

Theories of Mind as Languages of Thought for Thought about Thought

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Abstract

What kind of thing is a theory of mind? How can we formalize the various theories of mind we study as cognitive scientists? In this paper, we argue that it is valuable to think of a theory of mind as a kind of programming language: one that is specialized for setting up and reasoning about problems involving other minds. Drawing on ideas from the theory and history of programming languages, we show how this perspective can help us formalize concepts in a theory of mind, precisely articulate differences between multiple theories of mind, and reason about how we develop our theories-of-mind over time. (The full version of this paper is available at: <https://kach.github.io/memo/tomalot>)