

# TOWARD AN ETHICS OF KNOWLEDGE

by *Vitor Westhelle*

*Abstract.* Modern science is one form of knowledge, demarcated by its time (modernity) and by other “knowledges.” There is a fair amount of clarity as to what does not count as scientific, but there is a twilight zone of knowledges whose scientific status is ambivalent. In this zone the encounter between science and religion takes place. The particular contribution of religion and theology in this encounter is to call for an ethics of knowledge in the epistemological endeavors of science.

*Keywords:* epistemic claim; epistemic territory; epochal threshold; ethics of knowledge; knowledges; liminality.

---

Dominant, hegemonic, and globalized as modern science is, it is but one form of organizing knowledge, assessing information about reality, and devising tools to intervene in it. This is the underlying assumption I am working with. Modern science is demarcated, first, by its epoch (modernity) and, second, by other contemporaneous knowledges. The emergence of modern science in Western history is marked by emblematic events that took place in the middle of the last millennium, the “epochal threshold around 1500” (Habermas 1993, 5), which gave it specific features. The Copernican revolution, by challenging the geocentric paradigm, opened the way for eliminating the possibility of having an Archimedean absolute and secure reference for astronomic certainty. The Reformation freed consciousness from external authority and allowed reason to rule unhampered on issues regarding our finite existence. The discovery of maritime routes and the “conquest of the new world” positioned Europe, aided by resources from abroad, to have a truly global dominion. Gutenberg’s mechanical

Vitor Westhelle is Professor of Systematic Theology at the Lutheran School of Theology at Chicago, 1100 East 55th Street, Chicago, IL 60615-5199. A version of this article was presented at the symposium “Religion and Science: The Questions that Shape Our Future” organized by the Zygon Center for Religion and Science, 1–2 May 2003.

[*Zygon*, vol. 39, no. 2 (June 2004).]

© 2004 by the Joint Publication Board of Zygon. ISSN 0591-2385

printing press allowed for a qualitatively new stage in which information could travel fast and virtually cover the whole globe without the distortions that plagued previous modes of reproduction, creating for science an “immutable mobile” (Latour 1990, 26) for the dissemination of ideas.

Along with this temporal demarcation there is a spatial demarcation, which is equally important and more relevant for the examination of the relationship between science and religion. The development of modern science within this period created a body of knowledge and a form of discourse that coexists with other epistemic realms and forms of discourse more or less external to the self-referential systems of science and its “régime of truth” (Foucault 1977, 133). In this sense, science can be said to be a “local” knowledge, however expanded this locale and bright the field it enlightens.

However, the exploration of what lies beyond the epistemic territory of science is severely restricted by certain limitations. The very irreducible multiplicity of scientific disciplines indicates the impossibility of a precise demarcation of the boundaries of what is scientific. Gone are the days of the Vienna Circle’s dream of a unified language of science based on physics for its grammar and on mathematics for its syntax. The distinction between “hard” and “soft” sciences is in itself not hard but elastic, and not as certain as once fathomed. For instance, which would be “harder” (that is, more purely scientific)—Newton’s laws or Heisenberg’s indeterminacy principle? Nonetheless, although the scientific canon is not a closed one, it does have some margins, however shifting they might be. We know what does not count: that which clearly falls outside “disciplinary matrixes” (Kuhn 1977, 463)—astrology, magic, scientific socialism, superstition, phrenology, immaculate conception, alchemy, voodoo, creationism, and spontaneous generation, to name a few. What characterizes these fields of knowledge with their truths or beliefs is that their epistemological claims are self-consciously incongruent with most of what would be considered scientifically tenable by contemporary canons of scientific rationality, even if some have been regarded as scientific or reasonable at a given time. These knowledges find themselves in epistemic dissension, if not at war, with the scientific regime of truth. The case of creationism illustrates such an overt conflict over the legitimacy of epistemic claims.

There is, then, a twilight zone between the luster of scientific clarity and the obscure realm of the knowledges that surround the scientific territory but are clearly excluded from it. What is characteristic of this zone is that the knowledges produced here are problematic in the sense that they do not necessarily contest scientific epistemic claims; they are not in open epistemic dissension with them but regard these claims as either insufficient or exclusionary. For these knowledges, modern science either claims an excess of meaning or surrenders to a deficit of meaning; science either says too much or too little. As opposed to the knowledges clearly outside

of the scientific canon, i.e., those with which it has epistemic dissension, these in the twilight zone are approached by science. However, their own explicit or implicit epistemic claims are viewed with suspicion or are plainly ignored. They are, as such, colonized territories; science seeks to assimilate them into its own canons, accepting the reality of the experience they claim while disqualifying their epistemic claims, in the process reducing them to pathologies. Experiences of marginalization, madness, some illnesses, near-death experiences, delinquency, human sexuality, and, indeed, religion are examples of what have been called “sequestered experiences” (Giddens 1991, 156) or “subjugated knowledges” (Foucault 1977, 81–87).

In order to make a proper approach to this twilight zone, which is for me the territory for the encounter of science and religion, I offer an illustration from astrology, one of the now excluded knowledges. Not more than five hundred years ago, well into the “epochal threshold” I referred to, astrology was within the contours of what was then scientific territory. Early great champions of modern astronomy were known then for casting horoscopes, among them Tycho Brahe (1546–1601) and Johannes Kepler (1571–1630). Holding astrological convictions were also theologians, including the likes of Thomas Aquinas (1225–1274) on the Catholic side and Philip Melancthon (1497–1560) later in Protestantism.

There is an anecdote that in the late eighteenth century, when J. C. F. von Schiller (1759–1805) was writing the play for his tragedy *Wallenstein*, he felt embarrassed putting on stage the figure of an astrologer, whom the historical Wallenstein in fact had in his employ. Legend has it that his friend J. W. von Goethe (1749–1832) offered him assurance by reminding him of the noble features of a belief that had earlier commended itself to great minds for bringing about the perfect yoking of religion and science.

The tale is telling in more ways than one. Schiller's embarrassment reveals how much astrology had been exiled from territorial science by the end of the eighteenth century. Goethe's counsel was an affirmation of the frail character of historical judgments. But, most important, the comment attributed to Goethe, in an ironic way, also suggests that a blessed blending of science and religion can happen only retrospectively, in a time in which science (and religion for that matter) was not refined enough; albeit noble, a time in which science did not have its boundaries defined well. And this time is never our time, because supposedly we know it better.

It should be noted that historically the flexibility of science to incorporate knowledges that would allow for a compatible relationship with theology and religion is not the whole story. In the case of astrology, its possible incongruities with science were at least as foundational as they were for theology. In both Islam and Christendom, the civilizations in which it flourished up to the middle of the second millennium, astrology was not a partner easy for theology to intermingle with. These monotheist religions, affirming human free will and the unlimited sovereignty of God, had to

make considerable adjustments and compromises to allow for the validity of astrological causation by influences of stars and planets and their conjunctions. Theological tolerance was significant enough to accept claims that were at variance with its ontological foundations, claims still harbored within the domain of accepted science. This is not to deny the many other cases in which overt opposition and even repression are documented. The cases of Nicolaus Copernicus (1473–1543) and Galileo Galilei (1564–1642) are examples of ecclesial intolerance during the same period, even as we are well advised to distinguish religion per se or theology as such from ecclesiastical politics.

The present engagement of science and religion (to which the very existence of the Zygon Center for Religion and Science attests) seems to belong neither to that idyllic yoking that Goethe referred to in relation to astrology nor to the contemporary incompatibility between science and astrology. The recent typologies accounting for a score of possible practical and theoretical scenarios in the relationship between science and religion, developed by Ian Barbour (1990), Philip Hefner (1996), Ted Peters (1996), Niels Gregersen and J. Wentzel van Huyssteen (1998), and others, already indicate that this encounter inscribes itself in that twilight zone. In other words, the relationship between science and religion is neither an incompatible external one, as between science and astrology, nor an internal one, as between science in general and astronomy or any other of its traditional disciplines.

The task ahead includes further exploration of this twilight zone in the relation of contemporary science with religion and theology, because in this dialogue the very questions of the threshold and limits of scientific knowledge and of the legitimacy of religious claims are raised. This chiaroscuro is the region in which human endeavors dwell on queries about liminality, ultimacy, and infinity, which modern science with its three fundamental operations—classification, calculation, and genealogical ordering—does not address in principle. Conversely, this twilight zone is also the area in which religious postulates and teachings (with their endemic theocratic verve) will find their limit by entering the world of quotidian existence in the finite realm of nature and technology. Religion and science are after all human affairs; it is in and through their encounter that the finitude of human endeavors is realized; both the scientific Faust and the religious Icarus find their end.

This is not a call for a new metaphysics. It is rather a modest plea for science to take into account precisely the experiences and knowledges in the liminal borders of its own domain as questions that might broaden, instead of threatening, the territory of modern science. By doing so, science might welcome the cries and silences of those whose questions are so many times too urgent and too pressing to be responded to by the *modus operandi* of calculation, genealogical ordering, and classification. And, let

us not forget, a corresponding challenge addresses religion and theology as well, which have often capitulated to the scientific canons of rationality or, worse, exiled themselves into solipsistic territories of nonaccountability.

There is an old rule in theology that comes from the fifth century (Prosper of Aquitaine, *c.* 390–*c.* 465), which says that what ought to establish the agenda for the theological endeavor is the plea of the supplicant, the one curved down by the weight of sin and oppression (*ut legem credendi lex statuat supplicandi*—that the rule of believing be set by the rule of the supplicant). This would not be an irrelevant starting point for a yoking endeavor. As much as theology in modern times has often relegated ethics to a discrete discipline within its own domain, so has science. Prosper's rule suggests for both science and theology a common ground, which could be no other than the very examination of the moral foundations on which our epistemologies work. The compatibility between the epistemic regimes of religion and of science might never be achieved; however, this does not rule out that the very willingness of keeping the conversation going is already an indication that there is a more fundamental agreement, an agreement not in theory but in the very practice of the endeavors we are engaged in. This is what Jacques Monod prophetically called, decades ago, an "ethic of knowledge":

The ethic of knowledge is also in a sense "knowledge of ethics," a clear-sighted appreciation of the urges and passions, the requirements and limitations of the biological being. It is able to conform the animal in man, to view him not as absurd but strange, precious in his very strangeness: the creature who, belonging simultaneously to the animal kingdom and the kingdom of ideas, is simultaneously torn and enriched by this agonizing duality, alike expressed in art poetry and in human love. (Monod 1972, 178)

This "agonizing duality" (begging Monod's indulgence) is as much expressed in art and eroticism as it is in religion, and all of these are human endeavors to address the "requirements and limitations" of our "precious strangeness."

As Martin Luther (1483–1546) once suggested, the twilights in our existence—and indeed the very twilight in the experience of the encounter between science and religion—might be not the nocturnal dread of an approaching night but rather a dawn of a bright new day. It is in approaching this twilight in this perspective in heart and mind that we have seen the work of CCRS (Chicago Center for Religion and Science) and its present incarnation in ZCRS (Zygon Center for Religion and Science). For the last couple of decades this has been its mission under the leadership of Philip Hefner and all the collaborators and associates who have helped him (in particular I want to mention Tom Gilbert). This is a legacy for Dr. Antje Jackelén . . . a legacy that is ongoing, an ellipsis for Antje herself to fill in.

## REFERENCES

- Barbour, Ian G. 1990. *Religion and Science: Historical and Contemporary Issues*. San Francisco: HarperCollins.
- Foucault, Michel. 1977. *Power/Knowledge: Selected Interviews and other Writings 1972–1977*. Ed. Colin Gordon. New York: Pantheon.
- Giddens, Anthony. 1991. *Modernity and Self-Identity*. Stanford: Stanford Univ. Press.
- Gregersen, Niels Henrik, and J. Wentzel van Huyssteen. 1998. *Rethinking Theology and Science: Six Models for the Current Dialogue*. Grand Rapids, Mich.: Wm. B. Eerdmans.
- Habermas, Jürgen. 1993. *The Philosophical Discourse of Modernity*. Cambridge: MIT Press.
- Hefner, Philip. 1996. "Science-and-Religion and the Search for Meaning." *Zygon: Journal of Religion and Science* 31 (June): 307–21.
- Kuhn, Thomas. 1977. "Second Thoughts on Paradigms." In *The Structure of Scientific Theories*, ed. Frederick Suppe, 459–82. Chicago: Univ. of Illinois Press.
- Latour, Bruno. 1990. "Drawing Things Together." In *Representation in Scientific Practice*, ed. Michael Lynch and Steve Woolgar, 19–68. Cambridge: MIT Press.
- Monod, Jacques. 1972. *Chance and Necessity*. New York: Vintage.
- Peters, Ted. 1996. "Theology and Science: Where Are We?" *Zygon: Journal of Religion and Science* 31 (June): 323–43.