

RETHINKING THE PAST AND ANTICIPATING THE FUTURE OF RELIGION AND SCIENCE

by *Hava Tirosh-Samuels*

Abstract. John Caiazza presents the current technoculture as the latest development in the ongoing conflict of science and religion that began with Tertullian in the third century. I argue that his presentation is historically inaccurate, because for most of Western history science and religion interacted with and cross-fertilized each other. Contrary to Caiazza's misleading presentation, Western thought did not follow the dichotomous model polemically posed by Tertullian. I take issue with Caiazza's portrayal of postmodernism and his claim that technology is the foundation of an inherently secularist culture. I conclude by highlighting certain ethical challenges engendered by the prevalence of new technologies and present the dialogue of science and religion as uniquely qualified to address these challenges.

Keywords: Thomas Aquinas; church fathers; double-truth theory; feminism; *paideia*; pictorialism; postmodernism; Leo Strauss; Tertullian; University of Paris.

Evoking Tertullian's rhetorical challenge "What has Athens to do with Jerusalem?" John Caiazza argues that the rise of techno-secularism is but the most recent manifestation in the conflict of science and religion that has lasted for 1,800 years. Although Caiazza states that the current phase of the debate has to be understood in its proper historical context, his essay lacks exactly that, both in terms of the origin of the conflict between science and religion and in terms of its development over time. By using "Athens" and "Jerusalem" as reified categories, Caiazza takes his analysis out of history, be it the history of Western culture, the history of science, or the history of religions.

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SCIENCE AND RELIGION IN HISTORICAL PERSPECTIVE

It is not self-evident that “Athens” and “Jerusalem” stand for “science” and “religion” respectively, as Caiazza presupposes, or that these two proper names should be employed as shorthand for two sources of knowledge, one discovered by human reason and the other revealed by God through scriptures, as Leo Strauss has led many to think.¹ As for Caiazza’s use of the terms, we should note that in the ancient world “science” and “religion” could hardly be understood apart from each other. Strauss’s formulation has more to do with his own identity as a modern Jewish intellectual and political theorist who defended liberal democracy in Weimar Germany than with the original intent of the third-century church father (Green 1993; Novak 1996).

If situated in its proper historical context, Tertullian’s question does not necessarily signify conflicting sources of truth but rather two educational systems and two sets of canonical texts. Tertullian’s challenge was to make Christianity—a small, persecuted religious cult from Judea—appealing to educated Roman pagans who were still committed to Greco-Roman *paideia* (the shaping of character through education) and its complementary civil religion. If the Christian orator could not openly dismiss the dominant pagan culture, he at least could show that paganism was irrelevant to the ultimate end of human life as Christianity understood it—salvation through Christ. Ironically, for Christianity to spread in the Roman Empire it had to become intellectually compelling. Christian apologists had to use the categories that permeated the culture that Tertullian openly challenged. Thus Tertullian himself not only used the most effective rhetorical conventions of the day; he and other church fathers also employed Platonic and Neoplatonic metaphysics to accentuate the ontological gap between the transitory world of the senses and the eternal world of Ideas, between the “secular” and the “spiritual” realms. Therefore, for Tertullian Athens was not a code word for science but shorthand for the spatiotemporal order represented politically by Rome, the opposite of which was the eternal, spiritual Jerusalem, represented by the Christian church. To understand Tertullian’s polemical challenge correctly we need to take into consideration the particular fusion of religion, philosophy, and politics in late antiquity rather than invoke his famous line to describe a presumed conflict between science and religion.

Notwithstanding Tertullian’s inflammatory rhetoric, Western culture is not a story of the inevitable clash between Athens *or* Jerusalem but rather the subtle interplay of Athens *and* Jerusalem. Not only were the religious doctrines of the church formulated and articulated within the matrix of Neoplatonic philosophy; the translations of Greek and Hellenistic philosophy and science into Arabic by Christian monks (mostly Nestorians) preserved classical *paideia* and made possible the rise of Islamic rationalism in the ninth century and its offshoot, Jewish religious philosophy. In

Islam and Judaism, however, there was no room for the separation between the temporal and the spiritual realms, because divinely revealed law encompassed all aspects of life, including knowledge of the physical world through science. In the Middle Ages outstanding Muslim and Jewish philosophers such as Avicenna, Averroes, Maimonides, and Gersonides did not view science as the opponent of religion but considered the scientific study of God's world to be a religious obligation of the highest order. Only through the knowledge of laws that governed the world created by God could the individual reach intellectual potential and know God, to the extent that such knowledge is accessible to human beings.

Even in medieval Christendom, which perpetuated the distinction between the secular and the spiritual realms, the interplay between science and religion was much more complex than Caiazza leads us to believe. Take, for example, the debates at the University of Paris during the thirteenth century alluded to in his essay. Albert the Great and Thomas Aquinas could hardly be called "radical theologians" who were "attempting to integrate this newly discovered secular knowledge with Christian revelation and facing heavy opposition from reactionary theologians" (Caiazza 2005, 11–12). If the expression "radical theologians" is to be used at all, it should apply to Siger de Brabant and Boetius of Dacia, the masters of the liberal arts who are commonly called the Latin Averroists (Dales 1984). We should note that their so-called radical views about the double-truth theory themselves grew out of the earlier debate on the status of universals during the twelfth century, in which logic and ontology were inseparable from religious doctrines and dogmas. By the same token, the "reactionary theologians" in the thirteenth century, as Caiazza calls them (I assume he has in mind the followers of Bonaventure and other Augustinian theologians), were not oblivious of philosophical knowledge; classical philosophy informed all Christian theological reflections.

What was new in the thirteenth century was not the rediscovery of secular knowledge per se but the fuller exposure to and understanding of Aristotle's physics, or natural philosophy. All religious participants in the debate—"radicals," "moderates," and "reactionaries"—were exposed to "Athens" to one degree or another and carried out their theological debates because they were proficient in Aristotelian logic, the philosophic grammar of their day. Furthermore, if we look closely at specific aspects of the famous condemnation of 1277 at the University of Paris we can easily see that the theological discourse itself facilitated the rise of new scientific discoveries. For example, Stephen Tempier, Bishop of Paris, hastily condemned 219 propositions associated with Aristotle's natural philosophy, of which 27 concerned the impossibility of vacuum's occurring naturally inside or outside the world and the impossibility that other worlds exist (Grant 1979). As a recent study has demonstrated, the precise details of the condemnation are by no means clear, and even "the question of whether Thomas

Aquinas was included in the condemnation cannot be solved by a comparison between supposedly Thomistic propositions from Tempier's list and Thomas' own words" (Thijssen 1998, 52).

The theologians who challenged Aristotle did so because they did not wish to put any restrictions on God's absolute power. By asking new questions about divine omnipotence, theologians who were themselves steeped in Aristotelian science offered new ways to think about divine power that undermined the Aristotelian paradigm. Once it was accepted that God could create vacuums as well as other possible worlds (contrary to Aristotle), natural philosophers began to speculate about the motion of bodies with finite or infinite speeds in such empty spaces, further contributing to the dissolution of Aristotelian science. In turn, this would pave the way for rethinking space, motion, and causality in the scientific revolution of the seventeenth century (Grant 2002, 40–41).

This is but one example of how an accurate understanding of the historical relations between science and religion is necessary if we are to move beyond the misleading perception of necessary conflict perpetuated by Caiazza's essay. Instead of evoking Athens and Jerusalem as rival ideologies, mutually exclusive stances, or conflicting sources of truths, it is more accurate to see them as intertwined threads of the same tapestry. The story of science and religion in the West is not one of necessary conflict between nonoverlapping or indifferent endeavors but rather of a complex, intricate, and dynamic conversation. In a genuine conversation we express our views, listen to and absorb what our interlocutors say, reject what we regard as untrue or unconvincing, rethink our initial positions, and rephrase our views in response to the exchange. Similarly, religious views and scientific discoveries influenced and shaped each other's development in particular cultures and institutions. The relationship between science and religion in the West should be understood as a dynamic process in which the participants are transformed by the process itself, an interactive process that involves openness to the other and willingness to examine oneself critically from the other's point of view.

This, I submit, is true not only descriptively about the past but also prescriptively about the present and the future. In the twenty-first century we find ourselves imprisoned by the mistaken perceptions that science has nothing to say to religion and that reason cannot possibly inform spiritual life. I regard this as an unfortunate state of affairs, because the separation of science and religion impoverishes both endeavors. If religion is devoid of science, the religious tradition has nothing to say about the physical world or the way things are, and if it has nothing to say about reality, it is no more than fantasy or wishful thinking. Conversely, science that is uninformed by religious values, hopes, and sensibilities can become shallow and empty, even dangerous. Dialogue between science and religion, between reason and faith, can help us overcome the harmful dichotomy and enable us to create a world in which they cross-fertilize each other.

THE POSTMODERN MOMENT AND TECHNO-SECULARISM

As much as I take issue with Caiazza's characterization of the premodern relationship between science and religion, I also feel very uncomfortable with his assertions concerning our current situation in the postmodern world. Caiazza treats postmodernism as a "movement among philosophers, *litterateurs*, historicists, sociologists, feminists, and multiculturalists" (p. 13). He portrays this movement as "antiprogressive" and "more reactionary in its way than were the theologians and Aristotelian philosophers who fought against Galileo." Presumably, whereas the latter "at least believed that the universe could be understood by the human intellect," the current "left-wing" obscurantists attack the very feasibility of "scientific objectivity" (p. 13).

Caiazza's treatment of postmodern culture is problematic for several reasons. It is true that the postmodernist posture is one of profound skepticism about metanarratives, including the metanarrative of modern science itself that claimed to represent the world outside the mind and made many promises to liberate humanity from many social ills. By contrast, the postmodern posture in science, as Jean François Lyotard put it, concerns itself with "undecidables, the limits of precise control, conflicts characterized by incomplete information, 'fracta,' catastrophes and pragmatic paradoxes." Postmodern theories of science highlight discontinuities, catastrophes, and paradoxes and produce "not the known but the unknown" (quoted in Connor 1997, 29). I agree that radical skepticism is necessarily self-contradictory and that postmodern theories taken to their logical conclusion always lead to a dead end. However, I find Caiazza's treatment of his imaginary postmodern opponents most unsatisfactory. Who are the "philosophers" he has in mind as representing the postmodernist view? Lyotard, Richard Rorty, Jacques Derrida, Michel Foucault, Frederic Jamieson, Jürgen Habermas, and Jean Baudrillard, to name some of the leading postmodernist theorists, say something distinct from each other as well as different from what Caiazza implies, and they must be dealt with in depth on their own terms.

Even more problematic is the lumping together of "historicists" with postmodernists, since historicism, as the term was understood in the nineteenth century, is actually contrary to postmodernism. Most likely, Caiazza has in mind the "new historians" who contextualize knowledge claims by situating the makers of these claims in their sociocultural context. Such a contextual approach to philosophical activity does not entail that the meaning of a given truth claim is reducible to the context in which it was uttered or that it reflects only the political agenda of those who make the claims. Attention to the historical context should deepen our understanding of what a given doctrine could have meant at a given time, but the contextual approach does not deny that a given doctrine, belief, or knowledge claim aspires to say something that transcends the historical context.

Understanding the historical context is no more and no less than a search for the correct interpretation of a given author. Thus, for example, understanding feminism correctly would have enabled Caiazza to see that only some feminist philosophers (including Luce Irigaray, Hélène Cixous, and Julia Kristeva) adopt the so-called postmodernist posture, while many other feminist theorists are actually quite critical of postmodernism, because it does not pay sufficient attention to historical patterns of oppression or to the role of politics in solving the actual suffering of women (Jaggar and Young 1998; Fricker and Hornsby 2000). In other words, Caiazza's cavalier treatment of postmodernism neither does justice to complex philosophical issues involved in the critique of the ideal of scientific objectivity nor explains adequately the unique culture in which we find ourselves today, with its proliferation of technology. Caiazza's presentation of the postmodernist movement as reactionary and antiprogressive only perpetuates the perception that science and religion are necessarily in conflict with each other.

The most pertinent aspect of our current postmodern culture, which relates directly to Caiazza's analysis, is the primacy of language. The postmodern sensibility includes not only the rejection of binary hierarchies, authority, and narrative closure but also the claim that representation is, in principle, impossible and that all interpretations are necessarily partial, incomplete, and of limited power. As a result, postmodern culture celebrates indeterminacy, openness, and multiplicity, but not in the name of any other value that lies beyond the text, however "text" is configured—be it print, electronic, visual, or virtual. Postmodern culture stands (and falls, I must add) on the centrality of language or, more broadly, on communication and information, but there is no necessary connection between postmodern culture and techno-secularism.

It seems to me that the postmodern emphasis on narrativity is at least as amenable to the flourishing of religions as it is to the dissemination of techno-secularism. Ironically, we may find ourselves in a world in which the Word is no longer a symbol of a noncorporeal, nonspatial reality but a new fusion of the corporeal and the spiritual, the spatiotemporal and the eternal. What is the ontological status of information? Do virtual objects exist? If so, in what way can they be said to exist? A few contemporary philosophers of science have begun to wrestle with these questions (see Smith 1996), but much time will pass before we can fully address the philosophical questions raised by recent technological inventions. Even without a full-fledged conceptual framework to address all of these issues, it is safe to say that technology per se is neutral; it can be used for secularist or for religious goals, for good or for ill.

That information technology does not mark the "triumph of the secular," as Caiazza claims, is evident from the proliferation of religious organizations, agendas, and beliefs in cyberspace. The divine Word has now

become a (virtual) reality, literally speaking. A typical example is the organization DBS International, located in Brooklyn, New York, which markets "Torah Treasures: The Computerized Torah Library." This Orthodox Jewish group uses the most recent computer technology to further the study of Jewish classical religious texts. On one CD-Rom the reader can access 560 books and then cross-reference these texts, thereby gaining a deeper understanding of the tradition these Jews take to be divinely revealed. In the postmodern world, information technology not only provides a very effective marketing tool for the religious group but also facilitates a deeper engagement with the Jewish textual tradition. With the help of computer technology, the reader can subject scripture to structural and numerical analysis in search of the hidden meaning of divine revelation. What the ancient Jewish mystics attempted to calculate in their heads, the computer now does in split seconds. Whether the new technology imposes meaning on scripture or reveals meaning hidden there depends on the beliefs of the user. In any case, the extensive use of information technology by religious believers defies the notion that we are today witnessing the triumph of the secular.

Ironically, while computer technology can accentuate one's deep commitment to and knowledge of sacred texts, it also facilitates the rise of iconism, or pictorialism. This development is contrary to the spirit of the Jewish tradition and also has profound impact on the cognitive skills of computer users who are not technologically adept. Caiazza is right to note that, because logical relations are embedded in the silicon chip, the uninformed user of the computer tends to regard it as magic. Clearly, the ordinary user cannot explain how the computer does what it does and how symbols appear on the screen. But the same inability to explain how technology works applies to most other technological inventions without which we can hardly imagine living today. What we need to worry about is not the proliferation of "magic" but the shift from linear logic to pictorialism. Over time, exclusive reliance on icons could diminish or even impair the ability of people to calculate or see logical connections on their own, without the help of the machine. This potential loss of cognitive skills is what concerns me most about the computer revolution, even though computer technology itself is neutral and can be used to advance both secular and religious agendas.

THE ETHICAL CHALLENGE OF TECHNOCULTURE

The main challenge, as I see it, is not the displacement of religion from the techno-secular world, as Caiazza suggests, but the emergence of a world in which ethical values disappear, whether these are justified on religious or secular (philosophical) grounds. The World Wide Web poses profound ethical challenges because inherently it is an impersonal and mediated form

of communication. The technology can easily be abused by people who lie, cheat, deceive, and feel neither responsibility nor guilt, compassion nor empathy, with the people they victimize. To the computer hacker, whether the intent is to play a practical joke, disrupt social networks, or protest against social ills, human beings are no more than digital addresses, aliases, and fictitious characters. Despite the existence of literature about computer ethics (Edgar 1997; Ermann, Williams, and Gutierrez 1990; Johnson 1985; Mitcham 1994), our global village lacks clarity about what is ethical or unethical in cyberspace, let alone any way to enforce a shared code of computer conduct. In the digitalized world of faceless and bodiless entities there is no guilt and remorse, because there is no sense of responsibility. How to cultivate moral responsibility in the age of technology is the challenge of our day, as Hans Jonas understood already in the late 1970s ([1979] 1984). What technoculture refuses to deal with is not the issue of what comes after death, as Caiazza claims (p. 19), but the moral responsibility prior to death that emerges in face-to-face human relations.

I believe that the dialogue of science and religion is particularly suited to address the ethical challenges of our technoculture. To be a participant in the dialogue of science and religion means to refuse to see them as mutually exclusive or diametrically opposed. Those who seek to understand the relationship between science and religion over time possess a sense of history: rooted in the past, they feel moral commitment in the present and responsibility toward the future. Participants in the dialogue belong to well-defined intellectual or religious traditions whose values are framed by actual communities. They shun simplistic generalizations, evaluate the merits and demerits of truth claims, avoid inflaming rhetoric, and criticize harmful social practices. In their ongoing pursuit of knowledge about the world and their continuous search for the deeper meaning of divinely revealed or inspired scriptures, the participants in this dialogue cultivate patience, humility, and moderation along with other precious virtues. Whether these virtues are justified on religious or secular grounds, the people who cultivate them can respect others and feel responsible toward others; they are not motivated merely by narcissism and self-interest.

The dialogue of science and religion can lead us to think ever more deeply about the human condition that has been irreversibly changed by new technologies. The more we ponder the complex interdependence of science and religion, the more we can acknowledge the complexity of the human condition, seeing ourselves as more than just animals and not quite like machines. The dialogue of science and religion could restore human relations to our technologically driven society and culture and could remind us that human beings are not alone in the world, that they have obligations toward other aspects of nature as well as to the Creator of nature. Through engagement in the dialogue of science and religion we can

ponder the mystery of human life: where we have come from, where we are going, and to whom we will account for our deeds.

NOTE

1. Strauss left for posterity a subtle, complex, convoluted legacy that could be interpreted in a variety of ways. Although he loved the Hebrew Bible and believed it to be rich in wisdom about the human condition, his understanding of the role of religion in the public sphere was by no means clear. Caiazza's reference to Strauss actually raises more questions than it answers.

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