

# ***Fortieth Anniversary Symposium: Science, Religion, and Secularity in a Technological Society***

THE JOURNEY BEYOND ATHENS AND JERUSALEM

*by Ursula King*

*Abstract.* John Caiazza's essay raises important controversial issues regarding the contemporary debates between science and religion. His arguments are largely presented in a dichotomous and rather adversarial mode with which I strongly disagree. Unable to present a detailed counterargument in this brief reflection, I ask, What is being spoken about, and who is speaking? What is meant by *science* and *religion* here? Neither term can be taken as a unified, essentialist category; both comprise many historical layers, possess numerous internal complexities, and invite a diversity of interpretations. I refer to the science of China, India, and the ancient Near East, all of which have fed into modern science, so that the sciences cannot be restricted to those of the modern West. Nor can religion be limited to the religious beliefs and practices of Western Christianity. I discuss the position/location/context of the author—Caiazza's as well as my own—after introducing Hans-Georg Gadamer's idea of the "fusion of horizons," which provides a rich vein for enhancing the debate between science and religion. To expand the respective horizons of their dialogue it will be important to move away from an adversarial, exclusionary spirit to a more collaborative and communicative framework that allows for the development of new ideals, new questions, new ways of knowing, and an ethical and socially responsible stance more centered on human needs and concerns. We may have to build an altogether new Athens and Jerusalem for this.

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*Zygon* editor Philip Hefner issued a *carte blanche* invitation to comment on John Caiazza’s provocative essay (Caiazza 2005) written with such *panache*. Highly controversial, but also rather cavalier, it raises important issues about the relationship between secular knowledge, especially contemporary science, and religion. This debate has grown increasingly creative and critically diverse and is documented by a voluminous body of literature, to which Caiazza makes only scant reference (mainly in terms of Stephen Gould, whose designation as a “theologian” in the first subhead of the essay I read as a somewhat ironic epithet). To provide detailed counter-evidence for each of the claims made by Caiazza would be a mammoth task, and, given the constraints of a brief reply, it is impossible to provide a point-by-point critical analysis of his essay here. Instead I share some of the personal reflections his article stirred up in me, and these highlight my profound disagreement and dissatisfaction with “Athens, Jerusalem, and the Arrival of Techno-Secularism.”

The tone, concepts, and construction of the basic argument, as also the methodology used by Caiazza, seem to me rather limited and ultimately misleading. John Polkinghorne is quoted as saying that “the days of the knock-down argument are over,” but this essay strikes me as yet another example of such a knock-down argument premised on a triumphalist stance (note how many times the article refers to triumph) and based on simplistic dichotomies drawing on an oppositional discourse about “science” and “religion”—which, frankly, is as unhelpful as it is untrue. Which sciences is the author speaking about—the physical sciences? the biological sciences? the Earth sciences? the social sciences? the human sciences? And what is meant by *religion* in this piece? All I can discern is a certain traditional Christian theological stance—sometimes Roman Catholic, at other times more focused on modern Western Protestantism and the Enlightenment. I see no reference to the historically and culturally diverse expressions of global Christianity (or any other faith, for that matter). Where is there a sensitivity to a plurality of faiths and religious worldviews? or to the richness and depth of faith experiences? or even to a faithful, close exegesis of William James’s seminal *Varieties of Religious Experience* ([1902] 1999), much reexamined during the recent centenary of its publication from a hermeneutically sophisticated, critical perspective but here practically reduced to “psychopathological terms” and “cash value”? Almost throughout the entire article, but especially at the beginning, *science* and *religion* are spoken about reductively in dualistic, oppositional terms, understood

in an essentializing, universalist sense without any hint at their many-layeredness, the fluidity of their historical and philosophical associations, the internal pluralities and complexities that these categories encompass, and the diversity of interpretations that they invite. Think of the richness of Chinese science (and the superb work of the great scholar Joseph Needham, who speaks of the “oecumenogenesis” of modern science), or ancient Indian science, or the scientific knowledge we owe to the ancient Near East (where the people of the area that is now Iraq made such an essential contribution), or the important achievements of Islamic science, not to mention the considerable knowledge of nature found in many native traditions of the world whose wisdom and powers of healing we are only slowly beginning to discover. These are just a few examples that show how “science”—even in the restricted sense of modern, post-Enlightenment empirical sciences—cannot be reduced to one essentialist category.

The same is true of religion. This concept—a largely modern construction, as Wilfred Cantwell Smith (1964) so persuasively demonstrated—covers a diversity of religious beliefs and practices, as the comparative and scientific study of religion has documented and taught us over the last hundred years. The richness of this knowledge cannot be summed up in shorthand writing that refers only to Western Christian theology of a certain kind as “religion” and thinks only in terms of Tertullian’s ancient and rather limited comparison between Athens and Jerusalem. What about Varanasi, Nalanda, Kyoto, Lhasa, or Mexico, to mention just a few alternatives? We now know that the religious worlds of human history and contemporary practice contain so many different worldviews and dimensions that it is not easy to speak of religion in the singular any longer.

And who is speaking in this debate, anyway? Science and religion cannot speak; it is always people, human individuals and groups, who enter into dialogue and debate, not the abstract, universalizing categories behind which we so often hide. I consider a good debate (even when expressed in the objectifying mode of writing rather than in the live voice) one that is truly dialogical, personalist, and now also intercultural and planetary in its expressions and awareness. That is, it reveals the personal ground and location of the speaker and the new knowledge that grows out of “a fusion of horizons,” to quote Hans-Georg Gadamer (1989), which is existential as well as intellectual, intending the ultimate good, the well-being of human persons and the Earth community, as well as the advancement of knowledge and understanding. A critical, self-reflexive recognition and acknowledgment of the temporal, social, and intellectual positions and contexts from which particular spokesmen (and they still are mostly men, so that a gender dimension is also embedded in discourse) hold forth about science or religion—or dialogue about their relationship—could perhaps clarify, further advance, and thus also enhance this interdisciplinary and ultimately transdisciplinary dialogue.

As historians of science have shown, and as Margaret Wertheim has brilliantly demonstrated, the rise of physics as foundational science in Western culture drew much of its original inspiration from Christianity and still carries certain powerful theological undercurrents in its contemporary secular garb, whereas “the idea of a long-standing war between science and religion is a historical fiction invented in the late nineteenth century” (Wertheim 1997, 7). However much philosophical hermeneutics, philosophy of science, and the sociology of knowledge differ in their respective approaches and subject matter, they concur in recognizing the constructionist element in our different ways of “seeing” and creating knowledge as well as the limited standpoint of each position, so that each speaker in a conversation or dialogue needs to expand whatever is perceived as the horizon of a particular viewpoint or position. A “fusion of horizons” will lead to larger horizons, to new views and shared understanding. This fusion is also important for the dialogue between science and religion, and it is likely to be far more creative and holistic than advocating a strongly adversarial stance between these universes of discourse and knowing.

The recognition of a personal dimension and subjective involvement with all forms of knowledge also counters the myth of scientific objectivity and the ethical neutrality of science. What is the purpose of knowing, and of knowing ever more, if it leads to self-destruction and ever-more-powerful forms of human diminishment? Intensive discussions about the relation between facts and values have been taking place between philosophers of science for many years. Similarly, many wrestle with the urgent need to ground the sciences in an ethically and socially responsible framework so that the sciences, as well as religions, work for the good of the human community, for the flourishing of peoples and planet, and for peace rather than violence and war. Fusing and expanding the horizons of both science and religion through creative dialogue from many perspectives could be of immense benefit for humankind.

Many differing voices could be quoted against the particular construction of Caiazza’s argument. His position as well as that of others and my own obviously depend on which authors one reads and prefers and which epistemological and moral stances one opts for when debating science and religion.

The speaker behind Caiazza’s text is utterly hidden and, to me, unknown. Constructing his aggressive and one-sided argument (even by the use of an exclusive “his” in an early draft of his essay when referring to “the religious believer,” although empirically it has been shown that in most religions there are more female than male religious believers), he adopts an objectifying mode of writing, occasionally punctuated in that early draft by a magisterial “we” that does not show much critical self-reflexivity. The tone of the argument appears to be combative, even though some turns of phrase are probably used as rhetorical devices (such as “ferocious questioning”).

If the debate between science and religion is to advance at all, it has to be conducted in a more nuanced and self-aware manner with appropriate discernment of the real difficulties and hard facts, including a sensitivity to the language in which these are presented to a wider public.

After taking the liberty of criticizing the hiddenness of the author, I had better declare my own colors by making it clear from which context I am speaking. My educational background includes many years of traditional continental European theological and philosophical training (especially Roman Catholic theology, and including the valuable experience of having a disciple of Martin Heidegger among my German professors and Paul Ricoeur, Maurice Merleau-Ponty, and Gabriel Marcel among those who taught me in France). I later came to question much of this education not only through my immersion in an Anglo-Saxon cultural milieu but especially through living and further study in India and other parts of the East. This existential immersion opened entirely new worlds and ways of speaking to me. It also made me more sensitive to the meaning of language, the power of words, and the potential of symbols to imprison as well as to liberate. Many years of research into the work of the French Jesuit scientist Pierre Teilhard de Chardin developed my interest in the sciences beyond what I had been taught in biology and physics at school, an interest focused particularly on the earth sciences, geology, geography, and human origins, and more recently the environmental sciences, and their immense relevance for all religious faiths as well as for the debates between science and theology and science and religion.

In most of these matters, however, I remain a layperson. In my lived experience, my family—my husband and children and now my grandchildren—have been of immense significance, and in my academic work the living network of students, researchers, friends, and colleagues around the world has inspired and supported me over many years. Presently I am concerned mostly with questions of gender and their complex embeddedness within all religions and also in all social worlds and scientific universes, including the description and expression of these worlds in academic language. I learned from the writings of Walter Ong how masculinist and agonistic the tradition of rhetoric—the oldest subject in the classical Western curriculum—is and how women traditionally were excluded from schooling in this art of argumentative fighting and score counting. I often think of this when reading an academic text or journal article. Of course, by now many women, too, have been schooled in these traditional arts, so this practice is no longer divided along traditional gender lines. Yet it still requires serious questioning. Many new, more integral and holistic ways of discovering, expressing, and advancing human knowledge have now come into being that should contribute to our discussions on the relations between scientific and religious worldviews. I am thinking not only of the developments in postmodernism, deconstructionism, and feminist theory

but also of the new methodologies developed by some ecological and eco-feminist thinkers and by some contemporary scientific thinkers who have a deep understanding of both science and faith.

Caiazza's critique of what he calls "techno-secularism" (other writers refer to "technoscience") is hard hitting and well taken. I enjoyed his thought experiments with the computer and his comparisons between the different technological developments of the nineteenth, twentieth, and twenty-first centuries. But are they really "magic"? Only in a metaphorical way of speaking, I think. In the study of religion, *magic* has a much more precise and limited meaning and cannot be used in this way. We are no longer living in a "magical garden," to quote Max Weber from long ago (1968), but there are probably few people in the world today who would wish for a return to a more naive, perhaps even archaic, state of human society with its attendant "magic" and enchantment. Yes, we are experiencing "technological ubiquity"; Caiazza is right here, but he is rather narrow in perceiving its limitations (in linking it only to the power of the state) and not its extraordinary new possibilities for the transformation of our human world and consciousness. Here, too, Ong and Marshall McLuhan have deeper and more provocative things to say on the information age and its electronic revolution (Ong 1991; McLuhan 1962; McLuhan and Powers 1989). Ong is especially perceptive in his nuanced analyses of the complex inter-relationship of technological stages of development, literacy, and the transformation of human consciousness. We are truly at a new threshold of the noosphere, as Teilhard would say, and this is not mere speculation or word-play but a revolutionary development in the possibilities of human participation and co-creation. It allows for the development of the power of the people and of more genuine democracy, with eventually perhaps some withering away of the power of the nation-state as a conceptual and bureaucratic structure developed largely during the nineteenth century.

Of course, scientific and technological advances also bring with them the possibility of much more totalitarian control and violence, from the microlevel of genetics to the macrolevel of warfare, and it is perhaps with the specter of these negative effects that Caiazza's essay is primarily concerned. I realize that we are living at a time of intense risks as well as opportunities, and I recognize the legitimacy of Caiazza's robust critique of what he calls techno-secularism. But I miss the other side of the picture: the many positive effects, huge benefits, and new ways of being that modern science and technology have brought us and that millions of people around the globe, especially in its impoverished parts, are still hoping and working for. Where is the vision of human flourishing here? Where is the power of love as the greatest energy for personal and social transformation? Where is there a life-affirming vision, one of peace and justice for peoples and planet? In other words, which parameters, or "horizons," do the (largely male) participants in the science-and-religion debate perceive as appropri-

ate, helpful, most hopeful, or now even urgently needed and necessary? Pioneering visionaries such as Teilhard and the sociologist Pitirim Sorokin were already in the first half of the twentieth century pressing for the rigorous scientific study and exploration of the transformative power of love and compassion in the life of human individuals and groups (King 2004). More recently, women scientists and feminist philosophers of science have shown how women can play an important role in helping to shape new ideals for science. Will we see more of this closer, more personally engaged and practically engaging dialogue and collaboration between science and religion following the tsunami disaster in Asia, with its global repercussions?

The “science” and “religion” I know and love are not those presented in this article. I cannot see them as so opposed as is categorically affirmed here, nor can I see the same division between the “secular” and the “revealed.” Nowhere is there an indication that many so-called secular developments may be implicitly religious and profoundly spiritual in that they put into practice and make possible many hopes cherished for centuries by religious people who in earlier ages were unable to give some of the highest ideals of the human community concrete expression and embodiment. Think of the new consciousness expressing itself in an ecological spirituality and in much scientific environmental work for the future of life on Earth. Think of the movements for ecojustice, for balance between the sexes, for the abolition of violence, for human rights for all people including women and children, for new economic and financial models, for the eradication of poverty and ill health, for peace on Earth. These movements would not be possible without the growth of more “noospheric institutions” on our planet, as Paul Samson and David Pitt (1999) have called them—NGOs (nongovernmental organizations), the United Nations, the processes of global networking so exponentially enabled through the advances of electronic means of communication. Without modern science and technology none of them would have come into existence.

It is true that the world has yet to reap the benefits of these developments and movements, for often they remain part of a certain Western rhetoric that has yet to translate into real hope and concrete transformation in the lives of the poor and the oppressed. The significance and transformative potential of these visions is immense, but their practical realization is very often opposed by violent and powerful political and economic forces that have to be strongly counteracted and fought against. This is perhaps part of Caiazza’s intention. I am not convinced, however, that this can be achieved by a return to some of the traditional ideals he appeals to.

I am well aware of the mystic rose alluded to at the end of the essay, an image and experience much loved and probably far more prevalent in Islamic mysticism than in Christianity. It is a symbol that speaks of intense love and union and of deep wisdom, all of which we need for the whole human community, not just for the individual soul. Today, most

roses exist in “created” form—created by the long process of evolution, created by the intervention of domestication and systematic cultivation by human beings over millennia, and further modified by modern forms of genetic selection and systematic growing of seeds (which also affects the growth of all other forms of life on the planet). It is not helpful to draw a strict distinction between an essentialist understanding of *nature* and *culture*. Biosphere and noosphere are inextricably interwoven. Nature and culture fertilize each other. But we need discernment and wisdom not to go astray in the accelerating process of new research in all fields of human endeavor, in the ongoing flow of new inventions, the formulation of new knowledge, and the discovery of new sources of empowerment, all of which contain considerable risks but also great promise and hope. Traditional religions, spiritualities, and ethics provide irreplaceable resources to help our thinking and decision making, but they do not come as ready-made blueprints. We need both ancient and modern streams of wisdom to effect the planetary transformation and renewal we seek, as Thomas Berry explains so well in his challenging book *The Great Work* (1999). It seems to me more constructive, psychologically more healthy, and spiritually more life affirming to draw from the wells of wisdom—described by Berry as those of the classical religious and philosophical traditions, those of native traditions, the newly discovered wisdom of women, and, interestingly, the new wisdom of science—than to expend one’s energies on constructing a falsely dichotomized battle between science and religion.

To conclude: The debate between members of different scientific disciplines and scholars and practitioners of different religions is of great importance for contemporary society and politics—more than for the internal developments of the academy as a relatively separate institution within today’s world, currently often adversely affected by considerable academic posturing and jockeying for position caused by unhealthy competitiveness and financial strictures. We need time and spaces for thinkers, visionaries, and dreamers, whether from the humanities, the arts, or the sciences. But they have to collaborate, communicate, and work together as a team rather than construct argumentative debates in an exclusionary spirit that divides and cuts off rather than connects.

*Zygon*, the title of this journal, is a word that means “yoke” or “yoking,” and I take it to be the journal’s aim to foster such connections in the form of collaborative communication and constructive thought, even though at times this may produce extraordinary disagreements. Linking the deepest knowledge and wisdom of science and religions will be like seeding new growth, producing new synapses, giving birth to new creation. Given that the word *zygon* has been described as “not available in the general English dictionary” and also has been used as a name for a fictional extraterrestrial race in the long-running British science fiction television series *Doctor Who*, I wonder whether, symbolically speaking, this new creation—this innova-



tive, constructive rather than destructive, encounter and synthesis between science and religion—may still be a long way off and may need some input from another sphere.

*Zygon* certainly has much to celebrate in looking back on forty years of debate between persons working in the areas of science and/or religion and in bringing together such a distinguished array of editors, international advisers, contributors, and discussants from a wide range of specialist disciplines. I deeply appreciate the invitation to participate in this symposium of different voices to mark the journal's anniversary, even though I disagree profoundly with some of what Caiazza says. In my view, to advance the science-religion debate and discover new horizons now, at the beginning of the twenty-first century, requires that some essential conditions be established: that we be perceptive, analytical, and critical, yes (not in a dichotomous, oppositional, and adversarial mode, though)—but also to be constructive in seeking to build bridges, make new connections, find new topics of investigation, and create new syntheses in order to frame challenging new questions. These relate above all to the social and personal implications of our pursuit of scientific, technological, religious, and philosophical knowledge and how we disseminate and apply it globally in education, politics, world governance, and finance.

There is still much more ground to explore between science, technology, and religion, and this is not only a question of the power of our intellects. The power of will, action, and moral purpose also must come into play here and help us find new ideals that can shape our lives as well as inspire our intellectual quests. Perhaps we need to build an entirely new Athens and Jerusalem or, rather, think of cities from all parts of the globe—Beijing, Tokyo, Mumbai, Cairo, Rio de Janeiro, Mexico City, London, and New York as well as Athens and Jerusalem—to ensure a future for the world and ourselves.

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