EVOLUTION, CULTURE, AND SIN: RESPONDING TO PHILIP HEFNER'S PROPOSAL

by Langdon Gilkey

Abstract. In his recent book, The Human Factor, Philip Hefner proposes to deepen theological understanding of the natural world and the place of humans within it. He describes humans as products of converging streams of genes and culture, and as possessors of freedom that requires them to be "created cocreators." In accordance with the requirements of "the way things really are" (God), humans are to become divine agents in enlarging the realm of freedom in the world through self-sacrificing altruism. While Hefner's insights are admirable, his work could be viewed, in part, as a covert expression of nineteenth century liberal beliefs in progress. In fact, human culture and freedom are more ambiguous products of both good and evil, and hence we must take more cognizance of the pervasiveness of what theology has termed sin.

Keywords: altruism, created cocreator, culture, dualism, freedom, genetics, myth, ritual, sin.

Philip Hefner's The Human Factor: Evolution, Culture and Religion (Minneapolis: Fortress, 1993) is an exciting and important book, the best to my knowledge of the many new theological efforts to rethink theology in the light of modern science. It represents both immense learning in the biological and anthropological disciplines and a stunningly creative and novel set of theological reinterpretations.

Although Hefner deals knowingly with many subjects, two dominate the volume. As he says repeatedly, the "main purpose of the book" is "to craft a viable image of human purpose" (p. 241, also p. 3 and p. 153). Through theological reflection on the human sciences, he outlines an understanding of human nature and the purpose of human existence (as "created co-creator") that is both new and relevant to the present crisis of the ecosystem. The second main subject

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represents the formal or methodological side of the first, namely, a discussion of how the facts of experience, especially the data of science, can be related creatively to the "larger frameworks of meaning" also necessary to human living—and survival.

In this effort Hefner is mainly interested in urging theology to reinterpret itself. This is not a theological critique of science, of technology, or of those elements of the secular culture which both have helped to create, though Hefner is well aware of the needs of that culture for new levels of motivation and guidance. Convinced that "the greatest danger is an obscurantist theology" (p. 15), Hefner wishes to turn the religious community's (and so theology's) concern to the world, and to do that in two major ways: (1) to shape a religious understanding of human being and its purposes by the knowledge we now have of our natural environment and above all of our place in it as products of nature's processes; (2) to affirm that human purposes *concern* the world that produced us: "the purpose of the creature (Homo sapiens) is ... to be working in the service of the natural processes for the purposes of what really is (God) ..." (p. 241, cf. also hypothesis 2, pp. 40-41). Thus, "Christian faith is a message about the nature and destiny of the world" (p. 13); faith, and so theology, "is a statement about the world"—i.e., the world is the referent of faith's assertions (p. 14). Hence it is intrinsically necessary for theology to understand itself in the light of the sciences which "know" our world. Interestingly, much as theology in the nineteenth and early twentieth centuries could have said "theology is a statement about history," so now Hefner shifts this and terms theology a statement about nature and its processes—though in the end this is also a statement about history!

For such a close integration of theology and science, it is appropriate that Hefner adopt as the legitimate method for his own constructive theological endeavor one important interpretation of the method of science: the theories of Imre Lakatos supplemented in part by those of Karl Popper. For Lakatos a legitimate scientific method represents a research program, centered on a "hard core" that is itself not directly testable but that entails "auxiliary hypotheses" that are testable, i.e., falsifiable. These hypotheses exhibit the implicit meaning of the core theory (p. 23). They are thus fruitful of new insights, and they can be falsified. That is to say, à la Popper, we can see what is incompatible with them and what they permit (24–25). On this pattern Hefner constructs and defends his theory of "created cocreator." The core of the theory is God as creator, a concept unavailable for testing. But the auxiliary hypotheses, nine of which he lists, expounds, and defends throughout the text, show what the

theory means, i.e., what it negates and the insights that it carries with it. This is fascinating, impressive, and original stuff. On the other hand, whether, as claimed, (a) Hefner's auxiliary hypotheses are really without theological content or presuppositions (p. 27), and whether (b) any real falsifiability of even the auxiliary hypotheses at this level of discourse, a philosophical level, is possible, remain questions in my mind.

Now to the substance of the central argument, namely, the articulation and defense of the theory of human being as created cocreator, and the elucidation on its basis of the purpose of human being. Let us recall that we are seeking to understand human being theologically in the light of the modern life sciences. This means that we understand ourselves and our purposes in terms of the natural evolutionary processes that have produced us, that uphold us in being, and that therefore serve to direct and shape whatever we are or do. Most important, these processes "constitute goals and purposes for human life" (hypothesis 2, p. 40). We begin, then, with the assertion (hypothesis 6) that "Homo sapiens is a two-natured creature, a symbiosis of genes and culture" (p. 45). That is, we are first the products of biological evolutionary processes, which have developed and made possible our entire nature, including all our human characteristics and so of course the other stream as well, namely, culture. Through genetic development (evolution) our brains and nervous system became complex enough to make possible the "adaptive plasticity" (p. 30) that in turn makes our freedom and so culture possible (pp. 30, 108, 113). As a consequence, the second stream appears, namely, the influence of culture upon humans, an influence that builds upon, reshapes, and redirects, but does not negate, the immediate influence of the genetic. Freedom results from determinism and redirects it; and, as we shall see, freedom also finds its own purposes and goals in developing further the determining evolutionary process that originated freedom (pp. 113-17)—much as, for an earlier age of theology. God the origin of human being also represents the true end of human being.

Hefner leaves no doubt about the reality and effectiveness of freedom; in fact, his entire argument depends on this affirmation of the reality of freedom. In this sense he is no behavioral reductionist. And clearly he recognizes and affirms cognitive avenues to "what really is" other than empirical science, since our knowledge of freedom is dependent on our self-consciousness and our awareness of others as well as on the implications of our common behavior. Many slightly varied definitions of freedom are given in the volume (pp. 38, 45, 98, 112, 119, 180). In sum, freedom seems to represent the unavoidable necessity for making self-conscious decisions among behavioral alternatives; for constructing "stories" or interpretations that place these alternatives in a "world," a larger frame of meaning, and thus that explain, justify and direct our decisions; and freedom also takes responsibility for these actions in the light of their consequences (pp. 30–31) and continually redirects its behavior and its frame of meaning. Implicit in all of this, therefore, is also a necessity of observing and exploring the environment and reflecting upon it, i.e., of "discerning what really is," since our behavior must be in harmony with its reality context. (One is surprised that awareness of temporal passage, i.e., memory and foresight, is not mentioned in any of these accounts of freedom.)

Freedom so defined is a community, not an individual, endeavor; the relation of freedom to community—as well as myth and ritual to community-might have been emphasized more. Though it is the product of genetic determinism, freedom is thus correlative with culture as the locus of these larger frames of meaning and therefore as the "second stream" that reshapes our behavior into human patterns. For, once behavior is not genetically immediate but open, subject to decision among alternatives and so widely flexible, a new model for the direction of behavior becomes necessary. Genetic programs, there for biological evolution and survival, are apparently blind, selfish, and thus competitive and destructive. The survival of humans, requiring a social context, thus would not be possible on a genetic basis alone. Culture provides that new mode of redirection. that system of information that combines with, supplements, and refashions us "from savage competitors into cultured cooperators." (Campbell 133). It is culture, then, that "puts our world together," discerns what is really real, and redirects behavior into lines that make common social action possible; it makes us, apparently, "moral," cooperative, human. Culture is at once the locus of freedom and the "superorganism" that conditions and directs behavior into those creative and harmonious, i.e. adaptive, directions that are "necessary for survival" (p. 149).

Crucial to this creative and adaptive role of culture—and to Hefner's argument—are myth and ritual, the "religious" center of culture, its "sacred treasure," as Ralph Burhoe was wont to note. Here Hefner says some very interesting and important things, not heard very often in our theological discussions of religion. It is through the myths and the rituals of cultural life that the information provided by culture and needed to supplement genetic information is channelled to humans; here humans learn the new modes of

behavior necessary for survival (from savage competitors to cultural cooperators) (p. 133). Obviously, for this transformation to take place, the information coming to us from culture must have the same weight and effect as the more immediate and determining genetic information (p. 162). Hence this sort of cultural information cannot be conditional and tentative; what is communicated must be apodictic and underdetermined by evidence (p. 87). Thus the crucial evolutionary role of myth and ritual dictates their nonempirical, absolutistic and dogmatic form. With the help of this biocultural analysis we can understand the unavoidable form as well as the essential role of religion; through science we can understand the strange perseverance of religion in the human story.

Myth and ritual are, says Hefner, necessarily religious, though clearly they have had a crucial social or secular function. How are they religious? First, in discerning the "world" and what it implies for our action, they penetrate to "the way things really are," to the ultimate and pervasive structure of the reality around us and its ultimate demands. Thus they actually represent an encounter with the sacred. This is, says Hefner rightly, not reductionist by interpreting religion in its social function; it is precisely the reverse, namely, an interpretation of social function and values—necessary for survival—as based upon the unveiling by myth and ritual of what is sacred and true (pp. 158-62). As Hefner, here following Lawrence Sullivan, says: "such behavior is a part of the encounter with what is sacred ... the functional character of the myth and ritual is instrumental to what myth and ritual depict as the way things really are" (p. 160). Finally, these ultimate structures of reality and especially their purposes—and so our purposes—are not self-evident or available on the surface of experience. They must be "unveiled" ("disclosed" is Eliade's term, "revealed" is Tillich's) by myth (DD. 174-75, 221, 248).

The necessary transcendent authority of culture in its tension with genetics derives, therefore, from the religious core of myth and ritual: the holy ultimacy of the way things really are (p. 168), the absoluteness of an unconditional imperative (p. 162), and now the mystery of what is not otherwise known. Thus myth and ritual, as religious aspects of culture (pp. 160-61), are alone the means by which what Hefner calls "the reins of life" are communicated to us, clothed in symbols, commands, and taboos (pp. 174-75).

In our present, we too are adrift as to who we are, what our niche is, and how we are to accommodate our behavior to "what is really the case," "the way things really are." Hence we too need a new

symbolization of our world that reaches to its levels of ultimacy and a new understanding of our purpose in the universe that bore us (pp. 66-69, 226). Again we must ask: if Hefner's argument be valid that myths and rituals need an apodictic form to function properly, then how can a "liberal," "science-shaped" form of theology be useful?

Hefner is clear that culture performs an essential role in our evolution and survival as humans, that central to that role are myth and ritual, and finally that the social function of myth and ritual in turn depends upon their religious character.

Though I may be pushing further than Hefner would wish, he thus seems to argue, contra Feuerbach and in support of Eliade and Tillich, that culture has a "religious substance" without which it could not have survived. It is, therefore, quite appropriate that "God" be recognized as the "hard core" of his theory of the created cocreator, the content of which theory we have just in part rehearsed. This theory then is a theological theory, as Hefner affirms (e.g., pp. 27, 32). However, if we be right about the religious elements within myth and ritual, it is hard to see how his auxiliary hypotheses (at least #9 and possibly #7) contain, as he claims, no important theological content or presuppositions (p. 27).

What does Hefner mean in this connection by God? God, he says, is the term referent to the way things really are, and what really is, i.e. (apparently), ultimate reality or being (pp. 32-33). When, therefore, the word God is used in a proposition, that proposition is immediately referred to what really is (pp. 34-36). To say "such and such are God's purposes" is to say that those purposes characterize reality at its ultimate level, what Tillich would call the level of Being Itself (cf. p. 92). Such purposes are, or may be, also ultimate for us or to us, but that is a slightly different matter. What is of ultimate concern to us, our deepest purposes, our "religion," must, Hefner reiterates, represent and refer to the purposes of reality itself, the way things really are (pp. 34, 69, 89, 202, 209, 244-46). There must be a correlation between what is ultimate for us and what is ultimate for reality—else any one of our foolish ultimate concerns may serve as our authentic purpose. No, our real or authentic purposes must match those of reality itself, the processes that govern nature's development. The word God makes reference to this "objective" mode of ultimacy, distinguishable from even the most ultimate of our own subjective commitments.

Although the term God, as Hefner is using it, thus has this ontological reference, Hefner does not wish further to explicate its philosophical implications, to do ontology or metaphysics (p. 32).

Rather here he views God as a symbol within myth and ritual—a symbol that, functioning through myth and ritual, is central to values and norms, and through them to behavior and praxis, individual and social.

If this be so, if we be concerned with the mythic and so the religious/ethical functions of "God," then it is no surprise that for Hefner this symbol of the way things really are is to be characterized or spoken of in personal ways (pp.84-88): as caring, as just or fair, as coherent, and above all for this theory, as having purposes for the creation God has made. As noted, moreover, there is here also the intimation that God discloses God's self, unveils what is hiddenand the result is myth (pp. 174-75, 221, 248). The role of God may, as I shall note, be minimal in Hefner's explicit anthropology or theory of human being (except as creator of natural processes); but when we come to the explication of purposes, for both the created universe and for us, that role becomes again quite central.

Along with the symbol God, Hefner discusses several other important Christian symbols or doctrines: Creation, Incarnation, Trinity, and Original Sin. After all, perhaps his major aim is to reconceive Christian theology in the light of modern scientific knowledge of nature and of human being. Not surprisingly, the hermeneutic with which he interprets the first three of these symbols represents an interesting reversal of that used by many 19th-century liberals (especially Ritschl), and even more by many if not all of the theologians of the first half of our century. In contrast to many theologians of the nineteenth century and early twentieth century, who read most Christian symbols as concerned primarily with the meaning of history, Hefner relates the first three of these symbols to nature and nature's processes (pp. 231-35). Thus we find reiterated one of Hefner's main affirmations about theology: Christian faith is a statement about nature and nature's goal (pp. 13-14). However, the theological symbol to which Hefner gives the most attention is that of Original Sin. This is, of course, along with the Imago Dei, one of the two theological symbols directly concerned with theological anthropology; it is also one to which, for Hefner, biological and cultural science can contribute the most.

Hefner begins by listing five significant and retrievable elements in the traditional theological symbol: (1) sin is an inherent factor in self-consciousness; (2) it arises with our origin; (3) it is inherited in some fashion; (4) it is associated with freedom, and (5) it is marked by guilt and estrangement (pp. 129, 138). Now, the sciences of genetic biology and cultural anthropology can help us to understand what these mythic elements "mean," what they really refer to

(p. 132). As we have seen, humans are now understood to be the products of two different streams of information or influence: genetic information reaching back deeply into our prehuman past, and cultural information providing information necessary for social organization and cooperation. Thus are we made up of contraries in tension; genetic influences that lead us to competitiveness, to brutality, to violence, to selfishness, and to hedonism; cultural influences (largely myth and ritual) that direct us to cooperation, to the welfare of others, to self-discipline. Following Donald Campbell, Hefner argues that "individuals are selfish genetically; society needs altruism; genetic competitors must become social cooperators" (pp. 133-34). Our inherent sense of sin and guilt arises from this experienced discrepancy within us (pp. 132-33). This is not, as it might seem, dualistic; the two, says Hefner, work together to form a whole (p. 131—but so also did the Greek body and soul!)

Not quite happy with his explanation at this point (pp. 135-36), and aware of theology's emphasis on the role of freedom in sin, Hefner adds that our cultural codes and rules, embodied in myth and ritual, are inadequate, relative, and diverse, the result of trial and error (137); our freedom itself is, therefore, fallible. But "we cannot satisfy all the messages delivered to our nervous systems" (p. 139). We are aware of this fallibility and we regret it (p. 140). Awareness of guilt does not arise, as one might think Hefner would argue, from the universal sense of responsibility (which he stresses), responsibility for our actions that are continually contrary to our mythic norms, for our actual fault, as Ricoeur puts it. Rather it arises from our (hidden?) awareness of the relativity and fallibility of these norms, as well as the ever-present experience of an inherited inner duality. It seems to be assumed, as much of liberal Protestant theology and with it secular culture have assumed, that our sense of guilt is a bit on the exaggerated side, that the problem is not so much the wrong actions that might cause that sense of guilt, but whatever factors there may be that make us feel that way. On the other hand, social history, past and present, seems to urge that we really do act in ways that are wrong, we do mistreat one another in a sadly universal pattern.

In regard to the role of culture in altruism, I would argue that our past and present behavior in social history is almost as contrary as it conceivably could be to altruism. If, as Hefner says, altruism is the way things *really* are, then *this* discrepancy between ultimate norm and actual action might make the more credible source for our universal sense of alienation!

Turning now to Hefner's description of our present situation vis-à-vis creation and our role in it, there is no question that he sees this situation as representing the most serious possible crisis, a crisis to whose elucidation and possible resolution this book and its theory have been largely devoted (p. 121). Because of the vast development of scientific technology and the control over nature's systems which that development represents, "human decision has conditioned virtually all of the planetary physico-biogenetic systems, so that human decision is the critical factor in the continuing functioning of the planet's systems" (p. 152). This is, then, a crisis of culture (pp. 20-21) and of culture formation; it is in short a crisis of freedom, which generates and shapes culture so that the latter can control freedom. Technology, one of the fruits of freedom, represents behavior that must be guided by freedom (155), a behavior whose influence now dominates all the planet's systems: "... our consciousness must be reorganized. Our myths must be recast, our rituals redesigned, our praxis reformed ... [we must] discover the proper interpretations ... for action, and [authorize, justify and revise them] (p. 226). Again we note how much Hefner emphasizes freedom, as well as culture, in his theory of the created cocreator. In this case, freedom, on the one hand, provides the cultural context and serves as the creative agent for the crisis but, on the other, holds out the only possibility of an answer through control of behavior through myth and ritual.

That brings us to the culminating topic of the volume, the uncovering on the basis of all that has been said of the purposes of human life, its primal values and goals, "what we are here for." Hefner has been stunningly original at many points—vis-à-vis culture and genetics, myth and ritual in culture, and the secular definition of freedom. Here he reaches his most creative and inspiring level. The purpose of a being, its fulfillment or areté (excellence, or, vocation in Ritschl's language) are determined by its nature, that is, by the processes and structures that brought it into being and uphold it. The "ought" is thus, as in Greek thought, derived from the "is"; it represents a knowledge of and obedience to the structure of a being (hypothesis 1, p. 40; pp. 57-58, 202, 208). The modern "naturalistic fallacy," says Hefner, is itself a fallacy (p. 58). So far Hefner is on traditional, if currently unpopular, ground. But this reference to nature as the basis for understanding our "ought" is now taken much further: "The meaning and purpose of human beings are conceived in terms of their placement within natural processes and their contribution to those same processes" (hypothesis 2, p. 41). Specifically, as products of evolutionary processes, humans represent "a radically new phase of evolution" (p. 248), "creation's zone of freedom"; they are, therefore, "crucial for the emergence of a free creation" (pp. 42, 265). Or again, "Human beings are God's created cocreators whose purpose is to be the agency, acting in freedom, to birth the future ..." (264), that is to say, "for enabling the creation to participate in the intentional fulfillment of God's purposes" (p. 265); for "the [divine] will is that creation shall fulfill its God-grounded purposes out of its own intentionality" (emphasis added, p. 46). Creation is created to become free; our God-given role is to be the agents in that divine process.

Hefner is, moreover, very clear what sorts of human uses of freedom, what sorts of behavior, are necessary in order that this role or purpose of freedom become realized. It is what E.O. Wilson called trans-kin altruism, the giving of one's self for another without survival benefit for that giving self (p. 199). (We will note soon how unhelpful such a "genetic" definition of altruism may be when it is moved into the complexities of history.) Trans-kin altruism, as we have seen, has been necessary for the social character of human life, which itself is necessary for human survival. Hence trans-kin altruism represents "the way natural processes really are"; even more important, it is selected to survive.

More interestingly, it is also true that altruism is absolutely central for religion, and especially for the Christian religion. It is the core of the message of Jesus and especially of the example of Jesus. As human beings, therefore, our vocation of altruistic sacrifice for natural processes is in accord both with the purposes of nature itself and through them with the ultimate purposes of God (pp. 246-47). In giving ourselves to nature's development, and so to the enlargement of the "zone of freedom," we identify with and so participate in God's purposes. "The cross and death . . . are instantiations of how life for us is to proceed, a project we are part of. That project is the creation's moving toward fulfillment according to God's purposes, a fulfillment that requires our self-giving for the creation, even as Jesus gave himself" (p. 253). (The parallel with Ritschl's theology of vocation within the Kingdom of God is nearly exact if one substitutes in his case "history leading to the Kingdom of God" for Hefner's "nature moving toward universal freedom.")

It is important that we note how firmly Hefner insists that for this understanding of nature's vocation and of our vocation within nature, God and God's purposes are absolutely essential—as they were for Ritschl's vision of the Kingdom of God in history. God, of course, means "the way things really are," the most ultimate level of natural processes. But now we are speaking of the purposes of

natural process, and especially of the purposes for an enlarged freedom. Here, therefore, the word God points in another direction: purpose, and the purpose of freedom, represent unambiguously personal and intentional concepts. As the union of ultimate reality and intentionality, process and purpose, therefore, the symbol God is necessary for this theory. Hefner agrees: he has vigorously argued all of this: (a) if we are to trust the identity of natural process with a purpose for freedom; (b) if we are to conceive of the identity of natural process so understood with altruism and sacrifice; (c) if we are to trust, therefore, that the "birthing of freedom" represents the goal of nature; and finally, (d) if this giving of self for nature's purposes represents our "natural" and hence authentic vocation, we must in all these cases assent to the identity of ultimate reality with personal purpose for which the symbol of God primarily stands. Without the identification of ultimacy in nature with God, of God with altruism, and of the evolutionary future under God with the growth of freedom, the whole theory of the created cocreator loses its acknowledged center and point, namely, to state "what we are here for." A really naturalistic interpretation of evolutionary process (for example, that of Stephen I. Gould or Michael Ruse) would come to quite different conclusions about the relations of human purpose to nature and so the place and role of our freedom in the "development of nature's freedom." (It is therefore difficult to see how Hefner hopes to abstract God from these auxiliary hypotheses (especially #2 and #9) entailed in the theological hard core, or how he can possibly consider his theory to be in accord with Preuss's strong antitheistic principle cited on pp. 217-21.)

In any case, this is an inspiring and original vision of evolutionary process under God, and of our human vocation, especially in a scientific-technological civilization, in the light of that vision. It is, I think, genuinely and creatively theological—based in fact on the centrality of Jesus as manifesting for us God's will for the world and so for us; and it is certainly deeply influenced by immense learning in and attention to the biological and cultural sciences. It represents a very great contribution to any theologian interested in the question of human existence and its purpose, and (I hope) to any scientists concerned with the larger meaning of nature and of the science that knows nature.

In any complete review there are always qualifications. I do not say criticisms; criticism in the negative sense implies that a view is wrong in some way—as probably any theological proposal is. Criticism in this sense is not what I intend. Every theologian has her or his style, a combination of unique influences, perspective, major presuppositions, life history, etc; each grasps the tradition in different ways and sees different things in it; each grasps human existence—and nature—differently; and the results are very different forms of theology. Consequently a given theology from the perspective of another theology may seem not only original, impressive, and inspiring (as this one does) but also in part, or at places, inadequate—and that does not mean it is wrong, or that A seen from B is hence more inadequate than B. What it means is that these are different perspectives on the world and on their common tradition—and they may well learn from one another. In that spirit let me list some matters that from my perspective seem to be in some need of reshaping and reformulating, matters that had I been as learned in science and original in theology as Philip Hefner, I might have done differently.

Probably because background influences on my thought differ from Hefner's, I felt there could be more theological input in Hefner's theological anthropology. Until he reached the subject of purposes (What are we here for?), where he was not only stunningly original but, as we showed, deeply dependent on the theological element in his view, he tended, I felt, to treat theology as the passive rather than an active, contributing member in the correlation of theology and culture (science). That is, the meaning of theological formulations was here both critiqued by science and then defined by science, e.g., "What theology means by sin is what genetic and cultural science understand as " The corresponding critique of a scientific interpretation of the human was not present in the way it might have been; and, as a consequence, the theological anthropology that resulted was neither as rich nor as in accord with common experience as it could have been. Hefner had early signalled this slight imbalance (by no means as sharp as with Burhoe) when he consciously directed his own critique largely at theology for its obscurantism vis-à-vis science, and not at all at the academic and scientific communities for their various secularistic prejudices and dogmas, quite possibly equally harmful. Hefner's is a perspective (probably that of the honest and perceptive churchperson) that has so much truth in it—theology is obscurantist!—that I hesitate to push this point, except that I felt that this "one-way street" aspect led Hefner to overlook many of the true, in fact "stunning," insights of recent theology on some of the themes with which he was dealing.

Let us begin with culture. The interpretation of culture and its influence here is very creative, especially for theological anthropology; culture and its influences are what shape us into human beings.

This interpretation is, however, also breathtakingly optimistic. Culture is here painted as the "stream of information" that counters with cooperative and civilized behavior the baleful influence of genetics: "genetic competitors ('individual selfish tendencies') are turned into cultural cooperators," as Hefner quotes Donald Campbell (pp. 133, 182). For example, "through culture humans are turned from beastly apes to civilized humans," creating a tension between "the ape-man's selfish genes and civilized altruism," as Ralph Burhoe has put it (p. 182). Further, altruism is cited as "a distinguishing characteristic of the human species ..." (p. 194), as if it were a universal trait like the neocortex or the thumb! My point is not so much that viewing humans as a unity of opposites, of genes and culture, is dualistic, though it surely is (as was much of nineteenth century thought in this issue). It is that this view seems hopelessly unrealistic about the ambiguity of the influence of culture on human behavior, an unrealism that is actually an inheritance (in the scientific community) from the cultural optimism of late nineteenth century thought that believed so thoroughly in the progress of history.

The role of culture in the perpetuation and intensification of human evil is well documented. Culture is the locus of the social institutions that pass on systemic injustice; it was culture's information system that perpetuated and justified slavery, and also class, gender, and racial domination. Culture is also the locus of the mores and morals that encourage, defend, and justify those unjust (and cruel) institutions. Culture is the site of ideology, whether religious or secular, which incites, increases, and excuses, in fact justifies through its myths and rituals, these injustices. And finally there is the role of the infinite horizon of human being in changing the "animal" drive to survive into the "human" drive to power, hunger into greed, and selfish impulses into organized and rationalized selfish behavior. These all represent the influence of culture and not genetics; they are among the products of that which is uniquely human: freedom, intelligence, moral devotion, and religion.

Sin is thus not referent to the war of culture against genetics; sin is on the contrary itself a compound, a symbiosis of both genetic and cultural influences. If this be so, both nature and nurture lie back of our good and our evil alike, and hence these two are not the only factors in the make up of our behavior. Such dualisms only perpetuate illusions about one or the other of these two factors. An unselfish moral sacrifice of the individual for the group combines in intergroup politics with a quite selfish concern for the survival and power of one's own group. Trans-kin altruism (or patriotism) is therefore much more ambiguous than here portrayed; by compounding individual selflessness with group selfishness, it not only establishes the morality necessary for social life but also causes the carnage of history. And, as Hefner points out, the development of scientific technology has made possible the exploitation of nature and the endangering of the planet. As he reiterates, our crisis is dependent on the high development of our civilization—a far cry, except in the most metaphorical terms, from genetic "beastliness." Early twentieth-century theology was as deeply convinced of the ambiguity of religion as it was of the ambiguity of culture and of history. That religion, i.e., myth and ritual, "contextualize, direct and justify" human (group) choices and behavior, instead of being mere epiphenomena, they probably had little doubt, though they certainly did not bother to say so. In making this creative role explicit, Hefner is brilliant, original, and most creative. But it is also true that, for twentieth-century theology, myth and ritual not only shared in the ambiguities of culture, but in fact initiated, grounded, and intensified those ambiguities. Genetic competition, innate anxiety, inordinate self-concern, were certainly implicated in evil. But ideologies, religious and nonreligious, enshrined in myth and ritual, have articulated hatred of the outgroup, have divided the world and the species into "forces of good" and "forces of evil," and have sent each group crusading, religiously and morally, against its rivals and competitors. At the least, religion has been (and unhappily still is) as ambiguous-and as creative-as any other of the higher aspects of culture.

My point is twofold: (1) that the problem with Hefner's dualism (it is really that he listened too eagerly to the siren songs of genetics!) is mainly that it is too often simplistic, unrealistic, and unhelpful with regard to culture and the myth/ritual it contains, and (2) that if he had listened more attentively to some of the things modern theologians have been saying about human waywardeness, he might have corrected that imbalance.

More specifically, this imbalance would have been improved with more theological input at the crucial center of his theory of created cocreator. For most of the theological tradition, human beings are to be understood not only in relation to nature and to other humans but also in relation to God; and it is, as Augustine said, that relation which determines the creative or the destructive character of the influence of the other two. Hefner really agrees with this: God has created us within nature, and it is the wider purposes of God that "unveil" the otherwise obscure and unclear purpose of nature and of human being within nature. He does not, however, introduce this at

the center of his anthropology, in which humans are understood, as in the life sciences, genetically and culturally, as two-natured beings.

Now it is this point—that humans are to be understood also religiously, in relation to God, to the object of their ultimate concern—that undergirds and makes possible one of the most helpful of theology's insights, as Hefner would put it, a "stunning insight." This is that the most creative aspects of human being—intelligence, morals, religion; individualism and social unity; memory and foresight, and on and on—can become instruments for destruction if this fundamental relation is askew. This is the way sin and its effects on the one hand and grace on the other are to be understood. And such an understanding also makes sense in Hefner's terms: we are, he says, to be understood in terms of the major "streams of influence" that create us, genetic and cultural; these are the agents of God's creative action and purposes. It seems, therefore, reasonable that our theological anthropology should understand us as created in relation to God, and hence view our sin (and our sense of responsibility and guilt) not as simply the experienced interface of genetics and culture, but even more in terms of our relation to God (faith, trust, and obedience, and their contraries).

One final point. Important in our theological tradition has been what Niebuhr termed the "continuation of sin in the life of the redeemed." This is a problem that dominated the medieval and reformation consciousness, that surfaces as central in many other religious traditions, and that appears as perhaps the main anomaly to the progressivism of modern humanism. Can humans, through grace, through education, through science, or even through improved myth and ritual, move, however slowly, towards perfection? As many Christian sanctificationists assumed that through justification and grace they would become gradually more and more perfect, so much of the nineteenth century assumed that with "civilization": education, scientific intelligence, political democracy, and moral idealism, the human community would gradually progress, in liberal Christian terms (note again the prominence of Ritschl) toward the Kingdom of God, or to the level of civilized altruism so frequently cited in biological and anthropological science.

In reading Hefner's original and inspiring view of the future of evolution, and the role of human freedom and behavior in that evolution, I was reminded of our nineteenth-century predecessors' hopes for the developing Kingdom of God or for the progression of civilized society. God's purposes for nature are that nature evolve further, to a new phase, a phase where the freedom now present in human being be extended out into the rest of nature, so that creation can follow

God's purposes intentionally. This is to be achieved by humans enacting the will of God for freedom, a pattern embodied in Jesus, for whom love of neighbor, sacrifice of self for the other, and hence complete subordination to the divine will was the key to being human: "The cross and death are instantiations of how life for us is to proceed, a project we are a part of. That project is the creation's moving towards fulfillment according to God's purposes, a fulfillment that requires our self-giving for the creation, as Jesus gave himself" (p. 253). This is surely inspiring; it represents (as did liberal hopes for history) a very persuasive interpretation of Christian hopes for the future of history and with it nature—for they are now intertwined. And note, though we use the word evolution rather than progress in this new scientific context, still we are speaking of the progress of history as a part of the evolution of nature. For as Hefner reiterates, it is now our decisions, how we as communities use our freedom, that makes all the difference to the future of nature. If nature now be "bathed in freedom," then paradoxically nature has become itself newly engulfed in history, dependent on the course of our freedom in history—as history in turn is now seen as the product of nature. A question for me is whether this unqualified progressivist hope for the sanctification of history into altruism and sacrifice—for sanctification is what this is—is credible in the light of past or present history, either of culture or of religion. As a result, I wonder if a slightly heavier dose than Hefner here administers of classical Lutheran concentration on justification and the hiddenness of Providence, and of Calvinist emphasis on grace and law, may not be relevant!