

Does Process Matter? An Introduction to the Special Issue on Interactivism

Mark H. Bickhard

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There is a growing appreciation in both philosophical and scientific literature of the fundamental importance of dynamics or process. These appreciations, however, tend to be limited in their understanding of how pervasively and deeply a process framework can enforce and enable changes. (For explorations of some of these, see Hooker, forthcoming, and this issue).

The basic reason for such limited appreciation is that Western thought has long been, and still is, dominated by the traditions of entities and unchanging substrates for change—substance or particle from Empedocles and Democritus, and “matter” from Aristotle—and these traditions obscure or even render impossible some of the most important consequences of a process metaphysics. A full appreciation of a process metaphysics requires getting beyond the heritage of substance and particle—returning, if you will, to Heraclitus (Graham 2006).

The general approach of interactivism has arisen in a confluence among a number of people of recognitions of the importance of dynamics, and of interests in exploring the many consequences of taking a strict process approach seriously.¹ The specific term “interactivism” derives from a model of the nature of representation that rests centrally on interactions between organisms and environments (Vuyk 1981). Such interactions are ontologically necessary, and, as such, “interactivism” refers to a form of process that intrinsically grounds the evolution and development of cognition. More broadly, however, a process metaphysics has consequences that ramify throughout philosophy and the sciences.

¹ ‘Process philosophy’ is a term strongly associated with Whitehead (1979). The interactivist approaches have, in general, been more directly influenced by physics and biology than by Whitehead. One point of convergence is the rejection of matter or substance as a basic metaphysical category; a point of contrast is Whitehead’s discrete “occasions”.

M. H. Bickhard (✉)
Lehigh University, 17 Memorial Drive East, Bethlehem, PA 18015, USA
e-mail: mhb0@lehigh.edu

In this special issue, we examine some of those consequences. In some cases, this involves the development of a model or models that require a basic process framework—that a process metaphysics enables—and in other cases it involves critiques of contemporary positions from a process perspective. Important aspects of such positions can be perspicuous from a process perspective that are difficult or impossible to see within classical substance and particle perspectives.

Mark Bickhard begins the issue with an architectural overview of a number of consequences of a process metaphysics, and of some of the new kinds of models that are enabled by such a framework. This extends from normative function and representation to action and ethics.

An account of ontological emergence is one important enabling of a process metaphysics. Richard Campbell and Mark Bickhard critique Jaegwon Kim's arguments against emergence, and show that Kim's arguments are, at best, dependent on unstated and undefended particle assumptions that cannot withstand scrutiny. A process orientation, in contrast, permits a coherent notion of ontological emergence. Various possibilities of emergence, in turn, comprise some of the most interesting enablings of a process metaphysics.

Alex Levine addresses the question of what an epistemic object is. The interactivist model provides some interesting perspectives on this issue. It is an issue that, arguably, cannot be successfully solved or dissolved within a substance metaphysics.

Itay Shani develops a model of intentional tracking: What constitutes an organism “keeping track” of something in the world, an organism's intentional directedness on an object? And how is this possible? Arguing that interactivism has not yet developed a sufficient answer to this question, Shani presents a model of intentional directedness involving both interactive anticipations concerning the environment and interactive guidance with the environment.

Cliff Hooker presents a model of rationality as constituted in organisations of interaction. This model is entirely naturalistic, and does not have the question-begging character of typical foundationalisms. In this model, rationality emerges in normative aspects of interactive agency.

Jack Martin develops a critique of Bickhard's model of persons. Persons, in this model, have a deeply, but not exclusively, social ontology. Martin's discussion is both an appreciation and the development of suggestions for improvement.

We hope that this sampling illustrates the power and importance of process metaphysics and of the interactive model thus far developed within such a metaphysics. There are good reasons to conclude that the world is process, and that recognition of that fact significantly changes both the philosophical and the scientific landscapes.

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