contents of the human self-consciousness as the self encounters the reality that lies outside itself. Therefore, existentialist philosophy is predisposed to view everything in terms of the distinction between the self-consciousness and that which it encounters. Nature, however defined—whether as matter, body, or whatever—must always be separated from the self-consciousness in this existentialist framework. As a consequence, the world of nature, including the human body, tends to be opposed to the self-consciousness in existentialist philosophy and theology, and this opposition becomes a matter of some significance when one considers that everything important for the existentialist happens in the self-consciousness.<sup>35</sup>

Our earlier observations indicate that, from the point of view of the life sciences, a radical distinction between spirit and nature or matter must appear very dubious, whether that distinction is theological or philosophical. The distinctive vision of the life sciences lays bare the unity and continuity between spirit and matter, between man and his world. What we are faced with—as we stand between existentialism and the life sciences—is a kind of strange double vision on this issue of man's relationship with his world.<sup>36</sup> An adequate doctrine of man must synthesize both factors, so as to resolve this double vision into a unity of vision in respect to man. Christian doctrine has no overriding investment in the spirit/nature dualism. Nor does it seem to me that existentialist philosophy has such an investment. Rather, Christian theology has used this dualism in order to talk about the self-conscious and

creative dimension of the human being, which is so crucial for man's humanity and which seems to differentiate him from other forms of life. The spirit/nature dualism has also been employed to talk about the forces which cause man to do evil, in direct contradiction to man's inner sense that he should be doing good. Now both of these concerns are legitimate and real, the concern for the creative dimension of man's life and the distinction between the sensibility for good and the propensity for evil. These concerns cannot be obliterated, but they can no longer be spoken of by postulating a dichotomy between spirit and material nature. At the very least, the life sciences call for a revolution of theological discourse at this point. This is the first important lesson that philosophy and theology must learn from the life sciences.

What we have said about the spirit-and-nature dualism has been set within a definition of nature as physical and material. But our conclusions are equally pertinent when nature is conceived of in sociocultural terms. The tendency in Christian theology has often been, particularly in recent years, to speak of man in individualistic terms which set him in sharp contradistinction to his sociocultural world. It is not only the hyperindividualism of frontier American Christianity that we object to here; nor is it simply the individual orientation of existentialist theologies, focusing as they do on the contents of the individual self-consciousness. (It is true that the Buberian I-Thou existentialist approach does emphasize the dialogical character of human existence.) Rather, what seems most inadequate is the view—common to many theologies today, whether existentialist oriented or not—that selfhood is an individual matter, that which resides in the interior of its possessor. H. Richard Niebuhr's *The Responsible Self* is a notable exception. Coupled with this view, we often come across a conviction that society is the enemy of the self, the "herd" or the "crowd" (to recall Søren Kierkegaard's term) which must inevitably compromise the self. Both the individualism and the polemic against society are strategies for separating man and nature, denying man's basic relatedness to and dependence upon nature, as nature is socioculturally defined.

The life sciences certainly call into question any simplistic interiorization of the self and any stereotypical rejection of society, which causes a dichotomy between man and nature, socially defined. Whether one thinks of the evolutionary understanding of society as the nurturing agent that prepares man to undertake the struggle for survival, whether one thinks of the anthropologist's understanding of society as the meaning-giving agency in human existence, or whether one thinks of the social-psychological understanding of selfhood as comprised of

roles that society prescribes—in any case we must question any interiorization of selfhood and any rejection of society. Goffman, the sociologist, puts this issue squarely, in a way that the evolutionary theorist and the anthropologist could also accept: “In our society the character one performs and one’s self are somewhat equated, and this self-as-character is usually seen as something housed within the body of its possessor, especially the upper parts thereof, being a nodule, somehow, in the psychobiology of personality. I suggest that this view is . . . a bad analysis of the presentation. . . . While this image is entertained *concerning* the individual, so that a self is imputed to him, *this self itself does not derive from its possessor, but from the whole scene of his action.*”<sup>87</sup> In other words, the self does not reside solely in the possessor but is *bestowed upon* the possessor in his social interrelatedness.

If these testimonies from the life sciences have any validity at all, they call into question any simplistic dichotomy between man and socio-cultural “nature.” This sociocultural “nature” is so intimately related to man that it is in him; we might even say that man and his sociocultural “nature” coinhere. Once again, if we choose to speak of man’s selfhood or his spirit, we must do so in a manner that includes his dependence upon society and culture as the matrix in which his distinctively human existence takes form and from which it emerges. This is the second lesson a doctrine of man must learn from the life sciences.

2. *A New Doctrine of Man Must Take Change and Diversity Seriously*  
Theological anthropology at the present time is very largely premised on a picture of man who has not altered basically since his creation by God. At least, he has not changed within his holy of holies, his self-consciousness. Even the methodologies like Martin Buber’s, which build into their theologies the factor of constant dialogue with the Thou, through whom the self unfolds, do not encompass change within their purview—at least not significant change.

The life sciences have suggested to us that change and diversity are of the very fabric of life. This change is of two kinds, and we can get at these two kinds of change by borrowing the categories of Andrew G. van Melsen,<sup>88</sup> in which case we can speak of change in respect to man regarded as an object and in respect to man regarded as a subject.

When the life sciences look at man as an object, it seems clear that he is one part of a chain of life that has changed from one species to another in a long history of development and that seems open to change in the form of future developments of life. This change was described by Ernst Haeckel in 1896: “The gist of Darwin’s theory is this simple idea: that the Struggle for Existence in Nature evolves new Species

*without* design just as the Will of Man produces new Varieties in Cultivation *with* design.”<sup>39</sup> We have difficulty imagining this kind of change in life, particularly in man. It is difficult for us to take seriously any significant change in future men. Continuity in man’s nature seems to be an indestructible building block in our thought. Father Teilhard is one of the few Christian thinkers who has really allowed for a change in man in the future. In his more dramatic phases of thought, Teilhard spoke of this change in terms of a Point Omega toward which man’s ever increasing complexification is tending.<sup>40</sup> The intense mystical dimension of this concept of Omega makes it difficult to work with. But in another aspect of his thought, Teilhard is concerned to speak, not about eschatology, but about evolution’s ability to make fresh starts when a maximum amount of complexification has lessened possibilities for further development in any particular phase. He uses the image of the space vehicle which achieves one orbit, only to launch a second vehicle into a still higher orbit. Man’s evolution has reached such a preliminary height, he believes, now that it has populated the entire globe, formed a world society, and entered upon the explosion of intelligence which cybernation has rendered possible. In this context, he writes: “Still deceived by the slowness of movements that embrace the whole cosmos, we all to some degree find extreme difficulty in thinking of man as still moving along his evolutionary trajectory. We still attribute to ourselves the fixity that we now recognize as an illusion when attributed to stars, to mountains and to life’s long past. . . . We must distinctly and once and for all finish with the legend that continually crops up again of an earth that has, in man and with the man we now see, reached the limit of its biological potentialities.”<sup>41</sup> If this change is difficult to conceive theoretically, it is all too evident in the practical developments of biological technology. Genetic engineering, electronic control of the brain and human emotions, asexual reproduction, advanced medical procedures, and more sophisticated drugs are making it clear that our conceptions of what it means to be man and of what life and death are, must be changed, if they are to be meaningful.

The second aspect of change, with respect to man regarded as a subject, overlaps the first kind of change but differs in that it is change that transpires within an individual within his lifetime, and it has to do with changes in his own selfhood. If man is the highly flexible creature we have described, whose phenotype is always changing, within an equally fast-changing world, to which he is intimately related, and if this world includes the sociocultural “world”—if all this is true, then we should expect great diversity within each individual human career.

This is not only the diversity that accompanies the physical changes of growth, maturing, and change in environments but also—as the social psychologists would want to point out—the diversity of the psychological and spiritual changes that attend those physical alterations. Berger, in *Invitation to Sociology*, discusses the implications of the fact that man owes his self to the social context in which he lives. This view of personality, he writes, “is far more radical in its challenge to the way we commonly think of ourselves than most psychological theories. It challenges radically one of the fondest presuppositions about the self—its continuity. Looked at sociologically, the self is no longer a solid, given entity that moves from one situation to another. It is rather a process, continuously created and re-created.”<sup>42</sup> I would suggest that most theological discussions of man employ a view of the self as a “solid, given entity.”

Van Melsen has given us another insight into man’s interior propensity toward change by asking what the sciences, as such, reveal to us about man as subject. His conclusion is that the sciences reveal to us, first of all, that man is fully involved—through the experimental method—in a nature that is fully open to change and, second, that man’s own cognition of that nature is always open to change.<sup>43</sup> The conclusion must be drawn that man’s understanding of himself is always open to change, since he is caught up in fully open-ended involvements, both physically and cognitively. “The progressive character of human knowledge disclosed itself first in physical science, but since then man has become convinced that progressiveness is valid for the whole of human existence. It could hardly have been different. For the self-experience man has acquired in the development of physical science essentially touches his relationship with nature, and a modification of his view of nature automatically has consequences for man’s view of himself.”<sup>44</sup>

It seems clear, then, that change is a fundamental category which we must implement in our thinking about man and nature; indeed, some years ago, Collingwood could already conclude that change was a basic category in modern man’s intellectual armory.<sup>45</sup> Change and diversity have already made their mark on our contemporary thinking about God. On the American scene, the efforts of theologians like Daniel Day Williams, John Cobb, and Schubert Ogden do not need to be detailed here. On the European scene, Pannenberg and Moltmann are simultaneously dealing with change and diversity under the rubric of hope and futurity. In a recent article, Moltmann put the issue well by saying that Christian theology must pay “attention to the future as a divine

mode of being.”<sup>46</sup> Pannenberg is doing precisely this as he seeks to develop an ontology of futurity which makes the future in God pre-eminent over past and present and which makes God’s future the prime determinant for all moments of the present. The work of Pannenberg and Moltmann, simply because it does emphasize futurity, bids fair to join forces with what seems to be a growing need and desire for a “theology of revolution” which can proceed more carefully than the rather careless, popular attempts that are rife today.

It is not at all clear, however, that we are proceeding with as much clarity and courage to implement the concepts of change and diversity in our theological thinking about man as we have in our thinking about matter, nature, and God. When we do proceed clearly and courageously in this area, our conceptions of sin, grace, and ethics will have to undergo decisive changes, since so much of the theological and philosophical tradition presupposes a static view of man.<sup>47</sup> Perhaps most important, relativity will figure even more prominently in our thinking concerning ethics and in our construction of norms for determining just what constitutes Christian life, both in the present and in continuity with the past.

I have already suggested that if theology is to form an adequate doctrine of man in the light of what we know about change and diversity, then perhaps we must say that man is himself most adequately conceived as an *event*. That is, man is himself a concatenation or juncture of biological and social forces; man is himself a bundle of energy, organized in a certain manner, proceeding in a certain direction. In these terms, we could understand that man is a process, continuously created and re-created. The self, in this reconstruction, must be considered not only as a changing entity, but its essential nature must be understood to be composite, relative, and unfinished; the self is a composite of the entire process that constitutes it. Such a view of man as event and composite would call for a corollary restatement of our doctrines of justification, sin, the image of God in man, and others. In each of these doctrines, the restatement should probably emphasize the category of *linearity*, rather than substance. Here we can only sketch cursorily what “linearity” might mean for our doctrine of man. It means, for one thing, that we must define man in terms of the *structure* or shape of the components that comprise him, in terms of the structure or shape of his actions and functions. Here we would simply be following the lead of Whitehead, Alexander, Teilhard, and most scientists.<sup>48</sup> Linearity would also imply that we consider man from the perspective of the direction in which he is tending, rather than the substance or

essence he has attained. So, for example, man's intelligence is to be described not so much in terms of the brainpower and learning that man has attained as in terms of the network of cybernated centers of intelligence and learning that man is building and projecting, with the concomitant changes such a network will effect. Linearity would combine changeability and instability with order and direction in defining man and his life.<sup>49</sup> This linearity would consist in a thrust forward, in full psychosomatic unity, toward the future.

3. *A Doctrine of Man Must Come to Terms with the Biological Significance of Psychic or Spiritual and Cultural Phenomena* We have indicated in the first part of this paper that the realm of biological considerations is of a piece with man's sociocultural achievements, including his morality, politics, etc. Christian theology has abhorred such intimations. Even a touch of Émile Durkheim or W. Lloyd Warner has brought howls from theologians,<sup>50</sup> who insist that the psychic phenomena with which the church has to do are God's *revelation*, and such revelation has not ordinarily been thought to possess biological significance.

This distinction between the psychic events that are revelation and the physical events of biological evolution may have been viable in a day when biology and the social sciences seemed to be unalterably discontinuous. But today, when biological and sociocultural considerations appear to reside in one single continuum, we must reassess theology's traditional abhorrence of the suggestion that even Christian psychic phenomena have a biological significance in the same sense that all of man's actions do. Of course, this statement needs some elaboration. A previous generation objected to Durkheim and Warner—as well as to Huxley—because their work seemed to imply that religion was simply another mechanism of adaptation to the environment. This functional approach to religion was simply too crass for theologians, and rightly so.

Today, however, we can put different constructions upon the statement that religious phenomena have biological significance. We can point, first of all, to the judgment that the term "adaptation" is not an exhaustive designation of man's activities. Man also "expresses" himself, sometimes in ways that seem to have little adaptive value at all.<sup>51</sup> For this reason, Dubos prefers to say that man "responds" to his environment, which includes expressiveness, rather than that man "reacts," as if he were victimized by his environing world.<sup>52</sup> Psychic phenomena, including religion, may very well fall under this expressive functioning of man.

More important, however, we can follow the lead of Teilhard de

Chardin to see that the biological significance of psychic phenomena lies in the assertion that the psychical phenomena point to the more complex phases of biological reality into which it appears to be the destiny of matter to evolve.<sup>53</sup> This perspective has the merit of viewing spiritual phenomena within the total continuum of nature, while at the same time showing that the purpose of those phenomena is in relationship to material nature. The realm of *Geist* or psyche is not a disembodied—and therefore scientifically suspect—realm that hovers furtively and illegitimately alongside empirical reality. Rather, the *geistige* dimensions of human life, including religion and faith, are in some sense a phase of empirical, material reality. Therefore, as both Teilhard and La Barre point out, man's morality is not simply a spiritual entity dropped into man's existence from above. Rather, it is a spiritual dimension which is appropriate to the increasing complexity of life, in its human phase, which makes it possible for that life to sustain itself.

Now such an assertion may be termed a "biologizing" of morality; on the contrary, it is more to the point to see morality as a phase, that is, having to do with the destiny, of biological realities. It is in this framework that Teilhard discerns a Point Omega, toward which life is evolving, which will be a final step in the destiny of life, and which he believes is encompassed by Jesus Christ.<sup>54</sup> Whether Teilhard is to be followed in all his details is not really the question; the point is that he understands that the psychic dimensions of man, including the psychic realities that we are accustomed to terming "faith" and "revelation," are to be viewed *within* the evolutionary career of nature and that their significance obtains within that career. Here again, it is possible to hold Teilhard's eschatology in abeyance, in order to focus on his contention that civilization is a specific phase of the life process which is marked by the socialization of the human organism, in which psychic influences predominate over others.<sup>55</sup> The work of Pannenberg and Moltmann, particularly to the extent that it has been forged out of a dialogue with Marxism, is cognizant that the movement toward the future is an *embodied*, material movement. Its idealistic root, however, must be carefully restrained so as not to lose this material dimension. This built-in concern for concreteness and materiality is an important contribution which Teilhard and American empiricism can make to the current German modes of thought that are concentrating upon the future orientation of God and the world and man.

If we do take the biological significance of psychic phenomena seriously, the results will be explosive for our anthropology. On the one hand, we will have to consider earnestly that material or natural phenomena are incomplete apart from a larger destiny which includes

## ZYGON

spiritual dimensions of the life process. By this use of the term "destiny," I am not suggesting an illicit concept of teleology. Rather, I am calling attention to the fact that if matter at a certain level of its complexity is *life*, and thus inclusive of a psychic dimension, then we cannot fully understand matter at any level unless we understand its relationship to the structure of matter we call psychic and vital. On the other hand, we cannot understand spirit or life unless we can comprehend its place and significance for the whole spectrum of matter and its process of development.

These suggestions have at least two important implications for our doctrine of man. First, our doctrine must be sophisticated enough to take its place in a cosmic context. What we say about Christ as Lord of men must be susceptible of elaboration under the rubric of his cosmic lordship. What we say about man's sin must be continuous with what we know about the existence of the entire cosmos, from subatomic matter to God himself; sin must have relevance not only for man's neuroses but also for the groaning and travail of the creation. What we say about grace must be capable of illuminating the redemption of nature, both physical and sociocultural. What we say under the rubric of ecclesiology must be inclusive of the sociological, psychological, political, and historical dimensions of church life. In other words, we must break out of a parochialism which isolates man as if he were a phase of life in separation from all others, as if his destiny and origins were separable from the rest of the cosmic spectrum.

Second, and here we draw together implications from our discussion of the spirit/matter unity and change, we must consider more carefully the sense in which the spirit *is* matter in man. In an important sense, the self *is* what it does in the material world, and this means that man's spirit can only with difficulty be distinguished from what he does. Man does know himself to be something "more" than his deeds, "more" than the empirical analyses of himself—but this "more" is itself fully imbedded in materiality. It has been suggested that man's life today is well described by the term "operator," indicating that man's very being today is spelled out in his actions of managing and directing the apparatuses he has built, whether those apparatuses be social, political, technological, or psychological.<sup>66</sup> As we look at man today, we can see very clearly that his selfhood, his spirit, *is* his managing and operating, since it is within that managing and operating that he understands himself, tests his possibilities, lays out his goals, performs his ministrations of mercy, works out his destiny. If this is so, we must reassess rather drastically some of our traditional notions about faith being sharply separated (soteriologically, at least) from works, about man's

true self being identified with what he *is* rather than with what he *does*.<sup>57</sup>

Third, we must recognize that in this respect the non-theological empirical disciplines can legitimately exercise a truth judgment upon our doctrine. If morality is a characteristic of the phase of life called socialization of the human species, then theologians can hardly formulate doctrines concerning morality that are disruptive of or nonsensical in relation to that socialization. Or, to restate an argument that Joseph Haroutunian has made very eloquently, if the peculiar biological and psychical task of mankind—under God's providence—today is to achieve a mode of existence which is hyperorganized and yet inclusive of ultra-personal freedom, then a doctrine of man that does not speak very importantly about man's relations in community and the possibilities of divine freedom in those relations is a doctrine that had just as well not be written, because it will be useless and profoundly unnatural in a time when unnatural theology is nonsense. I recognize that such comments are dangerous in that they are easily misunderstood. I do not mean to biologize theology; I do not mean that theologians should let social engineers write their moral theology for them. But I do mean that if man is a natural organism, set inseparably within a network of physical-social-cultural relations, then our confidence in God's providence and faithfulness demands that our moral theology be of such a kind that it will move man within these relations to his fruition and fulfilment. In other words, the cosmic goals of life, as that life happens to be structured in a hominized form, must be the context and even the goals of our theology as well, particularly our doctrine of man. Once again, a parochial form of anthropology cannot relate easily and adequately to these larger goals of the process of life.

#### NOTES

1. Of the "Chicago" School, I have in mind the well-known writings of Bernard Meland, Daniel Day Williams, John Cobb, and Schubert Ogden.

2. The chief work of Juergen Moltmann is *Theologie der Hoffnung* (Munich: Chr. Kaiser, 1964); see also his "Das 'Prinzip Hoffnung' und die christliche Zuversicht," *Evangelische Theologie*, XXIII (1963), 537-57, and "Die Kategorie *Novum* in der Christlichen Theologie," in Siegfried Unseld (ed.), *Ernst Bloch zu Ehren* (Frankfurt: Suhrkamp, 1965). For Wolfhart Pannenberg's thought, see *Grundzuege der Christologie* (Guetersloh: Gerd Mohn, 1964), pp. 79-85; also "Der Gott der Hoffnung," in Unseld (ed.), *op. cit.* Also pertinent are Harvey Cox, "Afterword," in Daniel Callahan (ed.), *The Secular City Debate* (New York: Macmillan Co., 1966), and Carl E. Braaten, "Toward a Theology of Hope" (to appear in *Theology Today*, July, 1967).

3. Theodosius Dobzhansky, *Mankind Evolving* (New Haven, Conn.: Yale University Press, 1962), chap. iv.

4. Weston La Barre, *The Human Animal* (Chicago: University of Chicago Press, 1954), pp. 3-4; my italics.

5. Pierre Teilhard de Chardin, *Man's Place in Nature* (New York: Harper & Row, 1966), pp. 23 ff.
6. Dobzhansky, *op. cit.* (n. 3), chap. iii, esp. pp. 58-59.
7. La Barre, *op. cit.* (n. 4), p. 237. Note also La Barre's social theory of psychosis, chap. xiii, which in effect underscores the role of sociality.
8. René Dubos, *Man Adapting* (New Haven, Conn.: Yale University Press, 1965), p. 8; my italics. John Greene points out how important sociality was in Darwin's theorizing, in his *The Death of Adam* (New York: New American Library, 1959), p. 288.
9. See Dobzhansky, *op. cit.* (n. 3), pp. 18-22.
10. See the insightful discussion in Dubos, *op. cit.* (n. 8), pp. 5-7.
11. *Ibid.*
12. See *ibid.*, pp. xvii-xviii, and La Barre, *op. cit.* (n. 4), chap. xii.
13. La Barre, *op. cit.* (n. 4), p. 213.
14. See Joseph Haroutunian's essay on this theme, "Toward a Piety of Faith," in Philip Hefner (ed.), *The Scope of Grace* (Philadelphia: Fortress Press, 1964), pp. 165-82.
15. Pierre Teilhard de Chardin, *The Future of Man* (New York: Harper & Row, 1964), p. 157.
16. Dubos, *op. cit.* (n. 8), p. 13. See also La Barre, *op. cit.* (n. 4), pp. 216 ff.
17. Dubos, *op. cit.* (n. 8), p. xxi; Dobzhansky, *op. cit.* (n. 3), pp. 303-12.
18. Dubos, *op. cit.* (n. 8), p. 233.
19. *Ibid.*, pp. xix-xx.
20. Aarne Siirala, *The Voice of Illness* (Philadelphia: Fortress Press, 1964).
21. Dobzhansky, *op. cit.* (n. 3), chap. xi. See also Lucy Eisenberg, "Genetics and the Survival of the Unfit," *Harper's* (February, 1966), pp. 53-58.
22. Greene, *op. cit.* (n. 8), p. 15.
23. *Ibid.*, p. 283.
24. *Ibid.*, pp. 249 ff.
25. *Ibid.*, pp. 250 ff., 283.
26. *Ibid.*, pp. 257 ff. See also Loren Eiseley, *Darwin's Century* (New York: Doubleday & Co., 1961). Also Andrew G. van Melsen, *Evolution and Philosophy* (Pittsburgh: Duquesne University Press, 1965), p. 11.
27. See La Barre's discussion of non-adaptive cultural trends, and the possibilities of producing a psychotic culture, *op. cit.* (n. 4), pp. 240-45, and chap. xiii. Paul Goodman's *Growing Up Absurd* (New York: Vintage Books, 1960) is also pertinent here.
28. See Dubos, *op. cit.* (n. 8), p. 249.
29. See n. 5.
30. Paul Tillich, *Systematic Theology* (Chicago: University of Chicago Press, 1963), Vol. III.
31. In Herman Preus and Edmund Smits (eds.), *The Doctrine of Man in Classical Lutheran Theology* (Minneapolis: Augsburg Publishing House, 1962), p. 49. See also the classical Lutheran theologians, Baier and Hollaz, quoted in Heinrich Schmid, *The Doctrinal Theology of the Evangelical Lutheran Church*, trans. Charles A. Hay and Henry E. Jacobs (Minneapolis: Augsburg Publishing House, 1961), pp. 626, 628. There is some indication that the mainline Reformation understanding of faith and works also participates in this unfortunate dualism, although one might argue that the dualism is not essential to the *sola fide*. The sixteenth-century discussions tended toward this dualism when they argued that (1) when justification is under discussion, works are extraneous; (2) without faith, works are hostile to God, whereas with faith they are part of his will; (3) faith precedes good works *temporally*. For pertinent sources, see Theodore Tappert (ed.), *The Book of Concord* (Philadelphia: Fortress Press, 1959), Formula of Concord, Art. III, pars. 29, 36; Art. II, par. 20; Art. III, pars. 27, 32, 40-41, and *passim*. Contemporary restatements of Reformation faith tend to maintain this dichotomy.

32. See Werner Kummel, *Man in the New Testament* (Philadelphia: Westminster Press, 1963), pp. 61 ff.
33. R. G. Collingwood, *The Idea of Nature* (New York: Oxford University Press, 1960), pp. 111-12.
34. Reinhold Niebuhr, *The Nature and Destiny of Man* (New York: Scribner's, 1949), pp. 245-46.
35. Even so sensitive a treatment as that of Karl Heim's discussion of *Leiblichkeit* carries with it unmistakably the presupposition that spirit and self-identity are dualistically opposed to nature and body. See his *Glaube und Denken* (1st ed.; Berlin: Furche-Verlag, 1931). The current school of the "New Hermeneutic" proceeds under this same assumption, as it insists that some primordial being (*Geist?*) is unveiled in language. This dichotomy is clearly seen, e.g., in the interpretive essay by James Robinson in James Robinson and John Cobb (eds.), *The New Hermeneutic* (New York: Harper & Row, 1964), pp. 1-77.
36. This "double vision" is worthy of much more attention. Hans Jonas throws some light on it in his concepts of "physical-outward" and "vitalistic-inward" approaches to man, in *The Phenomenon of Life* (New York: Harper & Row, 1966), pp. 17-18.
37. Erving Goffman, *The Presentation of Self in Everyday Life* (New York: Doubleday & Co., 1959), p. 252; my italics.
38. Van Melsen, *op. cit.* (n. 26), chap. i.
39. Quoted in Eiseley, *op. cit.* (n. 26), p. 334.
40. Teilhard de Chardin, *op. cit.* (n. 15), pp. 120-23.
41. Teilhard de Chardin, *Man's Place in Nature* (n. 5), pp. 107-8. Leslie Dewart, in his *The Future of Belief* (New York: Herder & Herder, 1966), chap. iii, makes an interesting effort to deal with change, but omits almost entirely any consideration of what Van Melsen calls the objective aspect of change. Dewart confines his attention to the interior, subjective self, as it changes.
42. Peter Berger, *Invitation to Sociology: A Humanistic Perspective* (New York: Doubleday & Co., 1963), p. 106. See also the work of Erik Erikson.
43. Van Melsen, *op. cit.* (n. 26), pp. 18-23, 51-53. See Dewart, *op. cit.* (n. 41), chap. iii.
44. Van Melsen, *op. cit.* (n. 26), p. 22.
45. Collingwood, *op. cit.* (n. 33), pp. 9-13.
46. Juergen Moltmann, "Hope without Faith: An Eschatological Humanism without God," in Johannes B. Metz (ed.), *Is God Dead? (Concilium Theology in the Age of Renewal: Fundamental Theology, Vol. XVI [New York: Paulist Press, 1966])*, p. 39. See the materials listed in n. 2, above.
47. Van Melsen, *op. cit.* (n. 26), pp. 17 ff.
48. See Collingwood, *op. cit.* (n. 33), pp. 158-74. Also the basic thesis of Karl Menninger in *The Vital Balance* (New York: Viking Press, 1963).
49. Wolfhart Pannenberg offers insights along this line in his emphasis upon man's "openness" to the world and God. See his *Grundzuege der Christologie* (n. 2), pp. 196 ff. and his *Was ist der Mensch?* (Goettingen: Vandenhoeck & Ruprecht, 1964).
50. Émile Durkheim, *The Elementary Forms of Religious Life* (New York: Collier Books), and W. Lloyd Warner, *The American Life: Dream and Reality* (Chicago: University of Chicago Press, 1962), chap. ii.
51. See Dubos, *op. cit.* (n. 8), p. xviii.
52. *Ibid.*
53. See Teilhard de Chardin, *The Future of Man* (n. 15), chaps. x and xiii.
54. *Ibid.*, chaps. i, vi, xxii, xxiii.
55. Teilhard de Chardin, *Man's Place in Nature* (n. 5), pp. 85-88.
56. I first heard this term from Joseph Sittler, although I am not sure that he would want to put it to the use I have here.
57. See n. 31 above.