

## BOOKS

Robert John Russell, Nancey Murphy, Theo C. Meyering, Michael A. Arbib (eds.), *Neuroscience and the Person: Scientific Perspectives on Divine Action*. Vatican City State: Vatican Observatory Publications, and Berkeley: Center for Theology and the Natural Sciences, 1999. ISBN 0268014906 (pbk). Distributed in Italy and Vatican City by Libreria Editrice Vaticana; elsewhere by University of Notre Dame Press (via University of Chicago Press). xxxv + 496 pp. USD 26.95. With subject and name index.

This is the fourth volume of a series of books on "scientific perspectives on divine action", developed by CTNS in Berkeley and the Vatican Observatory. Earlier volumes focused on cosmology, chaos and complexity, and evolutionary biology; a volume on quantum physics is still to come. This volume begins with a substantial introduction by Nancey Murphy, including an extensive overview of the contributions in this volume.

The volume continues with two essays on religious resources. Joel B. Green argues that the New Testament allows well for an embodied, holistic and social anthropology. Fergus Kerr, in a paper adapted from Kerr's book *Theology after Wittgenstein*, shows the pervasive influence of Cartesian dualism in modern theology, and the fatal consequences of this in attitudes towards embodiment, emotion and the like. In this way, these two essays, in line with Murphy's introduction, set the common framework for this volume: the rejection of Cartesian dualism.

The next seven essays introduce neuroscientific perspectives on emotions (Joseph E. LeDoux, 2x), capacity for language (Peter Hagoort), cognition and action (Marc Jeannerod), and sociality (Leslie A. Brothers), incorporated in a larger synthesis in essays by Michael A. Arbib on a "neuroscience of the person" and Jeannerod on the question whether there are any limits to the naturalization of mental states. To summarize briefly these fine essays, the answer is: No, there are no such limits, in principle.

Then come philosophers with a sustained criticism of too strong versions of non-reductionism. William R. Stoeger, Nancey Murphy and Theo Meyering all argue for qualified forms of the scientific self-understanding, summarized in the label "nonreductive physicalism". This line of argument is continued with a more explicit acknowledgment of theological interests in the next section by Philip Clayton (emergentist monism), Arthur Peacocke (idem), Ian Barbour (process metaphysics), Stephen Happel (Thomism, Husserl), Ted Peters (on resurrection, inspired by Pannenberg). Two essays follow on religious experience, one by Fraser Watts on multi-level cognitive theory and a very ambitious classification of experiences of ultimacy by Wesley Wildman and Leslie Brothers (60 pages, whereas the other contributions are of the order of 20-30 pages).

The final section consists of two essays. They reveal that, as a famous line from the poet Elliot says, in the end we come to the place where we have started, or rather, we return to the places we have started, in plural. Michael A. Arbib started as a non-believer, and ends repeating his view (found earlier in the book with Mary Hesse, *The Construction of Reality*, CUP 1986) that God is more like embarrassment than like gravitation — that is, that the god-scheme is a social construct without an external, non-social referent. The responses from other participants interwoven through this contribution not only make Arbib's essay one of the liveliest of the whole volume, but also evoke a sense of controversy — if not defensiveness on the side of the religiously minded participants. The Christian cosmologist George Ellis receives the final word for his claim that a view of divine revelation, as divine action mediated by the human brain, is consistent with contemporary neuroscience (474). It is to be hoped that the next line of Elliot's poem, that we know the place for the first time, may be true for the authors as well as for the readers, at least in the sense that the long road through these essays is rewarded by a better understanding of the possibilities for and the challenges to one's own position.

A few comments on this dense (in print and rich in content) book. Murphy claims in the introduction convergence of insights from the neurosciences and from Christian theology. However, the agreement seems to be mainly that there is a common enemy, namely Cartesian dualism as the straw man they are all happy to defeat. Whereas the authors may agree on the importance of embodiment, emotions, action, social life etc., for understanding human nature, there remain major disagreements on the nature and implications of a non-dualistic view, and especially on the theological consequences. Murphy notes (xxiv) that the participants were

not only disagreeing on "reductionism", but also on the point of advocating either reductionism or anti-reductionism. Thus, when claiming convergence, she adds "(the issue of reductionism being one important exception)" (xxxiiif.). This is a core issue; rather than the joint victory over the dead horse of Cartesian dualism, these disagreements seem to be the basis for further work in this area. Since the ambition of these books is to reflect constructively on theological issues in the context of science as practiced by first rate main stream scientists, it is embarrassing to observe that the main objective of most of the theologically minded contributors is to defuse the threat perceived. Most contributors take reductionism as the enemy to be argued against, in favor of a different metaphysics. The zeal with which anti-reductionism is defended, indicates that this is more than an anthropological issue; via non-reductionism in anthropology they seem to hope to argue for a theological non-reductionism – which, however, can be decoupled: If this world is God's creation, it does not make a difference whether this world has one, two, three or ninety-six types of basic types of entities; in a theological scheme, scientific reductionism may be understood as revealing some of the integrity of the created order. Peacocke, using the provocative title "the sound of sheer silence" (referring to God's communication to Elijah on Horeb), seems less defensive than various others, and thereby closer to the insights from the scientific contributors. Peacocke writes "the only ontological dualism to which they [theists] are committed is that between God and the world – that is, to the absolute difference between the infinite and necessary being and the contingency of the created order" (234f.).

Not only conveys this book the impression that there continues to be tension between the positions of the neuroscientists and those of the religiously minded philosophers, scientists and theologians. There seems to be genuine diversity among the Christian thinkers as well. Thus, while Ellis concludes saying that "we should take a strong realist position on religion" (474), this is not easily reconciled with the tone set in one of the earlier essays in this volume by the Wittgensteinian Fergus Kerr.

It is always hazardous to criticize a book for what it does not do, but nonetheless, let me make the observation that anthropological studies of religion seem almost absent in these contributions – though the issues I have in mind do arise in the essay by Wildman and Brothers and in Arbib's final contribution (and the responses integrated into it). Given the topic, one might expect more articles on cognitive and non-cognitive roles of religious beliefs and practices, or even references to such studies by, among others, E.T. Lawson, R.N. McCauley (*Rethinking Religion: Cognition and Culture*, Cambridge UP, 1990) or Stewart Guthrie (*Faces in the Clouds*, Oxford UP, 1993). Studies regarding the origins and functions of religious practices and beliefs might have been attractive mediators between the neuroscientific participants and the realm of religious studies. However, at the same time, such studies would have underlined even more that the scientific results and the philosophical arguments about nonreductive physicalism with respect to human behavior are as much a threat as comfort to the theologically minded of the realist, cognitive program that has shaped this volume.

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