

THEOLOGY AS THE QUEEN (BEE) OF THE DISCIPLINES?

by *Kenneth Vaux*

Abstract. Once Queen of the Medieval court of sciences, dethroned theology may be able in our time to play a strategic servant role in rightly humiliating, elevating, and ordering the disciplines, in gadflying like a mutant honeybee, generating surprise and serendipity through the intermediacy of social science, and in offering ethical homing direction to the disciplines in their applied endeavors.

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The honeybee is like a magic well—the more you draw from it, the more there is to draw. . . . A great deal of evolutionary novelty at the social level can be generated by only a small amount of genetic change at the level of the individual. A slight modification in one parameter of allometric pupal growth, for example, can produce a new array of castes; whereas an altered response to a pheromone can create a new mode of communication

—E.O. Wilson (1990, 259).

The disciplines of knowledge today are rapidly imploding and exploding, allowing the prospect of affinity as part of a vast unified field yet flourishing in their particular insight. A glimpse at any university curriculum shows this lively process of fragmentation and integration. My son, who is a medical student at the University of Chicago, began his higher education reading “Human Sciences” at Oxford. There he explored the continuum of biology, anthropology, and sociology. Continuing at the University of Chicago in HIPS (History and Philosophy of Science), he rounded out a disciplinary foundation that would prepare him to think critically throughout his

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life and to practice medicine. This education provided a beginning acquaintance with the overarching structure of knowledge about human beings and a sensibility about the ethics that should guide their action. In Puritan England or thirteenth-century France, such inquiry was called theology. Today we struggle to understand the connections between natural science, human or social science, and the normative sciences of ethics and theology.

Ralph Wendell Burhoe spoke of such a synthetic and integrative quest when he described the human brain with its manifest intelligence and spirit, as the yoke that binds our genes and behavior. The discipline of theology as a human science seeks to point all knowledge toward ultimate truth and all applied science toward ethical universality. Reason and conscience, the higher and deeper reaches of intelligence, are the instruments of this ordering reason and directing will.

The three essays of this issue of *Zygon* focus on this bridging or yoking by reflecting on the intellectual connections between natural and social science and ethics. They also speculate on the function of theology as an interstitial and architectonic discipline among the disciplines. Finally, the essays anticipate the question of whether theology is an ethically evocative endeavor by virtue of its power as the source of ultimate meaning and values in peoples' lives and in faith communities. In this commentary, I will discuss these essays and offer a concluding analysis from the perspective of theology and science.

Edward Wilson suggests that a purposive unfolding and elaboration of sciences is progressing as a dialectic of discipline/antidiscipline refines insight toward finer and richer truth about nature. For example, biology clashes and converges with anthropology and sociology to create the novel *Wissenschaft* of sociobiology, whose purpose and yield is the fundamental ambition of both biology and social science—i.e., “the deep structure of human nature” (Wilson 1990, 246). The deconstruction and reconstruction that is occurring at the *Grenze der Wissenschaften* of molecular biology and biochemistry, of ecology and population biology, of biology, anthropology and the social sciences, of economics, psychology and sociology, will eventually be absorbed into a profoundly human science where biology will provide “the key to human nature,” enhanced by the “far richer content” of social science.

Indeed, theology can attest that such “Human Science” has already illuminated the deep sin and the exalted glory of the human being. Patterns of aggression and altruism and structures of determinism and freedom have come to light that corroborate revelation.

For many years, Wilson has set a good example before the scientific community of the complementarity and mutual edification of the various sciences. He has shown the way in which the arts and humanities not only enrich human experience but bring conceptual depth to scientific knowledge. As in his book *On Human Nature*, his work has always posited moral direction (e.g., his evaluation of homosexuality) for the applied sciences. The intellectual contribution of his essay is to show the lively epistemological tension that lies at the boundary of disciplines. Like vital transducing synapses, creative cross fire ignites at the edges of cognate disciplines, making possible both more specified and more comprehensive science. Although Wilson may not intend this theological assumption, what is at work here is the *Weltanschauung* of the Greek Fathers, who believed that spirit contains matter, soul comprehends the body. Just as contemporary chaos theory holds that order contains within it pockets of disorder, the Greeks believed that the unseen world is more real and knowable than the world we can see and touch.

In an equally trenchant essay, Robert Segal asks that religionists abandon their suspicion and disdain for the social sciences, and he supports the contention of Melford Spiro that spiritual etiologies, what Wilson calls "purposes," are every bit as determinative of facts (events and behaviors) as are material causes. Manifestations or gifts of spirit such as love and hope animate social existence and reenact instincts and stimulate hormones, neuropeptides, and other molecules. Again, as in the Greeks, we have the suggestion that spirit may be the atmosphere and salience of physical process. Religion, in which an angry and transcendent deity acts over distance and in defiance from the time of creation, is rejected, in Segal's view, in favor of a deity whose grace and purpose is mediated through cosmic structures and processes. Segal seeks in his essay to restore intellectual integrity in their turn to scientific, social-scientific, and theological discourse. By recognizing the zone of competence in a particular discipline and by refraining from pretensions of overextension, the discipline retains its acuity and makes its contribution to comprehensive truth. Sharp definition in a discipline also hones its moral application by preserving it from overbearing or the inapplicability of imprecision. The repudiations of invalidity from one discipline to another, such as the religious distrust of social science or the dismissal by social science of theology as fantasy and projection, are exaggerations of the hegemony of a given discipline and a failure to realize the delimiting virtue of the cognate over- and underdiscipline.

Philip Gorski takes the argument one step further. Science and social science distort themselves, he claims, when they crave and

feign inappropriate dominion. Theology distorts itself when it mimics empiric or positivist science. Religion can keep science from becoming scientism, and science can preserve a transcendent authority for theology. Indeed, social science can realize its moral mediating purpose as it keeps both theology and natural science honest by checking infringement and remaining authentic to its own spheres of meaning. Drawing on Kant's crucial distinction between pure and practical reason, Gorski shows how the transcendent reach of theology, achieved by its etiologic and eschatological mooring and bearing, given as the alpha and omega of creation and redemption, supplies moral purpose and direction and introduces *ought* and *could* into the practical manifestations of science.

In turning now to a brief analysis of the import for theology and science of the issues raised in these essays, let us consider the three themes announced in the abstract: (1) theology as a discipline that might serve as a reminder of frailty and an envisioner of finality, possibility, and totality, thereby rightly ordering the disciplines; (2) theology as reagent or provocateur, evoking new mixes, imagination, and novelty; and (3) theology as a signpost to moral direction and an impetus to technical piety and morale. I will illustrate these three functions from my own discipline, human medicine, where one faces profound issues of applied biology.

FINITUDE AND ORDER

"The Lord kills and enlivens," say the old texts from Job to Asaph. Not only was Whitehead correct when he attributed the thought and impetus of science to the Hellenic/Hebraic deity as rational logos and righteous energy, but the reality of God also renders all science a penultimate and temporary activity. To truly disciple—that is, to learn and teach—disciplines need to be grounded in ultimate truth, which is to practice humiliation (earthiness). They also flourish best when a vision is held forth of insight to be achieved and possibility to be realized.

The birth of human persons, fathomed now in the disciplines of genetics, embryology, and the art of obstetrics, and human death, which is probed by cellular pathology, geriatric physiology, and the art of thanatology, illustrate the imperative to look down and beyond in the enterprises of science. The Human Genome Project, for example, in its effort to unravel the biochemical narrative of the entire genetic repository, is brought low not only by the immensity of the task but by the dread of its implication; the reality and judgment of God. At the same time, the challenge of the genetic quest is enhanced

by a divine stimulus to afterthink God's thoughts and to solve the pathogenic riddles that devastate persons (see, for example, Michigan's Francis O'Connell's reflections on his discovery of the cystic fibrosis gene in the (Houston) Institute of Religion's forthcoming publication on religion and the genome project (Nelson, in press).

The knowledge and technologies of human finitude and death, ranging from the biological studies of fibroblast longevity to research on the human life span, almost by definition touch on dimensions of finitude and frailty. The derivative arts of end-of-life intensive care and thanatology generally are tempered more than any other human activity by the reality of mystery and transcendence. Even the technical issues of brain death and brain injury (persistent vegetative state, irreversible coma, etc.) are far more arbitrary and elusive than precise. The same can be said for the psychological states and psychiatric diagnoses of competence. Theology at this threshold commends awe, wonder, and humility more than management and manipulation. It subordinates and superordinates the disciplines, showing, for example, that spiritual, moral, and human values are more important in decisions about the moment or manner of death than are material values such as electrophysiology.

FINALITY AND FULLNESS

“Religious Truth is not only a portion, but a condition of general knowledge” (Newman 1948, 62). It is no coincidence that religious impulses led Albertus Magnus in the thirteenth century to catalog the fish of the seas and streams and the Puritans of the seventeenth century to champion experimental science. Vital religion wants to hear and see, to touch and handle, things divine. The demand for tangible experience in faith is the foremost ground of experimental science, as Roger Bacon made clear. Today, if religion can free itself from its disdain of science and its fear of truth disclosed to other paths of insight, it can again become such a creative force. If the repressive spirit that discouraged Galileo and continues to attack evolutionary theory can yield to a more traditional mood of encouragement and support, it might again become the patron of science. Scientific work is secure within a theological frame of reference, and applied technology (as the Nazi era witnessed) turns demonic when cut away from the influences of faith and ethics.

The area of knowledge that can best illustrate this convergence is the mind-brain threshold. Indeed, the pages of this journal have often explored the new world of brain chemistry, neuropeptides, and the

influence of mental and emotional energies on bodily well-being. Theology, released from its present distractions with popularity and recasting the tradition through iconoclasm, might again turn to the higher questions of the nature of the human soul and human nature. Such renewal of a theology of creation and of theological anthropology would inevitably invigorate science.

ESCHATOLOGY AND ETHICS

Finally, these provocative essays call for theology to animate its classic prophetic and proleptic functions, whereby it challenges idolatries and offers positive ethical direction and inspiration. Theology is essential to the panorama of the sciences, and its removal from many American universities is grievous because, as the science of ultimacy, it is cognizant of the penultimate character of all disciplinary knowledge, including its own. This structure against idolatry is the negative side of ethics—"no other gods." Science and its member disciplines are always in danger of overstating their domain and exaggerating their explanatory and efficient power. It is usually more the popular and political appropriation of science than the activity of scientists themselves that enters this danger zone. Oppenheimer warned, albeit too late, of the sin implicit in the nuclear knowledge that built the bomb. The molecular scientists who gathered at Asilomar warned the world and placed a moratorium on themselves as they confronted the inordinate danger of DNA decipherment and recombination.

The no and the prohibitive are not the end-all of ethics. The primary reason that religion can offer a guiding, positive vision is the fact that the eschatological hopes of the human community—its desires for a new and better world—are focused, in part, on the religious vision. Eschatology embraces the future of God for the universe, which is the content of cosmic evolution and entropy. Finally, the sense of "should" is very closely related to the "could" of theological prolepsis, the science of the possible. The scientific and social-scientific disciplines are prisms through which this grand design and development are perceived. As Kepler remarked, discerning and probing nature is an act of contemplation (*Betrachten*). Piety is the precursor of penetration and utilization. Theology meantime can remind both the university of scientific inquiry and the enterprise of technical application of its provincial and cosmic possibility.