

FORTY YEARS LATER: WHAT HAVE WE ACCOMPLISHED?

by Gregory R. Peterson

Abstract. I examine the responses to John Caiazza's "Athens, Jerusalem, and the Arrival of Techno-Secularism" as part of *Zygon's* forty-year anniversary symposium. The responses reveal that issues of modernism and postmodernism are central to understanding the dynamic of the current science-religion/theology dialogue and that the resistance of many of the participants to the influences of postmodernism is a sign not of its backwardness but rather of some of the weaknesses inherent in the postmodern project. This does not mean that the many insights of postmodernism should be rejected. Rather, the science-religion/theology dialogue may be in an intellectually opportune place to construct successors to the worn label of postmodernism.

Keywords: John Caiazza; modernism; postmodernism; science and religion; science and theology; technology.

In his article "Athens, Jerusalem, and the Arrival of Techno-Secularism" (2005) John Caiazza reprises Tertullian's famous question, What does Athens have to do with Jerusalem? For Caiazza, Athens has been replaced with modern science, which in turn has given rise to a techno-secularism that threatens both religion and science. According to Caiazza, we have entered a new age of magic, an age of ignorant faith in the marvels of technology, an age that reduces ethics to utility and faith to the technological promise of pleasure.

Caiazza's brash and sweeping article was chosen as the basis of commemoration and assessment of forty years of *Zygon* and, by implication, the standing of religion and science as an area of inquiry and theological

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and philosophical construction. Twenty responses to Caiazza later—printed in the four issues of *Zygon* in 2005—we have some idea of where we stand.

Or do we? Reading through the many responses, one is impressed as much by the diversity as the unity. Indeed, at times Caiazza's article seems to function more as a Rorschach test, a blob of ink upon which the fertile and creative mind can act. Or is this, too, an illusion? Does the diversity conceal a deeper unity that is hiding in the shadows, waiting to unfold?

I suggest that, while the responses to Caiazza's article do contain important threads of unity, there is also considerable diversity, and this diversity is revealing in trying to make an assessment of where religion and science as an area of inquiry, or even as a field or discipline, stands today. In particular, the articles taken collectively raise issues about broader claims regarding modernism and postmodernism that haunt current academic discourse and also suggest what future directions need to be pursued.

UNITY IN OPPOSITION

Among the varied replies, the single strongest thread running through nearly all is that of dissatisfaction with Caiazza's essay. This dissatisfaction takes a variety of forms, most of which deal with how Caiazza has framed the issue, not least in his presumption of eternal conflict between religion and science, presumably dating back to Tertullian and his famous quote. Caiazza traces the conflict from Tertullian's time through the Middle Ages debate over the acceptance of Aristotelian thought, to the debates between Frederick Copleston and Bertrand Russell in 1948 and between John Polkinghorne and Stephen Weinberg in 1999. But, as Hava Tirosh-Samuelson (2005), Wolfhart Pannenberg (2005), and other respondents note, the historical relationship between religion and science is much more complicated than one of straightforward, eternal conflict. Although conflict has obviously been part of the interaction, the history of religion and science includes periods of mutual support, synergy, and occasional indifference, a point now well documented (Barbour 1997; Lindberg and Numbers 1986; Brooke 1991). Additionally, Caiazza's framing of the history is inadequately narrow, focusing on particular forms of Roman Catholic and Protestant thought while completely ignoring the diversity of religious traditions. This point is emphasized especially by Norbert Samuelson (2005), who observes how ill-fitting Caiazza's categories are for the cases of Judaism and Chinese religions. The framing, according to several others, also misidentifies or misunderstands or misconstrues the historical roots of secularism, with the result that the purported alliance of secularism with science and technology at the expense of religion is misconceived and that, in particular, Caiazza has misconstrued science with the ideology of scientism (Haught 2005; Roy 2005; Peters 2005; Jackelén 2005).

With regard to the presumption of conflict, I am much more sympathetic with the critics than with Caiazza. Admittedly, Caiazza is painting

with a broad brush, and the task of the essayist is often to be thought-provoking and insightful, even if this means some loss of precision and depth. Nevertheless, Caiazza's construal betrays how common mythologies continue to persist, even the mythology of conflict.

With regard to the issue of religious diversity and secularism, the situation is perhaps more complex. Although his critics are correct to point out that Caiazza has wrongly identified strains of Catholicism and Protestantism with "religion in general," this might be construed as a presumption about the audience rather than a sort of willful ignorance. In addition, the diversity of responses regarding Caiazza's handling of secularism suggests not so much that Caiazza is wrong but that the term *secularism* is an importantly contested one. For instance, Samuelson argues that the concept of the secular arises out of the political context of medieval Catholicism and early Protestantism and the need to separate the realm of the political from the realm of the religious. While Alan Padgett (2005) does note the political roots of the secular, he also emphasizes its meaning in terms of concern for the physical world in a way that is consonant with Protestant thought. Interestingly, the category of the secular is one that is rarely invoked in the science-religion literature. As Padgett, Jackelén, and others note, the secular need not be construed as being in opposition to religion, although it is often interpreted (at least in the United States) as being such. Exploring the category of the secular, both its history and current range of meanings with respect to religion and science, might be a fruitful area of pursuit. The issue of religious diversity I return to later.

SCIENCE AND RELIGION IN MODERNIST MODE

Caiazza notes the impact of postmodernism on the status and authority of science, an impact that he claims has so leveled the playing field that the putative battle between religion and science must now be declared a draw. Over the past two decades, postmodern modes of discourse, themes of postmodernism, claims as to who and what is postmodern and who and what is not have come to dominate academic discourse in the humanities, including the study of religion and theology. Several of the respondents to Caiazza endorse some form of postmodernism (Jackelén 2005; Tirosh-Samuelson 2005; King 2005), with the suggestion that Caiazza either mischaracterizes postmodernism or that if he fully drew out the implications of postmodernism they would lead him in a different, more positive, direction. I would go a step further and argue that there is not only a divide between Caiazza and some of the respondents on the character of postmodernism but an important divide, sometimes explicit but more often implicit, among the respondents themselves regarding postmodernism and that this divide is in an important sense central to the future of the science-religion dialogue.

By *postmodern* I mean a set of values that are typically contrasted with the values of modernism. Modernism is itself characterized in different ways but is usually associated with the dawn of the Enlightenment period in Europe and the modes of thinking that subsequently shaped Western intellectual culture. Modernist thinking is dualistic and hierarchical, with attendant implications for sexism and racism. Modernist thinking is mechanistic, atomistic, and consequently individualistic. Modernist thinking is given to totalizing metanarratives, seeking a unified truth that rejects pluralism and diversity. Modernistic thinking is reductionistic, especially in its scientific form. It is foundationalist and realist in its epistemology, often adhering to a correspondence theory of truth. It is ignorant of the way that questions of power, gender, and race affect putative claims to objectivity.

Postmodernism is in no small part defined in terms of the negation or overcoming of modernism. So, postmoderns reject or seek to overcome dualistic, hierarchical, and mechanistic modes of thought. Postmodernism either dissolves the self or places the self in the context of community. Postmodernism rejects metanarratives and embraces diversity and difference; it rejects foundationalism and correspondence theories of truth and emphasizes the constructed character of reality. It is extraordinarily sensitive to questions of power, gender, and race and how assumptions about all three have called into question the very idea of impartial reason (for similar characterizations, see Tirosh-Samuelson 2005, 38; King 2005, 537–39). Caiazza correctly notes that, among these other features, postmoderns have directed considerable skepticism toward traditional modernist claims about the priority of science. In modernist approaches, the expression *scientific truth* borders on the redundant, for the question arises as to what other kind of truth there could be. Many postmoderns, however, are inclined to give no priority to scientific accounts of the world, and indeed to see science as one practice among others, guilty of the same sort of abuses with regard to power, gender, and race that has distorted other forms of modern discourse. On this reading, science becomes one text among others with no special priority or significance.

I address the diversity of views within postmodernism later on, but it is important to note here not only these general characteristics, which to varying degrees are widely shared among those who call themselves postmodern, but also the sheer prevalence of postmodern modes of discourse within the academic study of religion and theology. Postmodernism, or at least elements of it, has been seen as key for such issues as religious pluralism, securing the legitimacy of religious knowledge and discourse, restoring orthodoxy, and confronting the environmental crisis. Postmodern ideas and themes have been championed by leading Christian theologians and are so ubiquitous as to be commonplace (for two very different samplings, see Ward 2004; Vanhoozer 2003). In religious studies I would suggest a similar scene.

One exception to this dominance of postmodern discourse is the sub-field of theology and science, where the winds of postmodernism have indeed blown, but much less fiercely and in the face of some resistance. Several of the leading figures of the theology-science discourse have endorsed a form of critical realism that is at odds with some of the dominant epistemological claims of postmodernism (Barbour 1997; Peacocke 1984; Polkinghorne 1986). Even when postmodernism is endorsed, it is often a less radical form or one that is even seen as at odds with what is “genuine” postmodernism. Thus, while J. Wentzel van Huyssteen embraces a post-foundationalist epistemology, he still maintains a place for speaking of the authenticity of religious experience and retaining a mild critical realism with respect to theology (van Huyssteen 1999, 191, 213). Similarly, Nancey Murphy has advocated a postmodern and postfoundationalist approach to theology and science but has been criticized for not being genuinely post-modern (Puddefoot 1994).

In these characterizations, there are at stake issues of exactly what post-modernism is and what it entails, but I suggest that it is particularly in the interface of religion and science that forms of resistance to postmodernism can be found. Among the responses to Caiazza, three essays in particular exemplify these elements of resistance to postmodernism in favor of modernist modes of discourse. E. Thomas Lawson, for instance, almost completely ignores Caiazza’s thesis in favor of outlining an explanation of religion in terms of cognitive science. Endorsing the new field of the cognitive science of religion (to which Lawson himself has been a major contributor), he argues that many aspects of religious belief stem from biologically innate modes of inference and processing information that give rise to a “folk religion” that is universal in the same way that folk physics and folk psychology are universal. Having explained religion, Lawson claims to also have explained religion away, holding dim expectations that scientifically informed theological claims will ever amount to anything (2005, 562). On Lawson’s analysis, scientific, materialistic modes of thinking trump all others in a way that is familiarly modern.

A similar pattern of argumentation can be found in the response by Willem Drees (2005). Drees takes a classically sociological route, suggesting that the religion-and-science dialogue is not really about religion and science at all but about certain kinds of social conflict. Thus, religion-and-science should be seen as, among other things, an apologia for science, getting religious people to accept scientific methods and claims that they might otherwise reject. It is also part of a larger intrareligious conflict over authority, where scientific theories become allied or opposed to specific theological doctrines. Whereas Lawson’s article promotes a biological reduction, Drees suggests but does not completely endorse a sociological one. Drees’s analysis fits nicely into the religious naturalist position he has developed elsewhere (1999). If one is a modern naturalist, even a religious

one, a prime task is to explain the persistence of supernaturalistic beliefs in the face of modernism. For this, sociological categories are often invoked.

Gordon Kaufman's essay (2005) takes a slightly different tack. He attacks Caiazza's identification of religion with the appeal to revelation, arguing that revelation is merely a human invention that has no scientific basis and is contrary to a scientific understanding of the world. The idea of God as a personal, anthropomorphic agent is, Kaufman continues, similarly incredible to the modern, scientifically informed mind. Implicitly drawing on Friedrich Nietzsche's claim that God is dead, Kaufman concludes that it is no longer possible to even believe in the kind of religion and kind of God that Caiazza seems to assume. Instead we must reconceive God not as creator but as the creativity in the cosmological, biological, and cultural process.

I am not sure that either Drees or Kaufman would heartily accept the label of modernist in describing their work, although Drees has criticized arguments for a "postmodern science" and Kaufman in a recent work prefers to speak of a "modern/postmodern" world that suggests some discomfort with postmodernist claims (Drees 1999, 255–57; Kaufman 2004). Nevertheless, all three essays of Lawson, Drees, and Kaufman betray a confidence in science, a critique of traditional religion, and the implication of a unified—the postmodern would say totalizing—worldview that are characteristics typically associated with the modernist perspective. Furthermore, this streak of modernism is not limited to those who are naturalists or strongly critical of traditional Protestantism. The article by V. V. Raman, a practicing Hindu, jibes at postmodern critiques of science in a way that is familiar in the science-religion literature (Raman 2005, 824–25). Modernism, far from being dead in the religion-science discourse, is alive and well, albeit in a variety of distinct and competing forms.

MAKING SCIENCE AND RELIGION POSTMODERN

For the postmodern, modernist modes of analysis are fundamentally flawed, and the jibes that modernists take at postmodernism betray fundamental misunderstandings regarding the nature and strength of postmodern approaches. Modernists do not realize the hidden presuppositions that inform their thought, and when these are brought to light the modernist edifice crumbles. To some extent, this is evident in the charge of scientism that is frequently levied, and we see this clearly in the responses to Caiazza by Ted Peters (2005), Rustum Roy (2005), Bronislaw Szerszynski (2005), and John Haught (2005). The problem is not simply the techno-secularism that is present in today's society but that it is buttressed by a scientistic outlook that conflates science with a naturalistic philosophy. Haught chides Caiazza for not making this distinction, and Roy suggests that scientism has become the basis of a new religion for our society (Haught 2005, 364;

Roy 2005, 841). Once the distinction is made, the threat of science to religion disappears and perhaps the threat of techno-secularism along with it.

Although these critiques might be considered postmodern to the extent that they reject a hegemony of science, or at least an interpretation of it, they do not incorporate other postmodern themes in the way that other respondents do. Ursula King (2005) criticizes Caiazza for mischaracterizing postmodernism and proceeds to deconstruct Caiazza's article to reveal these hidden presuppositions. King challenges, for instance, the way that Caiazza has used the terms *science* and *religion* to privilege forms of Western Christianity. Caiazza also allegedly hides his voice, concealing the male, aggressive, and combative tone of the article (King 2005, 538). By contrast, King endorses a more inclusive vision that recognizes the gendered individuality of the participants, the essentially dialogical nature of discourse, and the turn to an ecological frame of mind.

These are familiarly postmodern themes—deconstruction, gender/power identifications, overcoming reified dualisms (science versus religion), and endorsing holistic, ecological sensibilities. I would not be surprised if the other respondents to Caiazza who most strongly endorse postmodern modes of thought—Antje Jackelén (2005), Tirosh-Samuelson (2005), and Barbara Strassberg (2005)—were sympathetic with King's line of analysis. Yet, what is most striking about these essays is their diversity. Tirosh-Samuelson, for instance, appeals to history in a way that is likely foreign to King and the philosophers such as Martin Heidegger whom King cites with approval. Although Tirosh-Samuelson is at least partially sympathetic with Caiazza's critique of techno-secularism, Jackelén, Tirosh-Samuelson, and Strassberg each give a more positive assessment of technology and its relation to religion, although each does so, again, in very different ways. While Jackelén notes how easily many religious communities, even fundamentalist ones, employ technology and defends technological usage on theological grounds, Strassberg appeals to a very different, sociological, reading of technology and ethics.

Strictly speaking, postmoderns value this diversity. Once we give up a unified account of truth, once we forgo totalizing metanarratives, pluralism is the inevitable result, and postmoderns argue that this pluralism is to be valued. Postmodern pluralism, however, is of a very specific type, for it necessarily excludes tolerance of the very modernist positions that it contrasts itself with, a point sharply made recently by Jerome Stone (2004). Indeed, postmodernist positions themselves fall into conflicting types, and it is not uncommon to divide them into those allied more with Continental philosophy, particularly the deconstructionism of Jacques Derrida and Michel Foucault, and those engaged more directly with traditional religions, ecology, and themes of holism, a divide sometimes referred to in the United States as East-coast and West-coast postmodernism, respectively.

Although there are substantial arguments for valuing certain kinds of diversity, postmodernism seems to founder when it encounters the sciences. This is a prime point of Philip Clayton's response to Caiazza (2005). Clayton argues that, despite arguments made to the contrary, science does have an epistemic privilege within its respective domain and that scientific methods provide a kind of exactitude and certainty that is simply not available to nonscientific modes of discourse. Although science may be a construct, it is not a *mere* construct, and so it is not, as some postmoderns would have it, simply one "text" among others. Because modern science's scope is so broad (from cosmology and natural history to genetics and behavioral studies and general biology), claims of pluralism become significantly limited in a way that is contrary to the spirit of many forms of postmodernism.

If science is not merely one text among others, an alternative strategy is to baptize modern science as postmodern. Theologian David Tracy, for instance, argued this point some years ago, suggesting that the development of quantum mechanics implies and fits in with a postmodern framework (Tracy 1989). This move, however, also seems strained, as the methods and modes of thought that the founders of quantum mechanics and modern physicists use barely fit the description of postmodern employed. Alternatively, one may understand postmodernism mostly or exclusively in epistemological terms as a rejection of foundationalism. At least some of Murphy's work (1990, for example) may be seen in this light. Under this construal, science may still have priority, but it would not be an absolute one. In the process, many of the other elements traditionally associated with postmodernism, including its radical pluralism, may be lost.

Where does this leave us? I suggest that a genuine examination of modern and postmodern themes in the context of the science-religion dialogue has not been adequately done and that there is good reason for such exploration. For a great many theologians and religion scholars, the science-religion dialogue is a foreign and not very interesting territory, not only because of the imposing problem of having to know something about science but also because many of the participants in the dialogue seem (to them) theologically old-fashioned and unaware of what is currently going on in theology and religious studies, that is, postmodernism. For the scientists in the science-religion dialogue, postmodernism seems a maze of obfuscation and pretension and lack of understanding of what science is about, and so, when postmoderns write about science, it seems to the scientists that the postmoderns just reveal their ignorance. Similarly, many of the theologians who are involved in the science-religion dialogue find the encounter with science refreshing because it seems to provide a way out of everything they find distasteful about postmodernism. It is therefore no accident that the science-religion dialogue is one of the few places that have resisted the rising tide of postmodernism.

At the turn of the twenty-first century, this puts the science-religion dialogue in an interesting and perhaps advantageous place. There is good reason to believe that postmodernism as a unified and coherent framework has reached its high-water mark. This is evident, among other places, in the several articles written in the *Chronicle of Higher Education* by professors who were graduate students in the 1990s who eagerly embraced postmodern modes of analysis but now have become jaded by the whole project, especially its deconstructionist end (for example, Benton 2005). For some, current issues of war and terrorism have put issues of truth and the relativism associated with postmodernism into sharp relief (see, for instance, the heated exchange between Hauerwas, Griffiths, and Elshtain 2003).

In saying that postmodernism has reached its high-water mark I am not saying that postmodernism has disappeared from the scene. Far from it, as a survey of publications in the fields of religion and theology will show. Nor am I claiming its bankruptcy, as some are doing. Indeed, those scholars who have labored under the label of postmodernism (sometimes retrospectively anointed by their successors) have made important contributions to scholarship. It is precisely because of postmodernism that we are now acutely aware of issues of race, gender, and class bias, perceptive to the dangers of binary dualisms and hierarchies, and sensitive to the difficulties and dangers in constructing metanarratives. The problem is that we have now amply explored these issues and sometimes become so enamored with them that they become their own sources of oppression. Postmodernism is not dying so much as it is exhausting itself.

But what comes after postmodernism—postpostmodernism? Whatever new labels are conceived, Caiazza's essay reveals that science and technology will continue to have a framing role. As such, this puts the religion-science dialogue in a potentially important position for shaping the next generation of discourse. Theologians engaged with the sciences are acutely aware of the issues that the sciences raise. Because of this involvement, they also are able to take a critical stance towards the postmodern framework, appreciating what is best about postmodernism while being able, at least potentially, to go beyond it.

IN SEARCH OF SOMETHING NEW?

Zygon's forty years represent an important achievement. Many academic journals, born often in a burst of scholarly excitement, barely make it off the ground let alone persist for forty years. In that time, *Zygon* has grown not only in size but also in sophistication. Along with it has grown the science-and-religion dialogue, for which the journal has been a major engine. After forty years, what has been accomplished?

As the responses to Caiazza's essay reveal, we have a much better grasp of the historical relationships between religion and science now than previously. While Tirosh-Samuelson and others roundly criticize Caiazza for

inadequately characterizing this historical relationship, Caiazza at least does not fall completely into the trap of simple conflict, as so often remains the case, and Caiazza must be more aware of the nuances of this history than he lets on. It is unfortunate that Caiazza chose only to focus on Gould's championing of the independence principle, or NOMA (non-overlapping magisteria), for Gould was as effective as anyone at deconstructing the myth of conflict between religion and science and showing its more complicated face (Gould 1999). Forty years later, we are much more aware of the complex historical relationship between religion and science. This achievement should not be minimized, because the history is important both for scholarship and for its use in more rhetorical arenas. When Bertrand Russell argued against religious belief because of, among other things, its historic opposition to science, he was able to appeal to the commonly accepted historiography of the day ([1935] 1997). Such an argument could not be credibly made today, because we now know that although there have been periods of conflict, there have been periods of synergy and indifference as well.

Forty years of publication has successfully elaborated the questions that need to be addressed and explored a number of the possible directions that solutions might go. The greatest success here has been in the direction from science to religion, and a good portion of this has to do with becoming familiar enough with the range of disciplines to be able to ask the questions in the first place. Drees is at least partly correct to claim that a good many publications in the science-religion dialogue are indistinguishable from popularizations of science (Drees 2005, 547). The claim is an exaggeration, but it is not unusual in science-religion publications to have lengthy descriptions of the science combined with only brief theological reflections. There are perhaps several reasons for this, but one is surely that for most nonscientists toward whom such books are aimed, including theologians, both the science and its implications are unfamiliar. Indeed, this unfamiliarity extends to scientists as well, who often are so specialized in their discipline or subdiscipline that they have as little awareness of what goes on in other scientific fields as the average layperson does. In order to even have a dialogue, knowledge of the material and the potential questions it poses is key. That knowledge is now more widespread than it was forty years ago and has extended from the physical sciences to, more recently, such fields as genetics and neuroscience.

There also has been some success, although admittedly less, in the direction from theology to science. Important work by Paul Davies (1984), Arthur Peacocke (1986), and Philip Hefner (1993) has not only drawn attention to the impact of particular scientific fields for theology but also has provided models of how theological resources might be employed to address these questions. Furthermore, there are distinctly theological questions, such as those of meaning and value, that the sciences have consider-

able difficulty addressing and that theologians involved in the dialogue importantly raised in their dialogues with scientists. Nonreligious scientists who become involved in such dialogues quickly learn that not all religious people are ignorant fundamentalists and that not all questions posed to scientists by theologians are easily dismissed. One might note here the journey of Carl Sagan (1997), who by no means ever embraced religion but came to see that there were complexities that had to be dealt with. Caiazza's claim that the "battle" between science and religion ends in a draw might charitably be interpreted as a reflection of this, for one positive contribution of postmodern reflection has been to develop a critical awareness of the contextualization and limitation of particular scientific claims. Theologians have been correct to pick up on these themes as one basis among others for a dialogue with science.

Forty years, therefore, have brought us to a deeper historical understanding and an elaboration of the basic questions in both directions, from science to religion and from religion to science. One might even say that some progress has been made in the direction of solutions, although such a claim is more problematic. One might say that there has been progress toward solutions within religious traditions. The project on divine action led by the Center for Theology and the Natural Sciences and the Vatican Observatory is one example; it has provided not so much a solution as a catalog of possibilities with a clearer sense of what works well and what does not (Wildman 2004). Once one has accepted certain theological tenets and certain scientific claims, specific possibilities for divine action emerge. At best, however, this is true for claims within a religious tradition. Once we move to the question of truths or progress across religious traditions, or more broadly between religious and nonreligious worldviews, any positive assessment becomes difficult if not impossible. This suggests a further question: What yet needs to be done? What do Caiazza and the responses to him reveal about the tasks ahead for a viable and thriving religion-science dialogue?

As the preceding reflection indicates, the biggest elephant in the room is the issue of religious diversity. Caiazza does not reflect on this, a point adequately made by Samuelson and others. But more needs to be done than to simply observe the diversity of religious traditions or simply affirm that the diversity is good, as is sometimes the postmodern impulse. Polkinghorne (2005, 49) suggests that the dialogue with the sciences can provide one means for bridging this diversity, presumably because the sciences provide a common set of themes and even a common vocabulary for conversation and exchange. Some significant progress has been made on this already. Much of the religion-science dialogue of the past forty years has been dominated, to put it mildly, by the Christian theology-and-science dialogue. It is only in the past decade that significant progress has been made in bringing in Jewish, Muslim, Hindu, and Buddhist voices and

those from other religious perspectives (see Samuelson 1994; Wallace 2003). A great deal more needs to be done not only to include these voices but also to understand what issues may be of importance to these traditions. Issues of evolution and divine action may be important for Christian thought, with its heavy emphasis on theological claims and (in some forms of Christianity) a doctrine of providence, but divine action would certainly not be a concern for Buddhists and many Hindus and would likely rank low for many Jews as well. To cultivate these multiple dialogues will take years if not decades, and it will become a Herculean task to simply be aware of the developments in each of them.

And what then? Is each dialogue proclaimed successful when each tradition has reconciled its religious claims with scientific realities or, failing that, has delineated where unavoidable conflict resides? Do the religious traditions themselves need to be reconciled? This is one arena of discourse that particularly seems to need the postpostmodern moment. Postmoderns have been keen to point out the religious intolerance of the modern period with all its negative ethical implications, and they have been eager to embrace sometimes radical forms of pluralism, a pluralism united in no small part by opposition to modernism and its ill effects. But it is a mistake to assume that we should blithely embrace all forms of religiosity. Some forms of religion are, frankly, poisonous. Drees is correct to note that one of the functions of the science-religion dialogue is that of intrareligious disagreement. Perhaps, in the long run, this is a good thing. Perhaps the sciences can serve as one resource among many to weed out the bad. Will this mean some new, unified religion? Probably not. Postmoderns are correct to note the value of diversity. The problem lies in the fact that not all forms of diversity are equally valuable.

Related to this issue is a second issue of what precisely the religion-science dialogue is about. Forty years later, it is important to be clear that what often is called the religion-science dialogue is really two dialogues. One is more properly called a theology-science dialogue, a purpose of which is to assess theological claims and to assess scientific claims and to see to what extent they are compatible, mutually justifiable, and so forth. A good portion of this literature can be characterized as theological apologetics, attempting to show that, for instance, Christian faith is intelligible in the face of modern science and perhaps even strongly supported by it (consider, for example, Murphy and Ellis 1996). Mixed up with this is what may be more properly called religion-science discourse, or perhaps religious studies-science discourse, which seeks not to justify particular religious traditions but to describe what has and is occurring. The achievements in religion-science historiography already mentioned fall into this category, as does descriptive work on current developments, polling data, and biographies. Included also is ongoing work in what may be called the new psychology of religion, including neuroscience and the cognitive science

of religion. Lawson's response to Caiazza (2005) is an example of this last type.

In the early days of *Zygon*, these two efforts were often mixed together, in no small part because there were so few resources and so little had been done. Both of these fields have matured considerably, and it is time for scholars to be more self-conscious about which endeavors they are participating in. Doing so will bring clarity to both endeavors at the same time that it lays bare presuppositions. Theologians must inevitably draw on the resources that religion (or religious studies) and science scholarship provide. At the same time, separation will reveal the religious-studies presuppositions that are at work and that are not always ideologically innocent. This is especially obvious in the nascent cognitive science of religion, which promises to provide important insights into the nature of religion but tends to be clouded by hostility to its own subject matter.

A third issue is that of theological depth. A frequent complaint by those outside the theology-science conversation is that, while the science is all very interesting, the theological labor is lacking. There is occasionally some truth to this, but I would argue that the reason for this is different from that usually cited. Presumably, the reason that good, sophisticated theology is not found in the theology-science dialogue is that the persons involved are not good theologians or have inadequate theological training. But there is another possibility. It may be the case that much of contemporary theology (postmodern or otherwise) is simply not up to the task of a sophisticated dialogue with the sciences. Here again I would suggest that the postpostmodern moment is awaiting us. I do not mean that we should throw away everything that has been done before. Rather, there is an ongoing need for reworking and deepening that takes into account the particularity of religious traditions, along with shifts in perspectives that may break through current impasses.

FROM BEING TO BECOMING

Caiazza's concluding remarks on techno-secularism are particularly important for the ongoing science-religion/theology conversation. Many of the respondents to Caiazza question the linking of technology to secularism and the opposition of both to religion (Jackelén 2005; Padgett 2005; Oviedo 2005; Peters 2005). The points are important to raise, but Caiazza's essay does reveal that the issue of technology and its link with science has been inadequately explored within the science-religion dialogue. There are exceptions. Ian Barbour has spent a lifetime in both areas of discourse, and both Hefner (2003) and Peters (1997) have connected issues of science, technology, human nature, and ethics in ways that are important for the ongoing dialogue. These works, however, tend to be the exception rather than the rule. As Drees notes, the science-religion dialogue tends toward the passive and metaphysical rather than toward the prophetic. There are

reasons for this, not least that the sciences raise many issues that once belonged properly to the metaphysical. But, to the extent that there has been theological engagement with technology, it has occurred largely outside of the science-theology conversation. There is good reason for the lines between the two areas of inquiry to become increasingly blurred if not for the separation to end altogether. Many of the potential technological developments of the near future rely heavily on fairly recent scientific discoveries that raise important theological and ethical questions about human nature. Forms of genetic engineering are already upon us. Couples using in vitro fertilization may request genetic testing prior to embryo implantation and discard embryos that they find undesirable. The nascent field of neural engineering not only promises to provide significant help in the fight against Parkinson's disease and paralysis but also holds out the potential promise of neural enhancement. Those involved in the science-religion dialogue have something important to say and are in an opportune place to say it.

Caiazza concludes by suggesting that we have entered a new era of magic, embodied now in modern technology so sophisticated that it is incomprehensible to the average person. To some extent he is correct. For the average person, technology is inexplicable in the way that magic is often thought to be. As Caiazza points out, many if not most of us have only the faintest idea of what goes on inside the shell of a computer. But then, most of us are also surprisingly incurious about it. Once upon a time, computers were mysterious objects that required considerable labor and expertise to use. Now they are ubiquitous and easy to use and require very little reflection, so they end up having the existential significance of toasters—cheap, easy to use, and easy to replace when they break down.

I might suggest that the magic of technology lies elsewhere—not in the apparent mystery of its inner workings but in its promise of control. The dream of magic is the dream of being able to control one's life with ease; it is the dream of youth, the love potion, the conqueror, even the dream of immortality. It is this dream that the myth of technology seeks to gratify. But, as often can be the case, dreams can be dangerous, and in gaining control we might find that we end up losing it. Here, too, theology has something to say.

REFERENCES

- Barbour, Ian. 1997. *Religion and Science: Historical and Contemporary Issues*. San Francisco: HarperCollins.
- Benton, Thomas H. 2005. "Life after the Death of Theory." *The Chronicle of Higher Education* 51 (34, April 29): C1.
- Brooke, John Hedley. 1991. *Science and Religion: Some Historical Perspectives*. Cambridge: Cambridge Univ. Press.
- Caiazza, John C. 2005. "Athens, Jerusalem, and the Arrival of Techno-Secularism." *Zygon: Journal of Religion and Science* 40 (March): 9–21.
- Clayton, Philip. 2005. "The Religion-Science Discussion at Forty Years: 'Reports of My Death are Premature.'" *Zygon: Journal of Religion and Science* 40 (March): 23–32.
- Davies, Paul. 1984. *God and the New Physics*. New York: Simon and Schuster.
- Drees, Willem B. 1999. *Religion, Science, and Naturalism*. Cambridge: Cambridge Univ. Press.
- . 2005. "'Religion and Science' as Advocacy of Science and as Religion versus Religion." *Zygon: Journal of Religion and Science* 40 (September): 545–53.
- Gould, Stephen Jay. 1999. *Rocks of Ages: Science and Religion in the Fullness of Life*. New York: Ballantine.
- Hauerwas, Stanley, Paul J. Griffiths, and Jean Bethke Elshtain. 2003. "War, Peace, and Jean Bethke Elshtain." *First Things* 136:41–47.
- Haight, John F. 2005. "Science and Scientism: The Importance of a Distinction." *Zygon: Journal of Religion and Science* 40 (June): 363–68.
- Hefner, Philip. 1993. *The Human Factor: Evolution, Culture and Religion*. Minneapolis: Fortress.
- . 2003. *Technology and Human Becoming*. Minneapolis: Fortress.
- Jackelén, Antje. 2005. "What is 'Secular'? Techno-secularism and Spirituality." *Zygon: Journal of Religion and Science* 40 (December): 863–73.
- Kaufman, Gordon. 2004. *In the beginning . . . Creativity*. Minneapolis: Fortress.
- . 2005. "Techno-Secularism and 'Revealed Religion': Some Problems with Caiazza's Analysis." *Zygon: Journal of Religion and Science* 40 (June): 323–33.
- King, Ursula. 2005. "The Journey beyond Athens and Jerusalem." *Zygon: Journal of Religion and Science* 40 (September): 535–44.
- Lawson, E. Thomas. 2005. "A New Look at the Science-and-Religion Dialogue." *Zygon: Journal of Religion and Science* 40 (September): 555–63.
- Lindberg, David C., and Ronald L. Numbers, eds. 1986. *God and Nature: Historical Essays on the Encounter between Religion and Science*. Berkeley: Univ. of California Press.
- Murphy, Nancey. 1990. *Theology in the Age of Scientific Reasoning*. Ithaca, N.Y.: Cornell Univ. Press.
- Murphy, Nancey, and George F. R. Ellis. 1996. *On the Moral Nature of the Universe: Theology, Cosmology, and Ethics*. Minneapolis: Fortress.
- Oviedo, Lluís. 2005. "Whom to Blame for the Charge of Secularization?" *Zygon: Journal of Religion and Science* 40 (June): 351–61.
- Padgett, Alan G. 2005. "God versus Technology? Science, Secularity, and the Theology of Technology." *Zygon: Journal of Religion and Science* 40 (September): 577–84.
- Pannenberg, Wolfhart. 2005. "Notes on the Alleged Conflict between Religion and Science." *Zygon: Journal of Religion and Science* 40 (September): 585–88.
- Peacocke, Arthur. 1984. *Intimations of Reality: Critical Realism in Science and Religion*. Notre Dame, Ind.: Univ. of Notre Dame Press.
- . 1986. *God and the New Biology*. London: J. M. Dent.
- Peters, Ted. 1997. *Playing God: Genetic Determinism and Human Freedom*. New York: Routledge.
- . 2005. "Techno-Secularism, Religion, and the Created Co-Creator." *Zygon: Journal of Religion and Science* 40 (December): 845–62.
- Polkinghorne, John. 1986. *One World: The Interaction of Science and Theology*. Princeton, N.J.: Princeton Univ. Press.
- . 2005. "The Continuing Interaction of Science and Religion." *Zygon: Journal of Religion and Science* 40 (March): 43–50.

- Puddefoot, John. 1994. "Response by John Puddefoot." In *Science and Theology: Questions at the Interface*, ed. Murray Rae, Hilary Regan, and John Stenhouse, 137–47. Grand Rapids, Mich.: William B. Eerdmans.
- Raman, Varadaraja V. 2005. "Techno-Secularism: Comments and Reflections." *Zygon: Journal of Religion and Science* 40 (December): 823–34.
- Roy, Rustum. 2005. "Scientism and Technology as Religions." *Zygon: Journal of Religion and Science* 40 (December): 835–44.
- Russell, Bertrand. [1935] 1997. *Religion and Science*. New York: Oxford Univ. Press.
- Sagan, Carl. 1997. *The Demon-Haunted World: Science as a Candle in the Dark*. New York: Ballantine.
- Samuelson, Norbert. 1994. *Judaism and the Doctrine of Creation*. Cambridge: Cambridge Univ. Press.
- . 2005. "Culture and History: Essential Partners in the Conversation between Religion and Science." *Zygon: Journal of Religion and Science* 40 (June): 335–50.
- Stone, Jerome. 2004. "Philip Hefner and the Modernist/Postmodernist Divide." *Zygon: Journal of Religion and Science* 39 (December): 755–72.
- Strassberg, Barbara A. 2005. "Magic, Religion, Science, Technology, and Ethics in the Postmodern World." *Zygon: Journal of Religion and Science* 40 (June): 307–22.
- Szerszynski, Bronislaw. 2005. "Rethinking the Secular: Science, Technology and Religion Today." *Zygon: Journal of Religion and Science* 40 (December): 813–22.
- Tirosh-Samuelson, Hava. 2005. "Rethinking the Past and Anticipating the Future of Religion and Science." *Zygon: Journal of Religion and Science* 40 (March): 33–41.
- Tracy, David. 1989. *Plurality and Ambiguity: Hermeneutics, Religion, Hope*. Chicago: Univ. of Chicago Press.
- Vanhoozer, Kevin J. 2003. *The Cambridge Companion to Postmodern Theology*. Cambridge: Cambridge Univ. Press.
- Van Huyssteen, J. Wentzel. 1999. *The Shaping of Rationality: Toward Interdisciplinarity in Theology and Science*. Grand Rapids, Mich.: William B. Eerdmans.
- Wallace, Alan, ed. 2003. *Buddhism and Science: Breaking New Ground*. New York: Columbia Univ. Press.
- Ward, Graham. 2004. *The Blackwell Companion to Postmodern Theology*. New York: Blackwell.
- Wildman, Wesley. 2004. "The Divine Action Project: 1988–2003." *Theology and Science* 2: 31–75.