Computation Without Representation

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Abstract

According to the received view of computation, there is no computation without representation. In other words, computational states are individuated, at least in part, by their content. I propose an alternative view of computation, according to which computational states are individuated by their functional properties, and their functional properties are specified by a functional analysis of the mechanism independently of their semantic properties. I defend my alternative on the grounds that unlike the received view, my alternative view fits the way the relevant community of experts—namely, computability theorists and computer designers—individuate computational states. I also argue that the two main arguments that have been offered in favor of the received view are unsound. Finally, I briefly point out how my alternative account helps us to better understand the relationship between computational theories of mind and theories of mental content.

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