## God and the World of Signs: Semiotics and Theology

with Andrew Robinson and Christopher Southgate, "Introduction to Part 2"; Andrew Robinson and Christopher Southgate, "Semiotics as a Metaphysical Framework for Christian Theology"; F. LeRon Shults, "Transforming Theological Symbols"; Andrew Robinson and Christopher Southgate, "Broken Symbols? Response to F. LeRon Shults"; Jeremy T. Law, "Toward a Theology of Boundary"; Philip Clayton, "Critical Afterword"

# GOD AND THE WORLD OF SIGNS: INTRODUCTION TO PART 2

by Andrew Robinson and Christopher Southgate

Abstract. We introduce the second part of a two-part collection of articles exploring a possible new research program in the field of science and religion. At the center of the program lies an attempt to develop a new theology of nature drawing on the philosophy of C. S. Peirce. Our overall idea is that the fundamental structure of the world is exactly that required for the emergence of meaning and truth-bearing representation. We understand the emergence of a capacity to interpret an environment to be important to the emergence of life, and we see the subsequent history of biological evolution as a story of increasing capacities for meaning-making and -seeking. Theologically, we understand God to be the ground of all such meaning-making and the ultimate goal of the universe's emerging capacity for interpreting signs. Here we summarize the articles in Part 1, which focused on scientific and philosophical aspects of the research program, and introduce Part 2, which turns to the theological outworking of the project.

Keywords: incarnational theology; metaphysics; C. S. Peirce; research program; science and religion; semiotics; Trinity

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This is Part 2 of a two-part collection of articles (Part 1 appeared in the June 2010 issue). Taken together, these represent a snapshot of the current state of what we hope is a significant new research program in the field of science and religion. At the center of the program lies an attempt to develop a new theology of nature drawing on the semiotics (theory of signs) and metaphysics of American scientist, semiotician, and philosopher C. S. Peirce (see Robinson in press). The program amounts to a proposal for a new metaphysical framework within which explorations in both theology and science might find a home. In essence, the framework is a metaphysic of meaning. Our overall idea, which has profound theological undertones, is that the fundamental structure of the world is exactly the structure that is required for the emergence of meaning and truth-bearing representation. We understand the emergence of entities capable of interpreting their environments to mark the emergence of life, or at least of protolife, and we see the subsequent history of biological evolution as a story of increasing capacities for meaning-making and -seeking. Theologically, we understand God to be the fundamental ground of the possibility of all such meaningmaking and the ultimate goal of the universe's emerging capacity for interpreting signs.

In Part 1 we began by introducing our original motivation for developing and exploring this framework, which arose from questions about whether Christian theology remains coherent when examined in the light of evolutionary biology (Robinson and Southgate 2010). Is there a biologically plausible and theologically satisfactory property or process that could be regarded (theologically) as a truly generic goal of evolution? Furthermore, can such a property or process be understood to be in continuity with the rest of biological evolution (and the prebiotic history of the universe) in such a way that its full or distinctive emergence in humans appears to be in some sense a continuation and fulfillment of the evolutionary process rather than a peripheral curiosity? We suggested that the field of biosemiotics offers the prospect of just such a property. Semiotics is the field of the study of sign processes. Biosemiotics is concerned with the place of signs, interpretations, and meanings in biological processes. The biosemiotic perspective regards sign processes as a generic feature common to all living things. However, a challenge posed by critics of biosemiotics is to show how semiotic concepts offer any explanatory advantages over purely mechanistic accounts. Another way of putting this is to ask whether biosemiotic thinking gives rise to testable scientific hypotheses that cannot be framed merely in terms of mechanistic causes and effects.

The first article of Part 1 of this collection (Southgate and Robinson 2010) summarized our own attempt to respond to the challenge of demonstrating the scientific relevance of the biosemiotic perspective. We focused on the question of the simplest entity capable of making an interpretation of some aspect of its environment, analogous to an amoeba interpreting the

presence of a chemical attractant molecule as a sign of "food" in that direction. We explained our proposal for a new general definition of interpretation and showed how it could give rise to testable hypotheses about the origin of life. Our essay was followed by a response by Bruce Weber, who set our proposal within the wider context of the current state of the field of origin-of-life research. Two articles then broadened the perspective. Jesper Hoffmeyer, one of the founders of biosemiotics, showed how semiotic and biosemiotic thinking requires a relational ontology and offered a semiotic perspective on the concept of emergence. Robert Ulanowicz explored an ontology of process as way of understanding the emergence of life that might serve as a stepping stone to a biosemiotic philosophy of nature. Part 1 ended with a dialogue between ourselves and Terrence Deacon about the differences between our own approach to biosemiotics and the eight theses recently proposed by a group of biosemioticians as a step toward formulating a coherent conceptual basis for biosemiotics.

Having explored, in Part 1, the scientific and philosophical promise of the field of biosemiotics, in Part 2 we develop some theological aspects of our research program. We begin by setting out a summary of our semiotic approach to trinitarian thought and incarnational theology. Two integrating themes in our essay, and in the framework as a whole, are (1) the sense in which semiotic processes in nature may be understood as vestiges of the Trinity in creation and (2) the question of how creaturely semiosis may be understood as a mode of participation in the divine life. F. LeRon Shults responds to our proposal, suggesting other theological directions in which Peirce's philosophy may lead. He emphasizes the way in which religious symbols are potentially transformative for human lives and are themselves in perpetual need of transformation. We in turn respond to some of Shults's specific criticisms of our approach. Jeremy Law then reflects on implications of the philosophical and scientific work in Part 1 by developing a theology of boundary. Finally, Philip Clayton draws Parts 1 and 2 together with a critical afterword.

### NOTE

1. The papers stem from an invited consultation, "Semiotics, Metaphysics, and the Emergence of Life," held in Berkeley, California, in November 2008.

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