"RELIGION AND SCIENCE" AS ADVOCACY OF SCIENCE AND AS RELIGION VERSUS RELIGION

by Willem B. Drees

Abstract. "Religion and science" often is understood as being about the relationship between two given enterprises, religion and science. I argue that it is more accurate to understand religion and science in different contexts differently. (1) It serves as apologetics for science in a religious environment. As apologetics for technology the role of religion-and-science is more ambivalent, as competing and contrary responses to modern technology find articulation in religious terms. (2) In the political context of the modern university, some invoke religion-and-science in arguing for a place of theology alongside the sciences. In this context, secular studies of religion are a major challenge, which is hardly addressed. (3) Within the religious communities, religion-and-science is a battleground between revisionist and traditionalist ways of understanding religion.

Keywords: apologetics; intrareligious competition; religion and science; secular study of religion.

Is "religion and science" really about the relationship between religion and science? To mark the fortieth anniversary of *Zygon*, a continuing symposium on the nature of religion and science has been initiated. This conversation began with John Caiazza's article "Athens, Jerusalem, and the Arrival of Techno-Secularism" (2005). In that essay we read of "an age-old contest between secular and revealed knowledge," and one section is titled "Science versus Religion—A Draw" (p. 12). I do not think that characterizing religion and science as a contest between religion and science, or even as the study of the interactions of science and religion, is a helpful way of

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approaching the issues. My thesis here is that religion and science is *not* about the relationship *between* science and religion.

If one claims that the issue is a conflict between science and religion, or that there is consonance between religious beliefs and scientific insights, or that there is a categorical difference, one assumes that science and religion are well defined. The issue to be dealt with is their relationship rather than their nature. However, the history of interactions between what we nowadays would call scientific approaches and religious convictions is also one of explicating what is meant by *science* and by *religion*. In the Middle Ages the distinction did not yet exist. In my opinion, however, it is not just a matter of historical accuracy that should bring us to reconsider the expression *religion and science*. I contend that the variety of publications and conferences on religion and science might be understood better if the agenda were not primarily understood as offering a particular view of the relationship between religion and science. I argue that there are at least three different contexts for contemporary religion and science and that in these contexts it might become more clear what religion and science can be about.

Religion and Science as Apologetics for Science in Modern Society

After the shootings at Columbine High School in April, 1999, there was a debate in the United States House of Representatives on a law regarding juvenile offenders. Senator Tom DeLay, leading Republican, read a letter from someone who argued that the cause of this shooting was not the availability of guns but rather broken families, day-care centers, television and computer games, small families due to sterilization and contraception, abortions, and "because our school systems teach the children that they are nothing but glorified apes who have evolutionized out of some primordial soup of mud" (*Congressional Record* 1999, H4366). Those who object to the teaching of evolution are not really interested in the scientific theory by itself. They fear that with the acceptance of evolution a whole cluster of social values would be put at stake. The issue is not science but modernity with its social practices and values. Explaining evolutionary insights, providing new data, and refuting apparent counterexamples will not tame the antagonism, because science education does not address the fundamental concerns involved. The basic opposition is between religious views that reject modernity and religious and secular outlooks that accept and even value modernity. Controversies over evolution are primarily controversies over social issues, reflecting different theological responses to modernity.

In this context, religion-and-science supplements science education as apologetics for science, especially in religious cultures such as the United States where distrust of science is widespread. When it is emphasized that science need not be in conflict with religious beliefs, science is presented as

acceptable. This is an age-old project; natural theology also served to inform people on new scientific insights and to convey to them the message that science is an ally rather than an enemy. This role of religion-and-science as apologetics for science makes intelligible why so many communications presented as religion-and-science, whether on Web sites or in popular books, are almost indistinguishable from science popularization. For the context considered here, presenting fascinating scientific insights is in itself a relevant contribution to religion-and-science. Elaborate arguments are not needed for most people; the purpose is served by popular science with a pious gloss at the end or by a presentation of apparent parallels between religious convictions and scientific insights. If the parallels are convincing, science cannot be perceived as a threat to these religious convictions. One may even conclude that a religious tradition was there first, a matter of priority that makes science even less threatening.

Compatibility may also be argued by suggesting that the domain of science is limited. Thus, when the late Pope John Paul II seemed to accept Darwinian evolutionary theory (John Paul II 1998), part of the message was that evolution is OK, but this message was served by separating the evolved nature of human bodies from the spiritual nature of humans. Among the more specific strategies that may make science acceptable to religious believers we find epistemic arguments against scientism (Midgley 1992; Stenmark 2001) stressing that science need not determine values. Quite a few appeal to Thomas Kuhn (1970) and other philosophers of science to argue that science is tied to paradigms, perspectives, and personal preferences and hence is not as objective and universal as it seems. However, reconciliatory goals also can be served by ontological arguments, indicating that there might be "room for God" in the context of scientific insights, as is the common theme of the Vatican–CTNS (Center for Theology and the Natural Sciences) series on "scientific perspectives on divine action" (Russell, Murphy, and Isham 1993; Russell, Stoeger, and Ayala 1998). Thus, my observation is that even though strategies differ, one major role of religion-and-science in a religious culture is to serve as apologetics for science.

Sciences that are primarily descriptive and explanatory align well with natural theology in the traditional sense, as such sciences may allow for a *design* argument to reconcile science and religion. The underlying orientation seems to be to show that this world is ordered well and that there is a Giver of the laws that have generated this order. This is the best of all possible worlds. However, these associations do not work as well with chemistry, engineering, and other sciences involved in the transformation of reality. One cannot engage in engineering and argue at the same time that this world is the best of all possible worlds (Brooke and Cantor 1998, 314–46; Brooke 2003). Our technological actions are inspired by the idea that this world can be improved upon. We need our technology also for

the morally lofty purposes of feeding the hungry, clothing the naked, and caring for those who are ill (Drees 2002).

Advocacy for science thus may take the form of natural theology or of a separation of religion and science, since these strategies serve well as apologetics for descriptive and explanatory dimensions of science. However, apologetics for science may also take the form of a plea for social responsibility and thus may amount to advocacy of technology. There are major theological differences involved, emphasizing creation as given rather than a call for conversion and transformation. When "playing God" is used as an accusation, theology tends to emphasize the given character of reality, whereas the same expression may serve as an appeal for liberation, for taking moral responsibility and using our capacities to transform the world and make it better. How the expression is used is not just religion and science but part of a wider struggle between different theologies. Apologetics for cosmology or evolutionary biology is theologically different from apologetics for nanotechnology or genetic engineering. In my opinion, the active, transformative side of science is neglected too often in favor of the more passive role of science in understanding reality. However, the choice between emphasizing "understanding creation" and "transforming reality" is a religious one. To this religious choice is connected a major choice regarding the role of religion in public conversation on technology—to serve as a source of motivation for science and technology or to serve again and again as a brake on technological developments.

Religion and Science in the Academy

The academic world is a particular context for religion and science. There is the issue of academic politics: whether theology deserves a place in a secularized institution. It may be useful to argue that the structure of theology resembles that of respected scientific disciplines—for example, by reformulating both in terms derived from Imre Lakatos's "methodology of scientific research programmes" (see Murphy 1990, 58–87). What are the norms for being scientific (or academic)? Can theology live up to those standards? Are the standards for the humanities lower than those for the natural sciences? If so, does that help theology? Are the standards for the sciences lower than we thought? (Again, the popularity of Kuhn in religion-and-science discourse serves particular purposes well.) Does that help theology, or is an argument that science is also perspectival and dogmatic not enough?

Alongside such debates on academic norms and the nature of science comes the important question whether theology should seek to live up to such norms. Thus, the question is also what the nature of religious belief is—is it propositional, like scientific theories, or is it an existential judgment? As an illustration, we might consider the contrast between posi-

tions defended by Mary Gerhart and Allan Russell (1996) and by Nancey Murphy (1996). In these two cases, arguments for a methodological or cognitive similarity do not work in the same way. Again, controversies are not just about the nature of science but also about the nature of faith.

There is another side to religion and science in the academy, and that is the avoidance, by and large, of engagement with the secular study of religion such as is typical of the history of religions and anthropological and social studies of religions. Such studies are often methodologically agnostic and functional in orientation; "sacred symbols function to synthesize a people's ethos and their world view" (Geertz [1966] 1973, 89). Some voices in the study of religion are perceived as reductionist and challenging, setting up such studies of religion as competing with a religious understanding of religion—for example, "God is not, like pain, a reality to be explained, but it is rather, like atoms, an explanation of reality" (Segal [1983] 1999, 158). The secular study of religion with its immanent, social, and naturalistic vocabulary conflicts with the religious interest of religion and science. In a more agnostic understanding, à la Geertz, the discipline still undermines the social function of making science acceptable for religious believers. In my opinion, however, the challenge is to be accepted. Avoidance of the social scientific perspective in favor of the natural sciences threatens the credibility of religion and science and thus, in the long run, its relevance.

A functional perspective need not imply that it is merely functional, without truth value. An immanent approach need not exclude a transcendental horizon. Thinking through the implications of historical and social studies of religion for religious beliefs is a task for philosophers of religion, who should engage themselves with secular study of religion while reaching beyond the social-scientific description and understanding to explore what this and other secular knowledge might imply for the truth or falsity of beliefs (Hubbeling 1987, 3). Philosophy of religion is therefore in the vicinity of systematic theology. However, philosophy of religion should take into account the secular study of religion.

Science and Religion as Intrareligious Controversy

Society (and science) and the academy (and theology) are not the only contexts for religion and science. More significant, I would say, is the role of religion and science in intrareligious disagreements. Even if people have the same beliefs, they may not mean the same thing by "believing." Within traditions there is a range of views. What is most important to some is totally uninteresting to others. Some focus on a tradition that provides a worldview. Others also emphasize tradition, but more as the source of their identity or the framework that provides normative orientation for their actions. When it comes to worldviews, bookstores do not present us

only with philosophically respectable abstract ones such as theism, panentheism, pantheism, or naturalism. Books and television deal also with witches and vampires. For many the most important issue is life after death rather than God. Thus, what are we after when we advocate religion—myth? mystery? metaphysics? morality? magic?

Which understanding of religion is dominant in religion and science? Academics tend to be on the intellectual side, avoiding the wide range of popular beliefs. But within the academic setting there is still enough disagreement to invite an explanation. Is this diversity a reflection of the difficulty of the questions? That may be part of the answer, but it also may reflect affinity with and advocacy for different strands within religious traditions. Religion-and-science is about the truth of ideas but as much about authority *within* religious traditions. It is a major battleground between revisionists and traditionalists in each tradition.

Let me support this thesis with brief reflections on some major cases in religion and science. The controversies surrounding Galileo began with a dispute within the scholarly community between advocates of scholastic approaches and those who favored instrumental science. Religious accusations were used in scientific disputes by adherents of scholastic science. However, the conflict shifted from one within the scientific community to one within the church. There it was a conflict not so much between religion and science as between religious factions such as the religious orders (Jesuits, Dominicans) and the representatives of different nationalities (Italians, Spanish). The Galileo affair was the context of a struggle over authority in exegetical matters, emphasizing in the outcome the authority of the pope and church officials over lay reading of scripture in the aftermath of the Protestant Reformation and the Council of Trent (Pedersen 1983; Drees 1996, 60–62).

In the reception of Darwin's ideas in the nineteenth century, the issue was not just evolution. Even the exchange between Bishop Wilberforce and Thomas Huxley in Oxford in 1860 was not only about the implications of evolution. Tension arose also because of the changing nature of the scientific profession, the replacement of the gentleman-naturalist elite by scientific professionals doing science for a living (Turner 1978). Beside this intrascientific dimension of the controversy there was an even more important intrareligious controversy, which might be summarized roughly as one between liberals and orthodox believers. Science was a minor issue in the controversy, which raged more deeply over the acceptability of a historical understanding of one's own tradition and its scriptures (Welch 1972; 1985; Drees 1996, 64–67).

Even the most well-known title suggesting a conflict between science and theology, Andrew White's *History of the Warfare of Science with Theology in Christendom* (1986), is misunderstood if the intrareligious dimension is neglected. White was the first president of Cornell University, a

nondenominational university. Cornell was set up as a Christian university, with compulsory attendance at chapel services (Altschuler 1979, 68, 81). Frustration about the ecclesiastical opposition he met from those in charge of denominational colleges probably influenced White's articulation of a warfare of science with theology. White took religion seriously but quarreled with sectarianism and theological dogmatism. He envisioned a religion that would be in harmony with science. "Religion, as seen in the recognition of 'a Power in the Universe, not ourselves, which makes for righteousness', and in the love of God and of our neighbour, will steadily grow stronger and stronger" (White 1896, xii; see Drees 1996, 67–68).

The perception of White's book as antireligious might be seen as an example of a more general trend, described by Jeffrey Stout in his recent study *Democracy and Tradition* (2004). Stout signals how orthodox believers and outspoken secular authors use each other as contrast, as if these two approaches are the only ones available. He comes out in favor of a more nuanced landscape, distinguishing alongside the "Augustinian" form of religion an "Emersonian" one that is far less institutionalized and less antimodern. What is often perceived as the secular voice of liberal democracy might, according to Stout, in many cases be better understood as a different religious voice, the Emersonian one.

Let me emphasize that religion and science is not just an intrareligious issue within Christianity. An example from a different cultural context is the project "science for monks" (Garewal 2005), initiated by the Dalai Lama, which is more about the modernization of Buddhism than about Buddhism and science, as if Buddhism were a single voice. And in the quest for modernization we also have a contest for authority; some Tibetan monasteries are not participating. The engagement is not only with science for science's sake but with science as an instrument in a struggle over the reform of Tibetan Buddhism.

I want to consider one more example, this one from the world of Islam. Even though the popular understanding, especially since September 11, 2001, is that Islamist groups oppose Western culture, their main opponents are not Westerners. The fundamental issue is a struggle for authority within Islam. Who speaks for the true faith? There are quite a few contributions to religion and science by Islamic authors who affirm traditional readings of the Qur'an. However, there is an alternative attitude toward the interpretation of the Qur'an that acknowledges the role of hermeneutical processes and human interpretation and concentrates the significance in a moral or metaphysical core. "Islam and science" cannot but be a part of the wider struggle of which Islam will acquire the upper hand, a traditional and mainly antimodern version or a more liberal one. Controversies in Christianity in the nineteenth century over scripture, science, and historical knowledge have close parallels in current controversies among Muslims (Taji-Farouki 2004).

Controversies over evolution in the United States were mentioned earlier. The issue need not be perceived as being primarily about the truth of evolutionary explanations; rather, it is about society and about the definition of genuine Christianity. Will that be Christianity as creationists understand it, or will it resemble more the self-understanding of what used to be called the main stream?

Religion-and-science is about the truth of ideas, but it is as much about authority within religious traditions. It is a major battleground between revisionists and traditionalists within each tradition. This is not to be understood as, for example, Christianity versus Buddhism, but as signaling that references to science are arguments in a competition between multiple ways of understanding the substance and nature of faith within each tradition.

NOTE

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