

Reviews

The Psychology of Religion. By JOSEPH F. BYRNES. New York: Free Press (Macmillan), 1984. 308 pages. \$24.95.

Author Joseph Byrnes brings together religious studies and psychological analysis in a way that seeks to select the latest and best in each. It is a multi-dimensional approach both religiously (ritual, doctrine, ethics, society, experience) and psychologically (James, Freud, Jung, Allport, Maslow, May, Erikson, Piaget, etc.).

To bring focus to the wide-ranging perspective of his work, Byrnes begins and ends the book with examples from Augustine's conversion experience. He notes the familial crucible ("his father's pagan casualness and his mother's Christian rigidity") and suggests a variety of alternative psychological interpretations that can be brought to bear on it.

As he unfolds these options, Byrnes explores the rich possibilities inherent in each major theorist's way of refracting the data. He begins with William James as a point of reference and notes two major interests—altered states of consciousness, and "a general concern to study all psychological data that might be considered religious: simple mental images of God and the saints, an ordinary sense of prayers, or the linguistic peculiarities of liturgical forms of worship" (p. 25).

Byrnes succinctly tracks James's expositions of various personal orientations as evidenced in healthy-minded, sick-soul, and twice-born individuals. Types of saintliness (asceticism, strength of soul, purity, and charity), the basic qualities of mysticism, and other forms of religious experience, such as devotional and philosophical religion, are explicated. James clearly preferred the exploration of religious experience in its immediate form ("devotional religion") and dealt with the *philosophy* of religion as "religion after the fact."

Byrnes sees James as a unique exemplar in his ability to take seriously religious phenomena as legitimate *scientific* phenomena (as opposed to a monolithic and supernatural reductionism). At the same time James resists falling into an exclusivistic scientific reductionism which could fail to appreciate religious phenomena as containing an authority and importance of their own.

The psychologists of religion (Starbuck, Leuba, Coe, Ames) who followed James early in this century shared James's goal of understanding religious phenomena in their own right. They lacked, however, his philosophical acumen, were reacting largely to his sounding board, and did not exhibit the theory-bound unity of the psychologists Byrnes chooses to elaborate upon in the remainder of his book.

The overall setting for the approach Byrnes chooses is "attribution theory," the roots of which are found in James and which deals with the interpretations and meanings individuals bring to (attribute to) their own experiences. "It is a specific religious interpretation of a given insight or feeling that makes it religious. Religious experiences are more than naturalistic processes. . . . By

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relaxing and attributing everything to an external cause, members are able to accept even changes for the worse in their lives as something better" (pp. 45-46). Such attribution may apply either to normal or altered states of consciousness, although it is more likely to be invoked in the latter.

Byrnes's chapter entitled "Describing Religious Thoughts and Feelings" is a helpful discriminatory lens for the student of this subject. By distinguishing altered states attribution and ordinary religious attribution, he bridges what is often a formidable psychic abyss for the Western mind and opens the door to the relevance of many of the secular theories that follow.

These are sectioned off into "Religion Within the Context of Personality," "Religious Development Through Social Interaction," and "Religion in Psychological Research and Therapy." The first section is devoted to analytic conflict theory as evidenced in the work of Sigmund Freud and Carl Jung and, second, to humanistic theory as seen through the eyes of Gordon Allport, Abraham Maslow, and Rollo May.

Freud's concern for religion as a belief system that contains infant anxieties and reinforces ethical behavior, both emerging from oedipal conflicts, is rooted historically and culturally in the murdered primal tribal father. Religion is seen as a political device to pander to the emotional needs for authority and childishness, centered in aggression and guilt as they drive the religious conscience. The therapist's role is to assist the patient with the analysis of the oppressive superego authority and strengthen the ego toward freedom through transference and interpretation.

Byrnes's treatment of Jung's complex religious position is caught in one sentence: "Jung was as pro-psychological as Freud without being anti-religious" (p. 81). Moreover, his psychologizing was preoccupied with the *idea* of God, "an absolutely necessary psychological function" which had little or nothing to do with the existence or nonexistence of God but was a necessary step (Winnicott's transitional object?) in the individuation process and the need to unravel from the parental ties. The sometime criticism of Jung for allegedly equating the God-image with the Self is dismissed out of hand.

Byrnes's chapter on the humanistic psychologists stresses Allport's more cognitive, intentional emphasis, with his well-known distinctions between intrinsic and extrinsic religion and his positive evaluation of conscience. Byrnes mistakenly contrasts it rather totalistically with Freud, whom Byrnes discredits with a completely "negative, wrongtrack" view of conscience. Byrnes forgets that Freud was far from such a moral nihilism and that his opposition was to the claims of the neurotic, oppressive conscience.

Maslow and May get brief billing as protagonists of self-actualizing and self-transcending religious experience and the interrelatedness of individual growth and freedom to interpersonal communion.

The section on "Religious Development Through Social Interaction" is a brief but helpful miniguide to the religious and moral impact of Jean Piaget and Erik Erikson, with their consequent elaborations by Lawrence Kohlberg and James Fowler. One sees here the sharpening of religious studies by scientific and clinical data as these are absorbed and applied to developmental stages psychosocially and morally.

Further, the significance of consistency theory (George Kelly and Leon Festinger) for religious belief systems is a fascinating window into perseveration of those believers who seem to ignore historical reality. This includes allusions to research on fundamentalism, authoritarianism, social class, ethnicity, sex, and so on.

Part four of Byrnes's work catalogues in summary fashion the extrapolations from the foundational theories he has explored into research and therapy. These include topics like "God-image," "conversion," and "prejudice." The quality of empirical research is only beginning to reach acceptable levels of sophistication, and Byrnes warns against overgeneralization and the special difficulties entailed in researching personal religious experience.

The effort to capsulize the appropriate application of particular modes of therapy in particular religious issues is perhaps the most ambitious (grandiose?) aspect of this book. Rule-of-thumb signs as to which conflict, growth, family, or behavioral therapies are appropriate, while modestly proposed, stretch the credulity of the reader a bit concerning the author's clinical depth. He rescues himself somewhat when he cautions against "once for all judgments on usefulness, . . ." adding that "Therapists should at least know how the ways of guidance can engender or sustain religious experience, and religious guides should make use of the therapies that are compatible with their traditions" (p. 244).

In a last, summary chapter, Byrnes uses Augustine's experience as an example of the power of psychological theory to help us understand this complex person. He makes some bold conjectures from a developmental, conflict model linked to an intentional model in a psychohistorical way that leaves the reader more convinced of the author's power of conjecture than of persuasion.

Nevertheless, this work is a valuable Baedeker for the beginning student of the psychology of religion. It frames the task in what Byrnes entitles the *technical*, *interrelational*, and *emancipatory* nuances confronting the scholar. It is richer in pointer-value than in exposition. If it attempts too much scope on one side, on the other it clarifies the magnitude of the subject. This reviewer found much that seemed sketchy but very little that misrepresented any position.

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L'Oeuvre Scientifique (Scientific Writings). By PIERRE TEILHARD DE CHARDIN. Edited by NICOLE and KARL SCHMITZ-MOORMANN. Olten and Freiburg im Breisgau, West Germany: Walter Verlag, 1971. 10 vols. (4598 pages) plus 1 vol. of maps. \$145.00.

This compilation of the scientific works of Pierre Teilhard de Chardin comprises ten volumes of text and an additional volume of maps. These maps present the geological features of China as a whole, more detailed maps and diagrams of regions in which Teilhard worked, and the fine details of some of the sites excavated. Collectively, these maps and diagrams will be of great interest to geologists.

In his introduction, Karl Schmitz-Moormann (a philosopher and theologian) explains that the selection of papers was not based solely on their scientific value, but "it was the wider context, the idea of complementing the philosophical and theological works of Père Teilhard, that determined selection." Thus,

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many book reviews and commentaries on the works of other scientists are included along with his original works. These show his attitude toward other scientists (typically appreciative and generous), while papers addressed to the general public show that he considered it important to inform the lay public about the scientific data and ideas which, according to Schmitz-Moormann, "help to form the ecological milieu in which modern thinking unfolds." These papers also illuminate Teilhard's thinking about science in relation to religion in a way that the purely scientific papers cannot.

Solid scientific papers in geology and paleontology comprise the great bulk of the ten volumes of this set. These papers are models of scientific objectivity. Data are presented and conclusions drawn from the data just as in the works of other good geologist-paleontologists. The writing is factual, direct, and clear, with a minimum of the figurative language to which many scientists objected in his major reflective works. Typical titles include "Les carnassiers des phosphorites du Quercy" (The Carnivores of the Quercy Phosphorites) (1914-15), a paper that established Teilhard as a world-class paleontologist; "Cenozoic Vertebrate Fossils of E. Kansu and Inner Mongolia" (abstract) (1923), one of his early papers from China; "The Fossil Mammals from Locality 13 of Choukoutien" (1941), one of his later papers from China, when he was at the peak of his career. Representative of Teilhard's papers written for the nonscientific public are "Le cas de l'homme de Piltown" (The Case of the Piltown Man) (1920), in which Teilhard suggested that Piltown "man" might comprise bones derived from a chimpanzee (the jaw) and an ancestral human (the skull); "Fossil Man in China and Mongolia" (1926), a paper written for an American magazine of popularization of science; and "L'Invasion de la Télévision" (The Invasion of Television) (1950). Most of the papers, both for scientists and for the public, are well illustrated.

Over half of the papers are in French, the balance in English. French, of course, was Teilhard's mother tongue. The distribution of the languages, however, is not at random: the earlier papers are all in French, and the proportion of English increases through the series. Partly this reflects his collaboration with other scientists, partly his increasing experience with his second language.

L'Oeuvre Scientifique is thoroughly indexed. There is an index of general subjects, geological and others; an index of names of persons cited in the texts; a geographical index; and finally an index of species, both fossil and living. Thus, it is relatively easy to find any specific passage that may be sought.

Massive as *L'Oeuvre Scientifique* is, it does not include the entire scientific works of Teilhard, extraordinarily prolific man that he was. Volume one includes a list of works that were excluded because they had already been published in *L'Oeuvres de Pierre Teilhard de Chardin* (Paris: Les Editions du Seuil, 1955-70), and hence they are readily available. The list includes ten books and sixty-three papers from many journals. While there is an element of science—sometimes an important element—in all of these, in general they include important philosophical or theological elements. Many are fascinating papers that will appeal strongly to readers of *Zygon*, but they are not entirely appropriate for a collection of *L'Oeuvre Scientifique*. The Schmitz-Moormanns did well to refer their readers to the earlier collection for these other books and papers.

The volumes of *L'Oeuvre Scientifique* begin and end with a preface and a "postface" by Jean Piveteau, the dean of French paleontologists and the president of the Foundation Teilhard de Chardin in Paris. In these essays Piveteau has evaluated the career and works of Teilhard. He concludes that the papers

of these ten volumes "montreront également que les généralisations philosophiques de Teilhard reposent sur un sérieux fondement scientifique" (they will show equally that the philosophical generalizations of Teilhard rest upon a serious scientific basis). This is a minimal conclusion. In fact, this collection demonstrates that the philosophical and theological generalizations of Teilhard were rooted in an extraordinarily productive career as a geologist-paleontologist. We are much indebted to Nicole and Karl Schmitz-Moormann for having compiled and edited this valuable collection.

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One World: The Interaction of Science and Theology. By JOHN POLKINGHORNE.
London: SPCK, 1986. 114 pages. £4.50 (paper).

John Polkinghorne is honorary professor of theoretical physics, University of Kent, a fellow of Trinity College, Cambridge, and the vicar of Blean, Kent. An early hint of his religious persuasion came in his brilliant and artful exposition of contemporary physics, *The Particle Play* (Oxford: W. H. Freeman, 1979). There in closing the author spoke of his identity as a "Christian believer," asserted that the world views of Christianity and science can be in "consonance," and announced the startling news that a change in his career was then underway: from professor of mathematical physics in the University of Cambridge to the Anglican priesthood.

Even the present book, however, is not Polkinghorne's first written account of his views on religion and science. Published previously in 1983, *The Way the World Is* (Grand Rapids, Mich.: William B. Eerdmans) came as a response to his "coffee shop" interactions with fellow scientists about the Christian faith. Now with *One World* we see his earlier ideas taking root more thoroughly in the context of contemporary philosophy and theology, though with the same distinctive style, clarity of thought, and dry passion which his admirers (including this reviewer) have come to expect and appreciate.

The Preface lays out the thesis and level of the book, the author's areas of competence, and his theological and philosophical presuppositions. The thesis Polkinghorne defends is that science and theology are "capable of mutual interaction" as they both explore "aspects of reality." Ultimately sacrament provides the "point of intersection of scientific and theological understanding." The book is aimed at the semipopular level though it is written not as "propaganda" but as a survey of the issues. Polkinghorne acknowledges that his expertise is restricted to fundamental physics, although he brings "an amateur interest" in biology, philosophy of science, and theology. He writes from an Anglican tradition and interprets theology as "a rational activity, with phenomena for investigation and its own criteria by which to carry out that investigation" (p. xii). He espouses a critical realist philosophy and argues against reductionism by appealing to an epistemological hierarchy of autonomous levels.

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In the chapters that follow, Polkinghorne first gives a brief historical summary of the Enlightenment with its rationalism, Cartesian dualism, and deism. Turning to the twentieth century he describes the challenge quantum physics gives to the Enlightenment view of the objective and determinate status of the world. Next he contrasts the popular account of scientific method, with its uncritical confidence in induction and its adherence to a literal interpretation of scientific truth, with an informed view of contemporary philosophy of science. According to the latter, experiments are always theory-laden (a la Russell Hanson), theories are underdetermined by their data (he cites the fact that quantum mechanics and hidden-variables theories are equally compatible with nonrelativistic data, although his discussion of David Bohm's program ignores Bohm's very significant recent work), and personal judgment plays a significant role in theory choice (a la Michael Polanyi). Still Polkinghorne prescinds from the relativism of Thomas Kuhn and Paul Feyerabend. He argues that neither positivism, instrumentalism, nor idealism can account for the motivation of practicing scientists, instead urging that it is understanding as well as prediction (the thesis which Stephen Toulmin has argued so carefully, though Toulmin is not cited) and understanding of the "real world" which motivates the great majority of practicing scientists. Through understanding, science achieves a "tightening grasp of an actual reality" although this grasp is one of verisimilitude, not of a literal picture.

Turning to theology, Polkinghorne argues against viewing it as unrevisable or irrational. Rather it is a sustained reflection and critical analysis of religious experience (as Anselm argued) and hence "theology, like science, is corrigible." Anglicanism is based on scripture, tradition (including personal experience), and reason, providing a "public domain for theological discourse." Yet theology differs from science in that while humans transcend the physical systems science studies, we are in turn transcended by God as subject of theology. Because God is both inherently unknowable and yet freely self-disclosive, theology must continue to wrestle with age-old problems without the kind of success characteristic of science, although this does not legitimate an irrational theology. Instead, Polkinghorne asserts that theologians, like scientists, should seek coherence, economy, adequacy, and existential relevance. Similarly, just as in the philosophy of science Polkinghorne argues against positivist, instrumentalist, and idealist interpretations in the philosophy of religion.

In an eloquent chapter Polkinghorne captures the majesty and mystery of our current view of nature: it is elusive (a la the unpicturability of quantum theory) and yet intelligible (since mathematics is "consonant" with the rationality of the world); problematic (conflicting interpretations of quantum theory continue unresolved) and surprising; filled with both chance and necessity (leading some to deny purpose and others to suggest divine creativity in all processes); tight-knit (the evolution of human life being as intimately connected to global cosmological features, expressed by the anthropic principle) yet ultimately futile (given the cosmological scenarios for a lifeless distant future); both complete ("the one God who is well and truly dead is the God of the Gaps") and incomplete ("There is more to the world than physics can ever express").

How then do theology and science intersect? Polkinghorne admits that the intersections sometimes involve conflict; nevertheless they can be stimulating if pressed further. Regarding origins, theology can see God as the ground of reality rather than a cause among causes, allowing Polkinghorne to affirm "God *and* the big bang." Chance, too, is not the sign of God's absence but rather

God's presence, while human nature is open to the mystery of self-consciousness and hence to the divine. But how can God interact with the world? "Both the lawful necessity of the world and the role that contingent chance has to play within it are aspects of [God's] great creative act" (p. 71). Polkinghorne grants that Christians need not accept all Biblical reports of the miraculous; still the Resurrection points to a "new regime" which, as a special case, cannot be contradicted by science. (Here the reader is referred to Chapter 8 of *The Way the World Is* for a more detailed discussion of the Biblical basis for belief in the historical resurrection. There Polkinghorne presents a modest but helpful discussion of the empty tomb and appearances traditions using standard critical tools.) As for future life, Polkinghorne imagines that the "pattern" of our selves could be "recreated in another environment in act of resurrection" (p. 77). Finally "natural theology" provides a critique of interiorization and subjectivism in religion by pointing to ways of knowing God "wholly outside the world of men."

In the last chapters Polkinghorne returns to the problem of reductionism. Although he agrees with ontological reductionism (e.g., against vitalism in biology) he defends epistemological emergence in which "totally new levels of meaning" arise with the increasing levels of organizational complexity in nature. Hence he concludes that "we live in one world and science and theology explore different aspects of it" (p. 97), a world whose "multi-layered unity" is grounded in God.

Though written to a general audience in an introductory style and laced with new insights, I do have several reservations about the book. Several of Polkinghorne's central arguments seem heavily dependent on other (though *uncited*) sources. His overview of current epistemological and methodological issues in philosophy of science and his discussion of critical realism have been covered elsewhere much more carefully (e.g., Ian Barbour's *Myths, Models and Paradigms* [New York: Harper & Row, 1974] and *Issues in Science and Religion* [New York: Harper & Row, 1966] or Arthur Peacocke's *Intimations of Reality*, Part I [Notre Dame, Ind.: Univ. of Notre Dame, 1984]. Similarly his discussion of a hierarchical epistemology and his insistence that chance and law work together as the ground of divine creativity strongly reflect the published writings of his colleague and Anglican biochemist Arthur Peacocke (especially *Creation and the World of Science* [Oxford: Clarendon Press, 1979] and *Intimations of Reality*, Part II [Notre Dame, Ind.: Univ. of Notre Dame, 1984]. On the other hand Polkinghorne seems largely unaware of the intense and growing debate among philosophers of science on critical realism. Perhaps in future work he will consider the various types of "critical realism," clarify more precisely which position he holds, and engage those who "refute" it. Similarly I would also challenge his agreement with ontological reductionism given his claim for an epistemology of autonomous levels.

Turning to theology I would like to see Polkinghorne develop his ideas further to engage current critical questions in such areas as revelation, Christology, soteriology, theodicy, and the role of science in interreligious dialogue. More importantly, I would want to press him to clarify his doctrine of God; specifically, I would challenge his terse assessment, given without further explanation, that panentheism "fails to do justice to the experience of the Otherness of God" (p. 72). In fact many of the proponents of panentheism, including several of the most prominent theologians of this century, argue passionately for the transcendence (*and* the immanence) of God. If I have one overriding criticism, however, it is that Polkinghorne does not adequately show

how the *contents* of science (and not just its epistemology or methodology) should affect *constructive* theology though this sort of interaction is the goal stipulated by the book's subtitle. In the end one is left still wondering how these fields jointly address "one world."

Still, for those wanting to "test the waters" of science and religion, *One World* offers a balanced, though brief, version of the challenge and promise of this interdisciplinary field. Polkinghorne's remarkable ease in communicating the current scene in natural science can only come from someone who has worked through the issues in precise detail from the inside. It is equally impressive to find someone whose religious convictions are made clear, while *never* pleading his case or preaching to the reader. Throughout the book Polkinghorne presents scientific, philosophical, and theological material fairly and objectively. As with his previous books, Polkinghorne's primary concern is pedagogic as suggested by the useful glossary of terms to help the nontechnical reader. If he does not make uniformly clear where all the land mines lie in the field, he also does not hype his case or depend on extenuating arguments or fringe interpretations as so many current books tend to.

In conclusion, *Our World* is one of the best introductory books in religion and science today. I will look forward to using it in my courses as a candid, compelling, and inviting statement of Christian faith by an internationally distinguished scientist—now priest and theologian. I heartily welcome Polkinghorne's new book and urge him on in the journey we share.

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Ecology and Religion: Toward a New Christian Theology of Nature. By JOHN CARMODY. New York: Paulist Press, 1983. 185 pages. \$6.95 (paper).

This is an ambitious pioneering attempt to build an ecologically focused Christian theology of nature and to sketch out its practical implications for ethics and spirituality. The author is a broad gauge, well-informed Roman Catholic theologian who is deeply concerned with the runaway proportions of environmental destruction and exploitation of resources. He reports that Pope John Paul II's third encyclical, *Laborem Exercens*, repeats his predecessors' neglect of nature and that of his brother bishops and finds Roman Catholic and Eastern Orthodox theologians, by and large, paying ecology little heed.

The spirit and objective of the quest which he has undertaken is best reported using John Carmody's own words:

The most I hope to accomplish is to lay out a path, suggest an enterprise, point *toward* a new Christian theology of nature. Ideally, future theologies of nature, or any other significant topic, will be the product of teamwork. For each area that my chapters represent, the ideal would be the sort of competence only a lifetime of scholarship can assemble. In no way, therefore, do I pretend that this set of reports and reflections is more than a sketch. I will be content if it stimulates others to do better. If it stimulates others to collaborate as a team, I will be downright delighted. At the moment, though, we

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need new blueprints. Not having a perfectionist temperament, I'm willing to attempt one (p. 2).

This is one of the first adaptations of the comprehensive, highly regarded method of the contemporary Roman Catholic theologian, Bernard Lonergan. Carmody says, "For Lonergan, theology mediates between a given culture and the role a religion plays in that culture. After one researches, interprets and grasps the history of a particular cultural issue, religious questions come to view in 'dialectics': the debate about the ultimate horizon or value-framework in terms of which an issue finally should be cast" (p. 1).

These initial stages of inquiry Carmody develops with empirical information about the earth's ecology, its disruption and a sampling of viewpoints, in chapters entitled "A Dramatic Scenario" (reporting on extreme pollution of the air and its consequences, in Cubatao, Brazil), "The Recent Dialogue Between Ecology and Religion," "Issues from Natural Science," "Technological and Economic Issues," "Political and Ethical Issues," and "Religious Issues." These chapters constitute what Lonergan calls the "listening phase."

The greater part of Carmody's discussion in especially the first four of these chapters, and again to a considerable extent in the two final chapters of the book ("Ethical Implications" and "Implications for Spirituality"), borrows heavily from the college text by G. T. Miller, Jr., *Living in the Environment* (3d ed., Belmont, Calif.: Wadsworth, 1982). This is an exceptionally appropriate, interdisciplinarily crafted source. The reviewer has used it in teaching and would recommend it for study in the churches and for the orientation of scholars in other fields who would like a brief introduction to ecological science and to the whole spectrum of environmental concern.

Following the listening phase, Carmody proceeds to four constructive phases, also a la Lonergan. These begin with "foundational reflections" considered to be basic: on nature in a horizon of grace, on sacramentalism, on sins against nature, and on authenticity as redemptive.

Attention is then focused upon Biblical doctrines and theological doctrines from the tradition. Carmody himself cautions that these two chapters are far from exhaustive, but adds "Nonetheless they do provide a miniature version of what Christian faith has developed or contended with in its long efforts to situate itself in the world" (p. 116). In the chapter on traditional theological doctrines and in theological judgments and borrowings elsewhere in the book, in addition to Lonergan, help is sought from, among others, the following theologians and scholars: Karl Rahner, Edward Schillebeeckx, Bernard Häring, Etienne Gilson, Eric Vogelien, Karl Barth, Paul Tillich, Jaroslav Pelikan, E. A. Dowey, Jr., William A. Clebsch, Charles Birch, and Wilfred Cantwell Smith.

Carmody chooses not to work in terms of process theology categories. "Useful as those categories are for honoring the interrelatedness of all creatures," he says, "they seem not to grasp the ontological core" (p. 126). In his sympathetic treatment of Barth's insistence upon the gratuity of human life, Carmody misses Barth's uncompromising "No!" to the witness of natural theology.

From his remarks on Augustine, Carmody appears to be unaware of the unhappiness of many with the treatment of the creation in the theology of Augustine; they find him basically a dualist. This reviewer thinks it unfortunate that no notice is taken of the creation-centered theology and spirituality of the late medieval mystics, Meister Eckhart, Hildegarde of Bingen, Julian of Norwich, and Mechthild of Magdeburg, who have received much recent atten-

tion in the researches of Matthew Fox and others. (For a recent summary, see especially Fox's chapter 4 in Philip N. Joranson and Ken Butigan, eds., *Cry of the Environment: Rebuilding the Christian Creation Tradition* [Sante Fe, N. Mex.: Bear and Co., 1984].)

Now, on the basis of all that has been viewed and evaluated, Carmody is ready to sketch an ecologically focused systematic theology of nature. Five central notions, and thoughts on their coherence, are advanced. First, God's endowment of being is established as the ontological core. "The being of natural things, their standing-forth from nothingness in such a variety of forms, is a bed-rock wonder theology should constantly ponder. All creation is gratuitous" (p. 120).

As a second notion, Carmody concentrates on the "Christological colorations of nature's ontological core, because those have the strongest sanction from the biblical tradition. For example, in the Pauline and Johannine theologies, creation holds together in the filial Word. All things were made through him; he is the alpha and omega of the creativity that lets all things be" (p. 122). And, "the God immanent in nature is never silent, never not addressing our senses, our minds, our hearts" (p. 123).

Third, the primacy of the divine being is stressed, with considerable help from Vogelin's *Order and History, IV* (Baton Rouge: Louisiana State Univ. Press, 1984), for whom "reality forms a universal whole, which 'happens' in God" (p. 124).

A fourth affirmation declares that "Nature testifies to God's impersonality. There are ways of being, production, intelligibility, and life that do not center in a reflective self. These ways are far from the whole story about God. For Christians they will always be less eloquent than Jesus. But they are essential chapters in the story, especially for a time on the brink of ecological disaster" (p. 128). Here Asian religious experience is seen to have much to contribute.

Finally, these four "innermost concepts" he sees linked in sacramentality. "When we begin to see nature afresh, honoring its expression of the divine mystery, we shall start on the road to the theory and practice our times demand. . . . The task today is to so apply what the great seers have learned that we bring reason and love to a new intimacy with nature. For this we need a new cosmological myth, a new rhapsodizing of nature's sacrality" (p. 130).

The book reaches its climax in final chapters on the implications for ethics and policy and for spirituality of the central notions of the new theology of nature—a theology centered in the mystery of God's endowment of all being, inanimate and animate, nonhuman and human: a world "brimming with divinity, too rich for our puny ciphers" (p. 123).

Opening the discussion, first, of ethical and policy implications is a section entitled "Preservation." "Nature has an independent right to exist, live and flourish," but "these rights are not identical with those of a man, woman, or even of a fetus in the womb. . . . an ethics centered on preserving nature correlates with stresses on conservation, steady-state economics, and replenishing renewable resources. It opposes consumerism, an economics of constant growth, and the wasteful use of any resources" (p. 133). Carmody seems to be unaware that in the environmental literature, "preservation" and "conservation" have long been used to describe conflicting—not compatible—policies.

Consumerism, so central to American culture, is sinful because it recognizes neither the demand for distributive justice nor the ecological imperative to simplify life style. We must use only what we genuinely need. We fail to take the ecological future seriously in part because of the failure both of imagination

and of hope. Instead, "A rational politics or religion would straightforwardly calculate the global levels of consumption supportable in the future, imagine how fairly to distribute the sacrifices needed to meet those levels, and set to the work of shifting the culture at large from a base of relatively gross material satisfactions to a base in spiritual satisfactions immeasurably more human. But it takes courage to be rational . . . and neither our politicians nor our clergy presently stand out for courage" (p. 137).

Further, the author calls for putting on population growth controls quickly, across the entire economic spectrum of the world's peoples. Some Christian spokespersons "have lost sight of the big question and nitpicked about the morality of mechanical and chemical contraceptives. . . . We won't have a vigorous ethical response from Christians until their leaders have knocked over many remaining taboos. Then the socio-economic barrier to population control will stand out more clearly, reminding us that until third world people feel secure enough not to need an army of sons and daughters, the population crisis will continue to tick away like a megaton bomb" (p. 142). Carmody raises a strong voice for appropriate technology, and urges that the best technology be placed at the service of society's greatest needs, which are today found among the world's poor.

His ethical and policy positions, here briefly described, even though, in the acknowledged circumstances, somewhat sketchily developed, amount nevertheless to a very substantial and creatively conceived contribution. It is much to be hoped that they will help to stimulate wider, earlier, and serious attention by others.

Finally, the author spells out some of the implications for spirituality that have stood out in the course of his dialectical, foundational, doctrinal, systematic, and ethical questing. He understands spirituality as life lived in faithful cultivation of the Presence of the Spirit and also in behavior that is in accord with its leadings. As elsewhere in the book, Carmody here draws in part on world religious experience. Spiritual theologians, he says, must make interconnectedness desirable, beautiful, and sanctifying. Appreciation of God's creatorship must be expanded. He has much to say about nonviolence as a fruit of the spirit that is implied in his theology of nature. He sees nuclear holocaust as "the ultimate impiety and sacrilege" (p. 153).

Spirituality also means reconciliation: breaking down barriers between human beings and nature. Wasteful attitudes toward nature call for reconciliation: becoming persuaded that waste is sinful and recycling is necessary. And there is much more to be faced.

But on what do we ground our hope that people will actually make the changes so urgently needed? Carmody grounds his hope partly in the Pauline proclamation that where sin abounded, grace abounds the more, partly on the persuasive power of a growing witness to the ecological revolution that might be. The self-fulfilling prophecies of the pessimists he finds "as rife in the churches as in the newspapers and legislatures," with "the do-nothing establishment depending upon their cynicism." He calls us to "display, enact, embody," "leaning into the future expectantly," never forgetting that doggedness is absolutely essential (p. 160).

What Carmody has achieved more than justifies this ambitious undertaking. What he himself described in his preface as "a sketch of reports and reflections" has issued as an outstanding combination of boldness, creative leadership, and humility in the face of a great challenge. In adapting Lonergan's methodology, he has chosen an excellent model. Carmody's credentials as a theologian are

substantial. He draws on the works of many scholars in the theological disciplines and in the natural and social sciences, in part through his extensive reliance upon Miller's *Living in the Environment*. In 1980, he and Denise Lardner Carmody, his wife, published *Contemporary Catholic Theology, An Introduction* (San Francisco: Harper & Row, 1980). They have also recently published Denise Lardner Carmody and John Tully Carmody, *Ways to the Center: An Introduction to World Religions* (Belmont, Calif.: Wadsworth, 1981).

In a few places, the accuracy of the discussion of ecological issues would have been improved by arranging for review by an environmental scientist. Carmody's use of the term "nature" is usually in reference to the nonhuman world, but the term has also been used in the sense that includes the human species.

The author's style holds the reader's interest. He has a flair for succinct, well-expressed analysis and commentary. He makes clear his persuasion that prayer-based perception and commitment are indispensable to the renewal of the environment, understood as God's creation, and that no time must be lost. A valuable annotated bibliography of forty-two references has been included.

The book will be of particular value to scholars, scientists, artists, and others who share his interest in the shaping of Christian theology, ethics, policy, and spirituality in confrontation with the nuclear and environmental realities of this present time. Fortunately, it is written in a style that will also well serve students and church study groups.

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God in Creation: A New Theology of Creation and the Spirit of God. By JÜRGEN MOLTSMANN. The Gifford Lectures 1984-1985. Translated by Margaret Kohl. San Francisco: Harper & Row, 1985. 365 pages. \$25.95.

In his latest major work in theology, Jürgen Moltmann's goal is to offer us an integrative theocentric vision of the cosmos from before creation to its consummation. He is "trying to find a new interpretation of the Christian doctrine of creation in the light of the knowledge of nature made accessible to us by evolutionary theories" (p. 206).

Moltmann's most immediate objective is to make a Christian contribution to the current ecology debate. Such a contribution is appropriate from Moltmann; as professor of theology at Tübingen he is a leading theologian of the Reformation tradition of Martin Luther, John Calvin, and Karl Barth. The subtitle of this book in the original German is *Ökologische Schöpfungstheologie* ("An Ecological Doctrine of Creation"). To meet the challenge of the ecology debate, however, nothing short of "a new cosmological theocentrism" (p. 139) is needed.

Moltmann's theological method is open to knowledge from all sources including the sciences. Unlike Barth, he recognizes the legitimacy of other sources beyond the revelation-tradition. Yet the role of these sources is secondary. While the sciences give us knowledge of nature, they cannot show us that nature is God's creation (p. 38). Only theology can do this, and only if it is based on revelation rather than science. This is the methodological claim on which, at

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first glance, the entire book turns. "The world does not disclose itself as God's creation just by itself. It is only because he reveals himself as its creator, preserver and saviour that God manifests the world as his creation" (p. 54; cf. p. 56). Regarding its own createdness, nature is mute. Revelation alone is the decisive, authoritative source for knowledge of nature as creation. All other sources of knowledge about creation, including the sciences, merely perform supplementary roles, according to Moltmann's stated theological method. Revelation is only reinterpreted in light of them; they do not change what is taken as revealed.

For this reason, Moltmann is more interested in what the Christian tradition can contribute to the present than vice versa. He comments that "the aim of our investigation is not what nature can contribute to our knowledge of God, but what the concept of God contributes to our knowledge of nature" (p. 53).

From this stance, Moltmann seeks to offer us a comprehensive vision of the ways of God with the world. His vision stresses the need for both a genuine *transcendence for the creation* in God and a genuine *immanence of God* in creation. He begins by insisting (in specific criticism of process philosophy) on creation out of nothing (*ex nihilo*). Before creation, the triune God resolves to create. Through an act of will which is free and which is nevertheless an expression of God's essential love, God resolves to be the God who has a creation. This means a loss or diminution for God. God creates out of nothing, but this nothing must first be opened up inside God, since there is nowhere else. God withdraws into God to make room for the time, space, and freedom of the creation. In opening this nothingness, God allows (within God) for the possibility of nonbeing, evil, and godforsakenness. That possibility precedes creation itself.

Moltmann distinguishes three modes of creation: creation out of nothing (*creatio ex nihilo*), continuing creation (*creatio continua*), and new creation (*creatio nova*). In creation out of nothing the dependence of the creation upon God is stressed. Through continuing creation God participates in the long evolutionary process, suffering empathetically with the creation. In the new creation God redeems the creation and brings it to consummation in fellowship. Of these three modes of creation, *creatio ex nihilo* is clearly the most fundamental to Moltmann. In his running feud with process thought he insists that the lack of *ex nihilo* creation in process thought is a major deficiency. His reason has little to do with creation in the beginning. It is grounded, rather, on his belief that the God who creates *ex nihilo* is the only source of novel, creative possibilities for the creation. *Creatio ex nihilo* is the only basis for *creatio nova*. "If there is no creation in the beginning, there cannot be a new creation either" (p. 79). When the natural world exhausts its possibilities and is moving toward death, God alone offers potentialities *ex nihilo*, not out of what is available in nature but from beyond. Translated into other terms, the Second Law of Thermodynamics does not finally apply to the cosmos as a whole. Without God, the cosmos as a whole may be construed as a closed system, destined for increased chaos. God, however, prevents the cosmos from being a closed system, thereby offering it a different destiny (pp. 204-6). Only a transcendent God can offer the creation genuine transcendence.

For Moltmann, creation must be both earth *and heaven* if it is to be creation at all. To be creation, it must be open to God's creativity, and heaven is precisely this meeting of creaturely openness and divine creativity. In the openness of the relative transcendence of heaven, God and creation meet and the creative potentialities of God are communicated, making possible created potentialities which genuinely transcend the creation itself.

With equal conviction, Moltmann stresses God's immanence in the creation. The very title of the book, *Gott in der Schöpfung*, suggests this. In his trinitarian theology with its emphasis on the Holy Spirit, Moltmann comes very close to affirming the truth of pantheism, saying that the reasons in favor of it are "factual, substantial ones" (p. 212). He speaks of God's immanence: "The whole creation is a fabric woven and shot through by the efficacies of the Spirit. Through his Spirit God is also present in the very structures of matter" (p. 212). At times Moltmann will speak of the immanent divine spirit as if it were the spirit of the world or a world soul, but he rejects that idea emphatically. The Spirit is the Spirit of God, not the spirit of the cosmos.

Moltmann's book prompts several critical comments. First, his discussion of heaven is so clearly and completely demythologized (i.e., translated into contemporary language) that one wonders what is to be gained by retaining the mythic language.

Second, in earlier books such as *The Trinity and the Kingdom of God* (New York: Harper & Row, 1981), Moltmann argued at length that God experiences the creation and this experience contributes novel enrichment to God. In this present book that theme is dropped entirely and Moltmann returns to the more traditional, one-sided understanding of God's relationship to the creation. Is this an intentional shift on his part?

Third, while Moltmann discusses the origin of evil, he says little about human sinfulness. For Moltmann, sin is the perversion of our relatedness to God, a selfishness which closes itself off from divine potentialities. He makes passing reference to "demonic or satanic forces" (p. 169), but nothing more dramatic is said about evil's strength. For a theologian who began his career literally in the shadow of the holocaust and who has sought to make the problem of suffering a major concern of his work, this is strangely optimistic. One simply cannot grasp the perniciousness of human evil in terms of closing ourselves to divine potentialities. Moltmann would be greatly enriched here through attention to human biological and social evolution, among other sources.

Fourth, Moltmann's methodological claim for the priority of historic, biblical revelation is problematic. His own cosmology argues against his belief in special revelation. The immanent Spirit is everywhere revealing, communicating, and influencing. To claim special access to revelation destroys the emphasis on immanence. In this book, which is by far the *least biblical* of any of his major works, he claims the priority of revelation but spends much of his effort translating biblical/traditional symbols into contemporary language. Not only does he translate these symbols, but he also argues for their validity on the basis of the contemporary, not the biblical. His most persuasive argument for "heaven" is not from scripture or tradition but from Ernst Bloch. What is most ironic is that precisely on the point that Moltmann says is most crucial for discerning nature as creation, namely "heaven," extra-revelatory sources prevail. What is most troubling is that Moltmann seems not to be content merely to offer his book as a fine contribution to thought about God and the cosmos but has to claim that his vision has a special basis in revelation. One wonders, finally, if Moltmann has not simply confused tradition for revelation. Rather than claim the advantage of special revelation, Moltmann would have done better to put forward his book as the latest installment on the question of God and creation in the time-honored tradition of Plato's *Timaeus*. Taken as such, it is a very good book.

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