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# Interactions, Computations, and Experience: Interleaved Springboards of Cognitive Emergence

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## REJOINDER

### Interactions, Computations, and Experience: Interleaved Springboards of Cognitive Emergence

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This rejoinder attempts to show that Bickhard's criticism is irrelevant to our theory and epistemologically one-sided. It is irrelevant because our theory is pragmatically and interactivist at a number of levels ignored by Bickhard. It is epistemologically one-sided because it assumes that interactivism is the only proper model of mind. Thus, we try to show that different approaches can be used to model different levels or phrases in the organization and development of the mind. The discussion focuses on how interactivism, connectionism, computationalism and experientialism may complement each other as tools for modeling cognitive architecture and change. We also try to respond to various other, less central, criticisms that Bickhard leveled against our theory. © 1999 Academic Press

Bickhard believes that we have "bet on the wrong model of representation, and, therefore, on the wrong model of cognition, and, therefore, that [our] model of cognitive development lacks valid grounding." The wrong model of cognition, according to Bickhard, is encodingism. Encodingist models assume that all representations are connected with the represented entities via some kind of correspondence between the two. According to Bickhard, these models may be valid and useful when both ends of the encoding relation plus the correspondence are already known. If not, encodingist models suffer from "the symbol grounding" or "the infinite regress prob-

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