

# Editorial

## NEW BIOLOGY AND OLD ISSUES: AN EDITORIAL

### BIOLOGY AND ITS INTERPRETATIONS: AN UPDATE

Biology has been one of the central disciplines in discourses on religion and science, constructively in natural theologies, and polemically in controversies about the nature and origin of humans. This issue of *Zygon: Journal of Religion and Science* offers a set of major articles on recent developments in biology. Holistic biology, systems biology, or developmental biology: What is the best way to envisage biology? And how to interpret biology, philosophically and theologically? Fraser Watts and Michael J. Reiss discuss meanings—broad and narrow—of determinism, reductionism, and mechanicism in biology. They see a turn toward more holistic, organismal, and systems biology. In their contribution, all those terms are considered carefully, in conversation with the scholarly literature.

Michael Ruse considers the history of two root metaphors, those of organicism and of mechanicism. Interestingly, he argues that Christians can be found on both sides of this distinction, and so too for atheists. Thereafter follow four articles that address major parts of modern science: developmental biology and the modern evolutionary synthesis, by David J. Depew and Bruce H. Weber; genetics and epigenetics, by Ilya Gadjev; neuroscience, by Harris Wiseman; and ecology, by Richard Gunton and Francis Gilbert. Last but not least, Niels Henrik Gregersen focuses on the main trends—extending or supplementing the neo-Darwinian paradigm—and their potential theological relevance. A rich set of papers offers the reader an update on modern debates on biology and its interpretations.

### OTHER ARTICLES

Medicine, the practical engagement with suffering, is the focus of an article by Kristin Johnson on diphtheria and theodicy. In illness and death, is it God who fails to answer prayers, or is suffering the consequence of human ignorance, to be overcome by further developed science? If so, can we understand science as God's provision? Johnson studies discussions on diphtheria and the germ theory in the nineteenth and early twentieth centuries, and thereby illuminates issues that continue to be alive.

Two of the greatest American theologians of a slightly later period in the twentieth century, Reinhold Niebuhr (New York) and Henry Nelson Wieman (Chicago) are the focus of a contribution by Daniel F. Rice. Wieman defended a theistic naturalism; he criticized Niebuhr for the

supernaturalism or transcendentalism involved. Niebuhr's approach was somewhat similar to the "neo-orthodox" theology of Karl Barth, an engaged voice from within the Christian tradition. Wieman published three contributions in *Zygon* in its first year of publication, and two more thereafter. He had corresponded with Ralph W. Burhoe regarding the possibility of establishing a journal already in the 1950s (Peters 2014, 613; 2015, 334). Rice brings us an informative historical article, on a history that could well inform discussions and reflections in our time.

Umberto Eco is well known to a wider public for his *In the Name of the Rose*, fiction situated in a monastic context in the European Middle Ages. His scholarly field has been semiotics, the study of language and signs in texts and other forms of expression. Central to the article by Benjamin John Peters in this volume is a reflection on telescopes as mirrors which reflect the universe. The images aren't signs, but are they merely images?

"Divine action" is a key issue in any reflection on theology in the context of the world we understand with the help of science. There has been the series of conferences organized by the Center for Theology and the Natural Sciences (CTNS) and the Vatican Observatory, with Robert John Russell as the key contributor arguing for non-interventionist objective divine action, which would be possible thanks to the indeterminateness in quantum descriptions of natural processes (Russell 1995, 12, and many publications since). According to Sarah Lane Ritchie, in her contribution in this issue, such attempts to propose a specific understanding of divine action in the context of scientific theories stand in contrast to theological approaches that seem to do without such a causal joint, such as Thomism, pantheistic naturalism (Christopher C. Knight, 2007, 2016) and pneumatological naturalism (James K. A. Smith 2008; Amos Yong 2011). She appreciates such strategies, but poses some critical questions as well on the way the difference between God and nature is envisaged, and the understanding of science involved.

American psychology of religion is the topic of the contribution by Daniel A. Helminiak. How should we evaluate claims about divine involvement in particular spiritual experiences? According to Helminiak, to avoid confusion it is important to distinguish common sense approaches from theoretical thinking, a distinction he clarifies with the help of Bernard J. F. Lonergan.

A few brief book reviews point the reader to more to be read—but I recommend reading the articles first.

With this issue, we say farewell to James Moore as our book review editor, after serving as such since 2010, and welcome Mladen Turk as our new book review editor.

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