

## IS THERE A FUTURE FOR THE DIALOGUE?

by Sjoerd L. Bonting

*Abstract.* The title question was raised by Philip Hefner in an editorial in the March 2007 issue of *Zygon*, and answered in various ways in sixteen guest editorials in the June, September, and December 2007 issues. In this article, after defining some pertinent concepts, I comment on these essays. I review critical statements made by the guest editorialists and survey their proposals for further dialogue topics. I conclude with my own views on the future of the dialogue and the role of *Zygon* therein.

*Keywords:* dialogue; dialogue topics; human science; natural sciences; religion; theology; worldviews

---

When I proposed “The Dialogue of Science and Theology” for the subtitle of my book *Creation and Double Chaos* (2005), Michael West, editor-in-chief of Fortress Press, was vehemently opposed. He said *dialogue* was a tired word that would make browsers lay down the book. I realized that he should know the market and the potential audience, so after some vigorous discussion we settled on “Science and Theology in Discussion.”

This experience came to mind when I read Philip Hefner’s editorial “Broad Experience? Great Audience?” in the March 2007 issue of *Zygon* and the five guest editorials in the June 2007 issue. I wrote to Hefner that I would like to comment on these editorials and give my view on the issues raised by him. He invited me to do so, provided I would also include the eleven guest editorials that were to appear in the September and December 2007 issues. So now I face the somewhat daunting task of commenting on Hefner’s editorial and sixteen guest editorials.

Before getting to my task, I think it is necessary to define some terms.

Sjoerd L. Bonting is Professor Emeritus of Biochemistry, Radboud University, Nijmegen, the Netherlands, and a priest-theologian in the Anglican Diocese in Europe. His address is Spereyse 12, 7471 TH Goor, the Netherlands; e-mail s.l.bonting@wxs.nl.

[*Zygon*, vol. 43, no. 1 (March 2008)]

© 2008 by the Joint Publication Board of *Zygon*. ISSN 0591-2385

*Science*—I strictly limit this term here to the natural sciences, comprising the disciplines (and in parentheses some of their relevant subdisciplines) of physics (astronomy, cosmology, quantum theory, relativity theory), chemistry (physical chemistry, biochemistry), and biology (molecular biology, genetics, evolution theory). They all develop theories from observations and experiments, frequently aided by mathematics.

*Human sciences*—These include sociology, anthropology, and psychology (experimental psychology might be considered part of natural science); for the present purpose I include religious studies, ethics, and philosophy.

*Religion*—This is a phenomenon with several facets, such as experience of the transcendent and the sacred, belief, spirituality, mysticism, prayer, worship, moral awareness, and theology. Because of its multifaceted nature I claim that religion is not a suitable partner for the dialogue with science.

*Theology*—I consider this to be the science that develops theory from the rational study of biblical data, directly (as in biblical theology) or indirectly (systematic theology based on biblical theology). As an Anglican I adhere to the so-called Anglican *tripos* of scripture, tradition (as expressed in the ancient creeds), and reason (with which to interpret the first two).

*Worldview*—Where a discipline offers a comprehensive picture of reality (universe and life, including their origin and future), I suggest that it provides a worldview. In this sense science and theology each offers a worldview. The human sciences, either together or separately, do not seem to me to offer a comprehensive worldview. I hasten to add that in saying this I am not disparaging the importance and quality of these sciences.

*Dialogue*—This is a critical discussion between competing worldviews for the purpose of seeking convergence (rather than synthesis) and thereby a deeper understanding of reality. *Critical* implies a willingness to revise earlier positions or formulations as a result of the dialogue. In my definition of worldviews this would limit the dialogue to science and theology, but in the last section I propose the possibility of fruitful dialogue between some aspect of religion and one or more of the human sciences.

*Critical realism*—This is the way in which I think both science and theology aim at depicting reality, although of necessity often in the form of models and metaphors (Peacocke 1993, 11–15).

#### HEFNER: BROAD EXPERIENCE, GREAT AUDIENCE

When calling for “broad experience,” Hefner writes at one point about “natural and social sciences,” but later he comments, “that a scientist believes in God is news,” while a cleric who “accepts evolution will attract some attention, but the views of theologians resonate in a small world.” He asks: “What experience base is it that resonates more broadly?” and wonders: “Is science compatible with belief in a larger, even transcendent, meaning to life? or with the sense that there is something transcendent

that undergirds the world, a cosmic teleology? Can one be an honest, independent thinker and still hold to traditional values and religion? Is the marvelous world opened up by scientific studies a realm of transcendence and a source of healing?" He claims that "Such questions surface when religion and science is discussed in the media, at cocktail parties, in bull sessions, and on blogs" (Hefner 2007).

All of this applies to the dialogue between science and theology. Yet, for Hefner, broad experience also includes the sacred, spiritual insight, moral behavior, myth, and (religious) experience. He suggests "that it is experience that speaks to a specific set of concerns, most of which have to do with transcendence." Clearly, science cannot be of much help here.

In speaking about a "great audience" Hefner seems to imply that scholars involved in the dialogue fail to bring their findings to the wider public. This is reflected in the question raised by Helmut Reich in his guest editorial: "how much has the dialogue really influenced the thinking of working scientists or of pastors and members of congregations?" (2007, 269)

#### CRITICAL COMMENTS IN THE GUEST EDITORIALS

On the whole, the authors are rather mild in their comments on Hefner's editorial, even though he makes some pointed remarks about the inability of the academics to provide answers to the questions asked by the public and to present their work in such a way that it will reach a great audience.

Reich, in his question quoted above, seems to doubt that we have done enough to reach this wider audience.

Ann Milliken Pederson puts the blame on other causes: loss of transcendent experience in Western culture and religion; people want a comfortable and literal form of truth. Although she suggests that dialogists should become "modest witnesses and scholars," she ends by calling legislators acting on health-care matters ignorant and arrogant (2007, 283).

Donald Braxton (2007) deplores the fact that the natural sciences and theology have dominated the dialogue, forgetting that it was the conflict between these two disciplines since Darwin's time that led to the dialogue. He suggests that social science should serve as the mediating structure between the two, but without saying why and how it should do this.

John Polkinghorne, on the other hand, lauds the results obtained with the problem-solving approach to the science-theology dialogue and on the whole seems satisfied with the way in which the dialogue is carried on. I am bemused by his continuing insistence on calling himself a bottom-up thinker, by which he seems to imply that theologians are top-down thinkers. I suggest that theologians, even in dealing with transcendental matters, necessarily do so by means of bottom-up thinking. He makes several suggestions for extending the science-theology dialogue, some of which are mentioned in the next section.

Michael Ruse criticizes the quality of the work as being “low to awful” compared to that of two books on the history of science (2007, 579). This to me is not a fair comparison, because these books are monodisciplinary works by experts, while the dialogue is always a multidisciplinary feeling of the way. Ruse rates the quality of the philosophical work in the science-theology field as hovering “between the trivial and the inane” (p. 579). Could this be due to the unsuitability of philosophy as a bridge builder between science and theology, its use often leading to confusion rather than resolution? Ruse also decries the current enthusiasm for *emergence*, calling it an attempt “to get spirituality or some such thing out of material things” (p. 581). Here I agree, and I mention the earlier hype of “self-organization.” Self-organization in biology is simply the coiling up of proteins and DNA in a specific form determined by their chemical composition and hydrogen bond formation between their components. Emergence simply denotes that between two successive species in evolution there is both continuity (in genome) and discontinuity (no mating; Peacocke 1993, 62–63). Both phenomena ultimately are determined by the physical laws and fundamental constants laid down in the beginning of the creation process. Ruse recommends: Start all over again, begin with philosophy and then go to science and theology. I find this unnecessary—and unworkable in view of my doubts about the usefulness of philosophy in the science-theology dialogue.

Taede Smedes offers the most radical critique of the science-theology dialogue. He claims that it is not really possible because of the great difference between the two disciplines. He is suspicious of attempts to integrate them (which I do not think should be the purpose of the dialogue), feels that fundamental issues are too often neglected, and accuses Polkinghorne and Arthur Peacocke of scientism (which was the main theme of his Ph.D. thesis). Smedes further claims that “theology is not taken seriously as the hermeneutical enterprise that it is . . . is seen as a kind of pseudoscience in which talk about God is on the same level as talk about the cat on the mat” (2007, 595). He deplores that science has become the sole heuristic instrument to tackle questions that relate to our world. However, is there a real difference between the hermeneutics of science and theology, when Smedes claims to be inspired by Kant’s hermeneutics? He faults Polkinghorne and Peacocke for speaking about scientific phenomena in connection with God’s action in the world, but later he recommends the inclusion of neuroscience and quantum mechanics in future dialogue. He claims that the science-theology dialogue has become a game played for the sake of the game by and for a small in-group of scholars in their spare time. I would say that it is desirable and necessary that the science-theology dialogue be carried on by scholars active in their respective fields, and thus it will only be a part-time occupation for them.

## SURVEY OF PROPOSED TOPICS

Of the sixteen guest editorials, twelve are by representatives of what I have broadly defined as the human sciences, two are by theologians (Wesley Wildman, James Haag), and two are by scientists who are also theologians (Polkinghorne, Celia Deane-Drummond). It therefore is not surprising that most of the topics proposed for future consideration belong to the human sciences. Only Polkinghorne recommends topics from science and theology: divine action, complex systems, quantum entanglement, eschatology, and resurrection.

Among the many topics proposed in the field of the human sciences are several that in my opinion are worthy of consideration, such as:

*Consciousness*: This topic, mentioned by Reich, is an important subject in psychology. However, it is not a biblical concept and thus would not lend itself very well to a dialogue with theology. The same applies to Wildman's proposal to study *knowledge* in order to provide "a comprehensive theory of human rationality that yields an understanding of disciplinary differences as a byproduct" (2007, 279) and Haag's proposal to study the "ambiguity of knowledge" (2007, 818).

*Cognitive science* and *cognition*, mentioned by Braxton and Fraser Watts, are closely related subjects. However, when Watts speaks about understanding "what kind of cognition is being employed in theology and how this relates to religious experience" (2007, 811), it seems to me that this could become a "study of" rather than a "dialogue between." More suitable might be a dialogue on epistemology or "truth" in science, human sciences, and theology.

*Ethics* in the fields of medicine and technology is mentioned by several authors (Ruse, Deane-Drummond, Don Browning, Karl Peters). However, it should be noted that in the medical field, nontheistic ethics—using the principles of beneficence, nonmaleficence, autonomy, and justice—is widely and satisfactorily used for such matters as abortion, in vitro fertilization, genetic disease, and euthanasia, without the need to call on theology. A critical study of the comparative value of Christian and nontheistic ethical principles might present an opportunity for a useful dialogue between theology and ethics.

*Evolution of religion*, proposed by Braxton, could be a suitable topic for a dialogue between paleontology/anthropology and theology. Both human prehistory and Old Testament study, he says, offer evidence for a development of religion, in which the theologian will see evidence for the interaction between the developing human mind and deepening divine revelation.

*Individualism*: Lawyer Edwin Laurenson decries the individualism of our time. Perhaps "individualism versus community" would be a timely subject for a dialogue between sociology/anthropology/law and theology.

*Violence and chaos* in our world, the topic proposed by anthropologist Joan Koss-Chioino, could perhaps better be seen as the problem of evil in

continuing creation. As such it might be suitable for a dialogue between theology and anthropology/sociology/psychology, as long as it did not become an exercise in handwringing.

*Wonder and wisdom* (Deane-Drummond) are experiences about which neither science nor theology can say very much, in my view, even though both may at times evoke the experience, as she says.

*The sacred* (Peters) is a rather vague concept that would attract the religious studies scholar, but science and even theology hardly know the concept, and thus it would tend to become a “study of” rather than a “dialogue between.”

*Secular theology*: Gregory Peterson asks, “Is a secular theology possible?” He thinks it is, explaining that *secular* here means not “opposed to religion” but rather not “tied to a particular institution or a body of private truth claims inaccessible to outsiders” (2007, 585). I would call this nondenominational rather than secular theology. As such, it would be an academic discipline that could very well be taught in universities, as it is in many European universities. However, this makes it a matter to argue before university administrators and faculty rather than a subject for the science-theology dialogue.

*Reasonable models of reality*: Cruz calls for a study of this subject. For me critical realism is the only reasonable model of reality, both in science and theology, so I cannot consider this topic very suitable for a dialogue. But others of a more philosophical bent may judge differently, although it may, again, become more a “study of” rather than a “dialogue between.”

#### MY VIEWS ON THE FUTURE OF THE DIALOGUE AND THE ROLE OF *ZYGMON*

1. We should bear in mind that the science-theology dialogue resulted from concern about the conflict between the two disciplines as competing worldviews that arose during the period from Galileo to Darwin. This conflict has contributed to secularism, particularly in Europe, and to fundamentalism and creationism, particularly in the United States. Engaging in this dialogue therefore is much more than a game for a scholarly in-group, as Smedes would have it, and it must seek to address a much wider audience than its scholarly participants. In publications, intelligibility should thus take precedence over scholarly finesse, notwithstanding Ruse’s opinion.

2. It is desirable to have some explicit guidelines for the dialogue. I miss those in earlier publications in the field and also in the sixteen guest editorials. I previously proposed a set of guidelines (Bonting 2005, 3). Key points are: (a) science and theology provide two worldviews of a single reality, the cosmos we live in, both God-given; (b) both have limitations—science can deal with mechanisms (*how* questions) but not with the transcendent; the-

ology can deal with purpose and the transcendent (*why* questions) but poorly with mechanisms; (c) dialogue between them is possible because both seek rational explanations of basic data—biblical data for theology, observations and experiments for science; (d) the two disciplines may challenge each other and should be open to revision of tenets.

3. With regard to 2(d), I am surprised at the tenacity with which many theologians hold on to the *creatio ex nihilo* (creation from nothing) doctrine, notwithstanding its difficulties—conceptual, biblical, scientific, theological, problem of evil—and the lack of supporting evidence (Bonting 2005, 45–93). Any scientific theory with such difficulties would have long been abandoned. It has led me to propose a revised creation theology, which I call chaos theology (2005, 94–108). In discussions with theologians adhering to *creatio ex nihilo*, I am asked where “initial chaos” came from, and doesn’t its acceptance constitute dualism? My reply is that here we reach “initial mystery,” just as when we ask about the location of precreation *nihil*. Maybe we could have as a dialogue topic: Which creation doctrine is more reasonable and more productive?

4. In points 1, 2, and 3 I have spoken about the science-theology dialogue as one of conflict. The human sciences could in my view contribute to a dialogue on the other topics mentioned by Hefner (the sacred, spiritual insight, moral behavior, myth, and [religious] experience), and, because they do not present a competing worldview, I would call this a friendly dialogue. In the previous section I proposed some topics, with the warning that the engagement should lead to a true dialogue on a given topic rather than a study of some aspect of religion.

5. Finally, I want to make some suggestions for enhancing the role of *Zygon* in the dialogue by speeding up the flow-through of ideas and bringing the results to a wider audience. *Zygon* now appears in quarterly book-length issues that are too easily laid aside with books “still to be read.” Go to bimonthly issues of at most 200 pages. Cut the inordinately long review period of twelve months down to one or at most two months, as is common in science journals. Limit the length of essays to at most 5,000 words. Give preference to articles that present a dialogue, if necessary in groups of two or three, one by each dialogue partner. Provide on the *Zygon* Web site an opportunity for persons to suggest a dialogue topic and call for others to participate. After these persons have studied the topic, they can write up their results and offer these for publication. To prevent reinventing the wheel, it would be valuable to have an annotated bibliography of dialogue results on the Web site and/or in book form.

I would hope that these recommendations could help to provide the “broad view” and “great audience” that Hefner is seeking.

## REFERENCES

- Bonting, Sjoerd L. 2005. *Creation and Double Chaos: Science and Theology in Discussion*. Minneapolis: Fortress.
- Braxton, Donald M. 2007. "Religion-and-Science Dialogue from the Vantage Point of Religious Studies." *Zygon: Journal of Religion and Science* 42:285–88.
- Browning, Don. 2007. "The Thickness of Experience, Religion, and the Varieties of Science." *Zygon: Journal of Religion and Science* 42:817–20.
- Cruz, Eduardo. 2007. "It Started with Galileo." *Zygon: Journal of Religion and Science* 42:591–94.
- Deane-Drummond, Celia. 2007. "Experiencing Wonder and Seeking Wisdom." *Zygon: Journal of Religion and Science* 42:587–90.
- Haag, James W. 2007. "Theology at the Forefront of Discovery?" *Zygon: Journal of Religion and Science* 42:813–15.
- Hefner, Philip. 2007. "Broad Experience? Great Audience?" *Zygon: Journal of Religion and Science* 42:3–6.
- Koss-Chioino, Joan D. 2007. "Whose Broad Experience? How Great the Audience?" *Zygon: Journal of Religion and Science* 42:273–76.
- Laurenson, Edwin C. 2007. "Religion, Science, and the Dreaming of Possibilities." *Zygon: Journal of Religion and Science* 42:809–11.
- Peacocke, Arthur. 1993. *Theology for a Scientific Age*. 2d ed. London: SCM Press.
- Pederson, Ann Milliken. 2007. "Needed: Modest Witnesses and Scholars." *Zygon: Journal of Religion and Science* 42:281–83.
- Peters, Karl E. 2007. "Saving Experience in an Age of Science." *Zygon: Journal of Religion and Science* 42:821–24.
- Peterson, Gregory R. 2007. "Whither Theology and Science?" *Zygon: Journal of Religion and Science* 42:583–86.
- Polkinghorne, John. 2007. "Science and Religion: Bottom-Up Style, Interfaith Context." *Zygon: Journal of Religion and Science* 42:573–76.
- Reich, K. Helmut. 2007. "What Needs to Be Done in Order to Bring the Science and Religion Dialogue Forward?" *Zygon: Journal of Religion and Science* 42:269–72.
- Ruse, Michael. 2007. "My Journey in the World of Religion-and-Science." *Zygon: Journal of Religion and Science* 42:577–82.
- Smedes, Taede A. 2007. "Religion and Science: Finding the Right Questions." *Zygon: Journal of Religion and Science* 42:595–98.
- Watts, Fraser N. 2007. "Does Primacy Belong to the Human Sciences?" *Zygon: Journal of Religion and Science* 42:803–7.
- Wildman, Wesley J. 2007. "From Grand Dreaming to Problem Solving." *Zygon: Journal of Religion and Science* 42:277–80.