

Editorial

This issue presents the second in our occasional series of "Profiles" of thinkers whose work is significant for the *Zygon* enterprise of yoking science and religion for the illumination of human living. The first Profile subject was Arthur Peacocke, the British biochemist and theologian, whose thought was examined in the December 1991 issue. The subject of this issue is Eugene d'Aquili, medical doctor, psychiatrist, and anthropologist. He epitomizes the type of thinker that the series focuses upon, one who has produced a body of work, but who is still in the prime of research and productivity. As we wrote in the preface to the Peacocke issue, the series is not conceived as a Festschrift. It does not seek to honor the thinker under discussion so much as to provide a readable presentation of his or her basic ideas, accompanied by interdisciplinary commentary and a final response. Typically, an already published piece by the subject will appear alongside a newly written piece that responds to the question, Just what are you trying to accomplish in your work? Our hope is that the Profile subject will benefit from the critique offered, and that the reader will be brought abreast of a thinker whose work is essential to the field of enquiry that forms an intersection between religion and the sciences.

D'Aquili has published a considerable amount of his work under his sole authorship, and a larger portion with collaborators, Andy Newberg, Charles D. Laughlin, and John McManus. This style of publishing demands that a treatment like the one in this issue of *Zygon* give proper acknowledgement to all of the researchers and authors involved, and that we do gladly. At the same time, since over the years, his single-authored publications have demonstrated a single-minded focus upon the sorts of issues that are at the heart of this journal's concern, we center our attention on d'Aquili himself, as proponent of a creative research program that its authors describe as *biogenetic structuralism*. The initial, programmatic statement of this approach appeared in 1974, and now, almost twenty years later, it is still dynamic and branching out in new directions, as d'Aquili's final response in this issue describes. In his own words, this program aims to help in the understanding of intense religious and spiritual experience in a more scientific form . . . to present a theoretical neuropsychological model for the genesis of such experiences in terms of information which we already possess about brain functioning, and to plead for further refinement of the model and for its empirical testing using noninvasive techniques. (d'Aquili and Newberg 1993, 178)

The promise of this program has been widely hailed, even as critics have expressed their considerable skepticism about its viability. In this issue, we have assembled a team of three commentators, from three of the fields most pertinent to d'Aquili's work: Rodney Holmes, neuroscientist; Mary Lynn Dell, medical doctor and psychiatrist; James Ashbrook, theologian and pastoral psychologist.

One of the most interesting aspects of the discussion between d'Aquili and his interlocutors touches upon his methodology of interdisciplinary thinking. Dell concludes that even though the neuroscientific descriptions

of d'Aquili, Laughlin, and McManus seem to the specialist to be strange and perhaps lacking detail and rigorous accuracy, they are probably more appropriate for the interdisciplinary endeavours that the academic territoriality of the specialists tends to prohibit. Acknowledging the importance of Dell's observations, d'Aquili's response to this point is to suggest that "the real problem derives from the interpenetration of data from varying fields which yields a vaguely unfamiliar feel to material that an expert in a field rightly expects should feel very familiar."

This exchange between Dell and d'Aquili could just as well be aimed at the enterprise of this journal in general. Since it is not only an interdisciplinary journal, but one whose statement of purpose speaks of bringing the sciences, humanities, and theology into interpenetration, most, if not all, of *Zygon's* articles should convey the "vaguely unfamiliar feel" that d'Aquili speaks of, thus bringing new perspectives to material that experts expect to find very familiar. If any of our articles could just as well be published in the journals of the specific disciplines, whether in the natural or social sciences or in the humanities, then *Zygon* is not, strictly speaking, fulfilling its purpose. If any expert in these specific disciplines finds no discomforting or unfamiliar feel in our articles, we have missed the mark. We do miss the mark, because the target of genuine interdisciplinarity, of interpenetration of the data from varying fields is a moving target, not a firmly fixed one. When does the familiar feel bespeak authority and responsibility to the data of the fields? When does the vaguely unfamiliar feel cross the line into undisciplined speculation and irresponsibility? Furthermore, we almost always err on the side of familiarity rather than undisciplined speculation, precisely because the journal's success depends on the responsible and careful quality of its judgments.

In calling for this interpenetration of the data from varying fields, Dell and d'Aquili may find allies in two recent books. Biologist Timothy Goldsmith's *The Biological Roots of Human Nature* (Oxford 1991) calls for a methodological alliance between the natural and social sciences, in which each discipline is respected for the level of organization with which it deals, but in which also each sciences must relate its terms to the rest of science, so that the significance of the contribution of each science can be noted and assessed. He believes that to date only evolutionary biology offers the framework that allows "for the discovery of principles that can unite hierarchies and cut across species" and thus "enrich our knowledge and our lives" (p. 141). In their book, *The Adapted Mind* (Oxford 1992), Jerome Barkow (anthropology), Leda Cosmides (biology and cognitive psychology), and John Tooby (psychology and biological anthropology) propose "conceptual integration," the principle that "the various disciplines [in this case, behavioral and social sciences] should make themselves mutually consistent, and consistent with what is known in the natural sciences as well" (p. 4).

Eugene d'Aquili and *Zygon* propose to take these methodological suggestions even further, to include the humanities, religious studies, and theology. This proposal is in itself enormously difficult, and it faces a great many skeptics, even opponents. Nevertheless, this interpenetration is what "yoking" is all about, and it is essential for the enriching of human knowledge and life.

—Philip Hefner