Reviews

The Reenchantment of Science. Edited by DAVID RAY GRIFFIN. New York: SUNY, 1988. xii and 173 pages. \$39.50; \$12.95 (paper).

Spirituality and Society. Edited by DAVID RAY GRIFFIN. New York: SUNY, 1988. xv and 162 pages. \$39.50; \$12.95 (paper).

There is something drastically wrong with the modern world, as the essayists in these two volumes make clear: modernity is mechanistic, scientistic, dualistic, patriarchal, Eurocentric, anthropocentric, militaristic, reductionistic, and, worst of all, it is destroying Earth's ecology. We need a postmodern antidote.

The Reenchantment of Science and Spirituality and Society are the first of a growing series of books advocating such a postmodern paradigm for scientific knowing, organizing society, and pursuing theology. Series editor David Ray Griffin is professor of religion at the School of Theology at Claremont and also directs the Center for a Postmodern World in Santa Barbara. Many essays in the books come from conferences sponsored by the center as well as from colleagues and friends of the postmodern movement.

Griffin himself is a committed Whiteheadian, well known for his collaborative work with John Cobb in process theology and for his careful analysis of the theodicy problem. His aim here is to press Whitehead's organismic cosmology into the service of a post-modern paradigm that will overcome the subject-object dualism we have inherited from the modern period. The problem with modern dualism is that it unnecessarily limits its purview to such issues as individualism, external relations, and efficient causation, thereby making modernity unable to account for subjectivity and purposive or final causation. Griffin says that Whiteheadian organicism, with its doctrine of internal relations, can recognize continuity between the role played by efficient causation, linking temporally sequenced individuals, and the role played by final causation within subjectivity. The result is a cosmic holism, an organic unity in temporal process.

This is Griffin's particular brand of postmodern thinking—but there are other brands, of course. What they share in common is the sense that the modern mind must be surpassed by something postmodern. The club of postmodernists to which Griffin belongs, however, excludes the Heideggerian and Derridan deconstructionists. Why? Because the latter, in Griffin's judgment, are mere ultramoderns—that is, deconstructionists simply take modernity to its logical conclusions: relativism and nihilism. In the wake of this observation, Griffin offers one of the best descriptions available of a holistic and constructive postmodern agenda:

We can and should leave modernity behind—in fact, that we must if we are to avoid destroying ourselves and most of the life on our planet. . . . The post-modernism of this series can, by contrast [to deconstructionism], be called constructive or revisionary. It seeks to overcome the modern worldview not by eliminating the possibility of worldviews as such, but by constructing a post-modern worldview through a revision of modern premises and traditional concepts. This constructive or revisionary postmodernism involves a new unity of scientific, ethical, aesthetic, and religious intuitions. It rejects not science as such but only that scientism in which the data of the modern natural sciences are alone allowed to contribute to the construction of our worldview. . . . Going beyond the modern world will involve transcending its individualism, anthropocentrism, patriarchy, mechanization, economism, consumerism, nationalism, and militarism. Constructive postmodern thought provides support for the ecology, peace, feminist and other emancipatory movements of our time (Reenchantment, pp. 1–3 and passim)

Other essayists, such as Brian Swimme, Charles Birch, Rupert Sheldrake, John Cobb, Catherine Keller, and Joe Holland, are of a similar mind regarding the reintegration of what modernity has torn asunder. Willis Harman proposes a "complementary science" that would attend to matters of consciousness such as purpose and volition (Reenchantment, p. 123). David Bohm says, "A postmodern science should not separate matter and consciousness and should therefore not separate facts, meaning, and value" (Reenchantment, p. 60). One of the ways to mark this shift to a reintegration of fact and value, says Frederic Ferré, is for us to follow the lead of ecological science and replace the paradigm of the machine with that of the garden. The world as garden implies that we tend and harvest it while we respect and love it (Reenchantment, p. 95).

The new paradigm in science has implications for spirituality and society. The doctrine of internal relations in the organismic model is said to overcome individualism and nationalism. Postmodern thought is communal and communitarian, seeking to revive the intimacy of the tribe, or *Gemeinschaft*, while promoting a global ecological vision.

Public life ought to reflect religious values, it is said here. But what do they mean by *religious?* Griffin is a naturalistic panentheist; contributor Joe Holland seems to follow naturalism; and Catherine Keller presses the reenchantment of Earth into goddess religion.

Thus the religious values advocated here are not those peculiar to Judaism or Christianity because, these writers say, this brand of postmodernism welcomes a religiously plural society (Spirituality, p. 19; cf. pp. 49, 76ff.). I find this commitment to religious pluralism curious. If each religious tradition provides the basic spiritual paradigms according to which its own people structure their lives, and if certain religions do not agree on the organismic paradigm or on naturalistic panentheism, how can postmodern society find the spiritual unity these writers seek? Do these authors require that every religious tradition convert to this new, scientifically derived paradigm? If they do, will they remain the religious traditions they have been until now? Or, in sum, can the Griffin-inspired postmodern proposal be reconciled with religious pluralism at all?

I for one am sympathetic to the version of postmodern thought that is emerging from David Griffin's fine leadership. Conceptually, it takes us in the direction our intuition leads us, namely, toward unity and wholeness. It is successfully persuasive in its demand that we reconceive the task of science so as to complement constructively the sense of value and volition we experience in subjectivity. In addition, it carries with it the moral advantage of seeking to right the wrongs of the modern period.

Yet something about the organic paradigm bothers me: its application to the whole cosmos. The choir of critics condemning modernity is in concert on one note, namely, the inadequacy of the mechanistic paradigm. Such things as subjectivity and final causation do not harmonize with the machine model. So, these postmodernists request that we sing a new song in praise of a new model, the organic model by which we can understand the full scope of experienced reality. But does this not merely extend, rather than remedy, the problem? Is the problem in the mechanistic model per se, or in its hegemonic claim to be the only model by which we apprehend reality?

There is much in our experience that does not fit the organic model. Take machines, for example. To be understood, machines must be understood mechanistically, not organically. Nor do rocks fit the organic model, as is aptly illustrated by the absurd lengths to which Brian Swimme goes to say that "every rock is a symphony" (Reenchantment, p. 54). One is tempted to ask: Is every symphony a rock? The point is that in this world there are organisms and nonorganisms, and to force the latter into a model of the former leads either to poetry or to nonsense, not to science or reason.

This method of modeling the whole on the basis of the part is endemic to Whitehead, whose metaphysic began with human experience and then projected the structure of human experience onto subhuman occasions and suprahuman divinity. By observing the human organism and then interpreting the world accordingly, as Whitehead did, the world began to look like a great big organism. But at root the argument is one of analogy; it is not literal predication. Griffin defines organicism as a view according to which the self is felt to be analogous to other individuals throughout nature (Spirituality, p. 13). The problem this creates is that if we forcibly interpret nonorganismic entities in terms of the human self, they can no longer be perceived as they are. Rather, we should admit that the machine paradigm is helpful for understanding machines, and the organismic paradigm is helpful for understanding organisms. Why does one have to have hegemony over the other? Why does everything have to become subservient to just one such model?

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A Godless Jew: Freud, Atheism, and the Making of Psychoanalysis. By PETER GAY. New Haven: Yale University Press, 1989. 182 pages. \$9.95 (paper).

Together with Charles Darwin, Karl Marx, and Friedrich Nietzsche, Sigmund Freud has long been typed as the nemesis of religion. At first glance, and possibly at last glance as well, Freud is uncompromisingly hostile to religion. He dislikes religion on several grounds. Most straightforwardly, religion for him is false; science is true. Freud assumes that religion and science stand irremediably opposed. For him, both purport to explain the origin and the operation of the physical world. The religious explanation, which appeals to the decisions of one or more superhuman personalities, is false. The scientific explanation, which invokes the mechanical behavior of impersonal forces, such as atoms, is true. The two explanations are not just exhaustive but also incompatible: one cannot consistently espouse both. The religious explanation is primitive; the scientific one, modern. Freud assumes that no educated person would rationally choose the religious explanation. Only irrational wishes or drives can account for its origin and, more, survival. Science holds the key to not only the present but also the future.

Freud also rejects religion on another ground altogether: it is not only false but ineffective. Indeed, religion exacerbates, rather than solves, the problem it arises to solve. In *Totem and Taboo* and *Moses*

and Monotheism, Freud's first and last books on the subject, religion arises to alleviate guilt over the incestuous drives that, according to him, all human beings harbor. Freud objects not to the denial of antisocial drives but to the manner of the denial. He advocates conscious restraint on grounds of practical necessity: society would not survive if antisocial impulses were indulged. He opposes unconscious restraint imposed in the name of morality, which for him is invariably religious. Freud assumes that religion opposes, not merely the realization of antisocial drives, but even the experience of them. For him. religion also prohibits more drives than the preservation of society requires. The invariable failure of the attempt to eradicate desires pronounced sinful incurs guilt, which leads to vain efforts at penance and, in turn, to added guilt. Freud slightly qualifies his exasperation with religion in Moses and Monotheism, where he grants the possibility of sublimating antisocial drives in socially productive outlets and where he credits the failure of religion to relieve guilt with inadvertently spurring the emergence of psychoanalysis.

In The Future of an Illusion Freud opposes religion, not because it fails to do what it is intended to do, but because it ought not succeed at what it does so well. Freud here takes for granted that religion largely succeeds in transforming the harsh, cruel, indifferent, godless "real" world into a secure, just world, overseen by God, but he objects to the vaunting of a god who, for him, does not exist. For Freud, it is pathetic that humans need a delusory crutch to get them through life.

As unremittingly contemptuous of religion as Freud seems to be, scholars have nevertheless long debated his true views of religion and the possible influence of Judaism on them. The conventional approach takes Freud's statements at face value: Freud, a staunch atheist, despised religion and pitted religion against science, of which psychoanalysis is a proud part. Thus Freud was both a secular and an assimilated Jew, whose scant religiosity played no part in his theory (according to Fritz Wittels, Otto Rank, Ernest Jones, Sandor Ferenczi, and Theodor Reik).

The range of alternative characterizations of Freud and psychoanalysis, however, is almost boundless. Freud, we are told, was hostile only to traditional, institutionalized religion and considered psychoanalysis a rival religion to Christianity (Philip Rieff). Freud, say others, was really a Jewish mystic and derived psychoanalysis from Jewish mysticism (A. A. Roback, David Bakan). Freud, say still others, was Jewish culturally rather than religiously—psychoanalysis reflected his cultural Jewishness (Marthe Robert, John Cuddihy). Alternatively, Freud was Jewish ethnically rather

than religiously—psychoanalysis reflected his ethnic Jewishness (Dennis Klein).

Although Freud was scarcely ever baptized, it has even been claimed that at heart he was Christian (Paul Vitz), or at least more Christian than Jewish (Oskar Pfister). It is said that psychoanalysis and Christianity (Vitz, Pfister, Gregory Zilboorg, Stanley Leavy), or even psychoanalysis and religion per se (Erich Fromm), preach the same message. While not a believer, Freud purportedly lamented his inability to believe (Joachim Scharfenberg). Others maintain that the religion that Freud undeniably opposed was religion of only one kind: either Judaism rather than Christianity (Carl Jung) or else phony rather than true Christianity (Paul Tillich, Reinhold Niebuhr). Finally, it is said that Freud could never have set scientific psychoanalysis against religion because he deemed psychoanalysis either an art rather than a science (Bruno Bettelheim) or else an art as well as a science (Paul Ricoeur).

Peter Gay, Sterling Professor of History at Yale, is the author of not only several books on Freud, including his best-selling Freud: A Life for Our Time (1988), but also an estimable two-volume work, The Enlightenment: An Interpretation (1966, 1969). Just as he seeks to restore the traditional view of the Enlightenment as antireligious, so he seeks to restore the traditional view of Freud as antireligious. Indeed, Gay sees Freud as "the last philosophe" (the successor to Voltaire, Diderot. and Darwin): "Freud appropriated the whole range of the Enlightenment's agenda, its ideals and its methods, its very language" (p. 43). For Freud, according to Gay, psychoanalysis is a science, tests its claims, subjects everything to its scrutiny, despises religion as dogmatic, and regards religion as a more dangerous enemy of progress than either art or philosophy. Says Gay summarily, Freud "saw psychoanalysis not as a religion: it is susceptible to the criticism of controlled experience as religions are not. . . . However imperfectly realized in his work, the distinction he drew-religious ideas are incorrigible, scientific ideas corrigible—defines Freud's fundamental conviction that there are two wholly incompatible styles of thinking in the world, the theological or metaphysical on the one hand, the scientific on the other, and that no mental gymnastics, no effort of will, can ever reconcile them" (pp. 31-32). For Gay, Freud is the heir of neither Judaism nor Christianity but of the militantly antireligious Enlightenment.

Gay spurns any of the parallels commonly drawn between psychoanalysis and Christianity in particular: that both preach original sin, that both strive to reduce guilt, that both preach love, and that the analyst is like a priest hearing confession. Gay notes, for example, that Freud "was willing to think of love as the ground of human experience . . . [only] if hatred were added to the picture" (pp. 106-7).

Gay's main argument against any possible reconciliation of psychoanalysis with religion is not, however, conceptual. It is an appeal to Freud's declared opposition to any reconciliation. As Gay puts it, scholars "cannot ignore and must not minimize Freud's repeated assertions that he was an atheist, an infidel Jew, all his life" (pp. 33-34). Psychoanalysis is antireligious because Freud declared it so.

Gay does stress Freud's strong ethnic affiliation with his fellow Jews, even suggesting "that Freud's undefined sense of Jewishness represents a special case of his obstinate belief in the inheritance of acquired characteristics" (p. 133). But Gay denies that Freud's ethnic ties were religious: "Freud, I conclude, was a Jew but not a Jewish scientist. . . . [I]t was as an atheist that Freud developed psychoanalysis; it was from his atheist vantage point that he could dismiss as well-meaning but futile gestures all attempts to find common ground between faith and unbelief" (pp. 148, 37). Gay concedes that Freud's relentlessness in promoting the antireligious message of psychoanalysis might have stemmed partly from the ostracism he felt in Christian and anti-Semitic Austria, but Gay ultimately balks at even this possibility. Here, too, he argues less on the basis of Freudian theory than on the basis of Freud's declarations.

As refreshing as Gay's blunt effort at restoring Freud to the atheistic camp is, he fails to carry it far enough. Ego psychology and object-relations theory are developments within psychoanalysis, not theology, that have spurred reconsideration of the irreconcilability of psychoanalysis with religion. If Gay were restricting his claim to the incompatibility of Freud's view of psychoanalysis with religion, his book would be damning. But he proceeds to claim that psychoanalysis per se is incompatible with religion. That claim must be supported by more than the wishes of even the founder of psychoanalysis. In sum, Gay's argument is merely ad hominem.

ROBERT A. SEGAL Professor of Religious Studies Louisiana State University Baton Rouge, Louisiana Religion and the Social Sciences: Essays on the Confrontation, Brown Studies in Religion, No. 3. By ROBERT A. SEGAL. Atlanta, Georgia: Scholars Press, 1989. 184 pages. \$43.95.

Robert Segal's essays have become a distinctive and provocative methodological presence in major religion journals, and this collection of thirteen previously published articles provides a useful collection of his essays that appeared between 1976 and 1987. All of them have been at least partially revised and in some cases include rejoinders to critics and modifications of previous positions. Several articles present explicit critiques of the concept that religion is an "irreducibly religious" subject matter, and all in one way or another address issues of how religion is to be explained in an era of social science.

The confrontation implied in the title is not between religion and science in general but between "religious studies" approaches that assume a sui generis character to religion and social science theories that do not. This is the major issue of the essays, and Segal draws the contrast in sharp, uncompromising terms. He presents closely argued critiques of what he considers to be misunderstandings of social science on the part of the "religionist." Religionists, the criticism runs, either are wrongly defensive against social science explanations or are wrongly optimistic about the coherence of those explanations with their own interpretive schemes.

Segal focuses on the work of the late comparativist, Mircea Eliade, arguing that he hides behind dogmatic and unfalsifiable assumptions that postulate a special religious nature of the subject matter and that amount to an implicit defense of the truth of religion. Eliade, Segal maintains, fails to justify his central concept, the irreducibility of the sacred. Eliade is not just describing the meaning of religion, Segal thinks, but endorsing it, and assumes the very thing he needs to demonstrate, the reality of the sacred. By any canons of verifiability, Eliade thus begs the important question of the meaning of religion. "The sacred," Segal writes, "is not, like pain, a reality to be explained and interpreted but is rather, like atoms, an explanation and interpretation itself of reality—here of both the function and the object of religion" (p. 26). According to Segal's argument, Eliadethe most prominent exponent of the modern "nontheological" study of religion—gives no clear method for showing how he arrives at "the sacred" as the basis of religion.

In one of his most penetrating essays, "Mircea Eliade's Theory of Millenarianism," Segal critiques the Eliadean concept of "religious man's desire to transcend history" by carefully showing that it lacks

any explanatory capacity to identify predictive, contextual variables and arguing that it fails to distinguish nuances of what "history" means in different settings. To Segal, this is but one example of how Eliadean interpretation precludes real explanation.

Several chapters deal with what Segal believes are misconceptions about social science. He claims that while many modern religionists (he does not specify who) like to think of modern social scientists like Geertz, Bellah, Douglas, and Berger as their colleagues in the study of religion, the gulf between explanation systems is very wide. Even though they focus on the meaning-giving functions of religion, rather than trying to explain it away, the social theorists have *not* been converted. For them, religion or the sacred is still only "a means to a secular end" of creating intellectual or existential order—to maintaining a system of meaning.

Some essays focus on how social science theories of religion handle the issue of the truth of religion. Segal shows how this works out in the above-mentioned contemporary theorists as well as in Durkheim, Weber, Lévi-Bruhl, Lévi-Strauss, Freud, Jung, and even "the first modern sociologist of religion," Fustel de Coulanges. Along the way, he argues that projectionist theories of religion in fact challenge the truth of religious belief and that they cannot be dismissed by religionists on the grounds of the genetic fallacy.

Segal's approach represents a useful and necessary side, but not the only side, of the vigorous contemporary debate about whether religion is an autonomous subject matter. He is among the neorationalists for whom religion represents a cognitive problem, rather than among the phenomenologists for whom it represents a hermeneutical, exegetical task. Dominant organizing categories for Segal are "believer/nonbeliever," "the true meaning of religion," "true/false," and "correct/incorrect." Segal reads Eliade in terms of the criteria for explanatory coherence expected in the social sciences and finds him lacking, referring often to what Eliade "fails to prove or justify" or to what Eliade "claims."

There are other ways to read Eliade's work and the concept of the autonomy of religion. If autonomy is seen as a methodological device for *Verstehen* rather than as an ontological "claim," several difficulties vanish. Where Segal says Eliade "insists on a nonreductive analysis of religion in order to preserve the reality of religion," hermeneutical phenomenologists would say that Eliade is nonreductive in order to allow *understanding* of the function of religious worlds in human experience. It is not clear whether or how "understanding" is a viably autonomous activity for Segal. In his treatment of the *Verstehen* concept as a possible rationale for Eliade's autonomy theory, Segal

conspicuously focuses on only the social scientific applications of it rather than those of figures like van der Leeuw and the hermeneutical tradition.

To be sure, Eliade is rarely explicit about his own methodology, and his interpretive frame combines diverse traditions. His phenomenology of the sacred is occasionally laced with ontological terminology, creating genuine conflicts about how to construe his approach. Still, Segal's stark assertions that Eliade "is committed to defending, not merely describing, the believer's point of view" (p. 19) seem overstated. Eliade had little interest in showing the cognitive validity of religious life, definite interest in demonstrating its existential viability, and much interest in deciphering its symbol systems. The primary use of Eliade's interpretive category of the sacred is to provide a framework for deciphering and understanding certain kinds of worlds or certain "modes of being in the world," and this does not require assent to or belief in those worlds. Maintaining the irreducibility of religion can thus be a phenomenological rather than metaphysical tenet, wherein one demarks the type of experience one is setting out to investigate "on its own terms" (as one might do, say, with art). This does not mean one needs to accept religion's terms, but only to see or exegete what they are. Even Durkheim used the phrase "irreducibility of the sacred" in his vocabulary of the sacred-from which Eliade freely borrowed-and clearly did so to describe, rather than to endorse, the viewpoint of the believer.

Segal is right that Eliade's disregard of social science analysis is unnecessarily defensive, and one senses that this is justly one of the strong, motivating circumstances for the author's attacks. But it is also fairly clear from Eliade's writings that his disuse of social science explanations is not simply, as Segal says, because of "his fear that they reduce religion to a delusion" (p. 25), but more because of the inadequate methodological asymmetry of describing a subject in ways that miss the nature of the subject. Certainly Eliade recognizes that there are many meanings to religion besides religious meanings. From Segal's view that Eliade is a believer—rather than the creator of a framework that allows secular people to understand beliefsocial theorists like Geertz, Douglas, Berger, and Bellah are shown to be working a different mountain. But if, contrary to the author's assumption, Eliade is primarily an interpreter of how worlds are organized religiously, then important continuity with these figures arises.

Segal's questions force necessary clarification of central, crucial issues of method. Where, he asks, is the dividing line between the practice of the neutral, phenomenological *epoche* and one's own

religious judgments? How is it possible for a nonbelieving scholar to employ the "irreducibly religious" approach? How can one "empathize" with that which one denies the reality of? Phenomenology of religion, the erstwhile methodological home of modern religious studies, is indeed in disarray, and there is little agreement about how to understand the theoretical capital and liabilities of its point man, Eliade. Analytical questioning like Segal's is therefore an indispensable catalyst for greater coherence in articulating explanatory and interpretive models and grasping the differences between them. He is certainly right that the reconciliation of the social sciences and the study of religion has yet to occur.

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Teologi og naturvidenskab. Hinsides restriktion og ekspansion (Theology and the natural sciences: Beyond restriction and expansion). By VIGGO MORTENSEN. Copenhagen: Munksgaard, 1989. 380 pages. With English summary. Danish kr. 285.00 (paper).

Continental philosophy of religion and theology has been surprised by the recent discussion on conflicting concepts of nature. The arguments about ecological crises and creation ethics require expertise not in its repertory, especially as the ecclesiastic-dogmatic efforts against the scientific and technical triumphs of the modern age were obviously lost in the nineteenth century and conceded in the twentieth. In England and America, however, there is still discussion concerning evolutionary philosophies of nature, as well as the nature of the humanities and natural sciences and the separation or nonseparation of human existence and nature. Viggo Mortensen knows both arguments through personal experience. A Danish theologian, influenced by Kierkegaard and Luther, Grundtvig and Lögstrup, he has studied German theology thoroughly and is equally familiar with those traits of Scandinavian nature-piety that are alien to it. His research stay in Chicago facilitated his firsthand study of the natural sciences together with natural philosophy, which dominates recent discussion in Europe more and more. These are optimal preconditions for his almost encyclopedic study on the preeminent topics of modern theology: its independence of the world, modern lifeconcepts of the natural sciences, and the newest evolutionary models in sociology, epistemology, and ethics. Mortensen presents this study with his "Theses for Discussion" (1942), for which he received the Dr. teol. from Aarhus. He does all this with a most instructive diversification under the headings *Restriction* and *Expansion*. The former is about setting the limits and the latter is about transgressing the limits of modern concepts of the natural sciences, philosophy, and theology (pp. 22ff.).

The peaceful pseudosolution after the end of the nineteenth century, to let the natural sciences and theology simply coexist (which in theology is best represented by Karl Barth), is the introductory description in the first part, "Restriktion og ekspansion. Modeller for relationen teologi-naturvidenskab" ("Restriction and expansion: Models for relating theology and natural sciences"). It culminates in a critical analysis of the concept that seems most adequately to characterize the level of the discussion and to have provided a wonderful solution: complementarity (pp. 67ff.). But the detailed analysis proves how uncertain, methodologically diverse, and vague this coordination of different things is: "The concept of complementarity fails in that it does not allow any interaction, so that restriction is taken for granted, and the separation is cemented" (pp. 367, n. 8).

In the second and major part, "Mellem restriktion og ekspansion. Naturalisering som udfordring" ("Between restriction and expansion: Naturalizing as a challenge''), Mortensen goes beyond the customary distinctions between the spheres of theology and natural sciences and shows, under the heading Naturalization, how the very domain of theology is being questioned by present-day theories of evolution, especially in sociobiology (whose main spokesperson is Edward O. Wilson). This is especially true when purely empirical and scientific models of explanation endeavor to argue in the areas of religious studies or value-ethics. If religiosity can be explained fully, it becomes a sheer function and can be used randomly; it long ago became superfluous for those who prefer that pattern of explanation. Mortensen explicates the "evolutionary epic" through a narrative of the natural sciences analogous to the biblical narration of creation (pp. 166ff.). Even this approach indicates that something must be wrong with this attempt at scientific objectivity (restriction and expansion alike) when it tries to prove a Weltanschauung (and its popular representatives want that unquestionably). This transgression leads into contradictions. Following the German theorist of science Wolfgang Stegmüller, if all explanatory theories are empirical, then this has to apply to epistemology as well; but how can such a metatheory be empirical? (p. 146). It follows: "Knowledge about the evolutionary genesis of the cognitive apparatus and the evolutionary lawfulness in the development of cognition does not solve the

problem of validity (the genetic fallacy), and must not lead to the renunciation of normativity and the dissolution of philosophy' (pp. 368, n. 14).

The third section, "Hinsides restriktion og ekspansion. Naturalisering som udfordring til teologien" ("Beyond restriction and expansion: Naturalizing as a challenge to theology"), is certainly the most interesting part of this treatise, and not just for theologians. Mortensen now has to show what might lie beyond all the suggested solutions (which thus far are problematic and failing). He begins with avant-gardist attempts to solve the coordination of theology and natural sciences theologically in such a way that the natural sciences become its basis, which looks to us like squaring the circle. How can the Christian God, the Creator, the creatio ex nihilo, revelation, and the redemption of fallen humankind be dogmatically articulated if an evolutionary explanation of all phenomena is presupposed as the basis of understanding? Exactly this kind of "naturalization" has already taken place in all these models of integration, as Mortensen points out, with sympathy and critical distance. Pioneering works around the journal Zygon are the subjects of this presentation, especially those by Ralph Wendell Burhoe, Arthur Peacocke, and Philip Hefner. Mortensen by no means denies that one can find empirically proven facts in evolutionary thinking (concerning the dogmatic "Creationism" he states briefly what has to be said [p. 82]), but he still wonders whether the expansion of the explanatory model of natural sciences into metaphysics, ethics, and religion is justifiable. More precisely: Can God and creation be simply identified with the natural process of selection? (p. 233). Do religions represent nothing other than mythological and pictorial dimensions of that which can be explained causally, in its genetic and cultural implications? (p. 235). Can God's transcendence, claimed by theology, be adequately absorbed when synergistic views of immanence give a topsy-turvy spin to Luther's doctrine of the enslaved will, the doctrine of grace without deeds, and the doctrine of the unconditioned new creation? (pp. 237, 253). The dilemma seems to be unsolvable, and Mortensen is not willing to submit to any kind of scientific expansionistic drive. His opposing view is thus: What can be made more ultimately precise in the thoughts of Knud E. Lögstrup, which are oriented toward Lebensphilosophie ("philosophy of life") and phenomenology? The phenomenon of being human is linked with basic experiences (Lögstrup: "sovereign experiences of being", which cannot be fully explained by any scientific objectifying method and therefore cannot be adequately articulated—e.g., meanings, colors, the language of common use, feelings, sensations, and expressions of life, which we experience in trust, compassion, suffering, and so forth (p. 258). Only through the experience of what cannot be approached empirically does the picture of the world become complete—and natural sciences become relative. But does not this realization negate the resolve of Mortensen's project: no longer to do theology without the modern sciences? In a word: no, Mortensen's conclusions are methodologically clear, he makes no easy compromises, he does not fall back to either of the pseudosolutions (restriction or expansion). In short, the work remains a well-informed, subtle description of problems; it culminates in the statement that both sides, natural sciences as well as theology, should be done in coexistence and with equal rights without separation or mingling, as Mortensen articulates it in a conscious reminiscence of the doctrine of Christ's two natures in the Old Church (pp. 283ff.). Elsewhere, he frames this theme in the words of the Christian piety of nature promulgated by N.F. Grundtvig, the Danish master of romanticism and language in Lutheran tradition and Scandinavian heritage: "Friendly reciprocal interaction is traced and evaluated as the most adequate model for the relationship between theology and natural science" (p. 370, n. 28; cf. p. 292).

But these formulas are not really a solution of the basic problem. Although well-founded and certainly productive, they represent only a basis for future studies that draw on common and unveiled experience and its uncensored and unreduced expression and advancement. A solution is only conceivable if the unity of reality, truth, and experience as such can be experienced and can be thought, something Mortensen nowhere denies. This would only be possible in a newly designed metaphysics that would be as necessary to natural sciences as it would be plausible to phenomenology. Mortensen knows this and devotes two short chapters to this project, each at a significant place ("Metafysikken som mödested I" ["Metaphysics as place of encounter I" [pp. 60ff.] after having described A.N. Whitehead's concept of process; "Metafysikken som mödested II" [pp. 254ff.] in the introduction of the chapter on Lögstrup). However, he does not really seem to trust the proposed metaphysics. Even Lögstrup's suggestions are problematical for him at a decisive point—the claim that metaphysics and "religious interpretations" themselves, which are the gates to the phenomena, have to be described in an evolutionary way, i.e., a way of natural sciences, and therefore are subject to empirical verification (pp. 274, 283). But that would be the Fall from the Continental perspective of thought! That is, the key question of what would remain if one were to leave restrictions behind and avoid expansion in order to achieve unity (p. 283) can ultimately be answered only by the quoted compromise: the application of the christological formula of Chalcedon to the process of inquiry and a future metaphysics. Unless metaphysics and experience were thought through once more and differently. The critic would like to suggest the use of Charles S. Peirce's categorical semiotics, which in every aspect has been designed more comprehensively and integrates phenomenology, metaphysics, and the natural sciences.²

Mortensen remains committed to the difficult question, which his motto-text from John Updike's Roger's Version exposes and which runs like a red thread through all models for a solution (pp. 4, 223, 254): "Whenever theology touches science, it gets burned." Mightn't that process work the other way round as well—even though the progress of natural sciences in this century seems unaffected? What should be achieved—despite the problems that Mortensen's book accurately describes—is not only to demand the cooperation of natural sciences and theology, nor to recommend a "friendly interaction." Instead, one must think of the process of experience metaphysically, in unity and difference, as it develops and presents itself to us. Then natural sciences and theology or, more generally, science and religion, belong naturally to the explication of what we experience. Mortensen insists on the consequent difference (before a shortcut unity is claimed) in the name of a unity that is not yet conceivable. His insistence might be expressed through a quotation by William James, who at the turn of the century courageously linked the reasoning of phenomenology and natural sciences: "This feeling, forced on us we know not whence, that by obstinately believing that there are gods (although not to do so would be easy both for our logic and our life) we are doing the universe the deepest service we can, seems part of the living essence of the religious hypothesis."³

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NOTES

1. See in addition Mortensen's account of metaphysics in the recently published collection of the discussion occasioned by one of his doctoral theses in Denmark: Viggo Mortensen, ed., Gud og naturen. Kan der etableres en dialog mellem teologi og naturvidenskab? (God and nature: Can a dialogue be established between theology and natural science?) (Copenhagen: Munksgaard, 1990), pp. 119ff., 122ff.

2. Cf. the suggestions in my article in *Free Will and Determinism*, ed. Viggo Mortensen and Robert C. Sorensen (Aarhus, Denmark: Aarhus University Press, 1987), pp. 116-20.

3. William James, The Will to Believe. (New York: Dover Publications [1897] 1956), p. 28.