A Philosophical Introduction to LLMs

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Abstract: This work – based on a book in preparation – critically examines the significance of large language models (LLMs) to philosophy and cognitive science. It contextualizes the development of LLMs within the history of natural language processing, and analyzes how it resurrects longstanding debates about mind, language, and intelligence. This discussion covers the following questions:

- Does the progress of LLMs undermine older critiques of connectionist models?
- Do LLMs put pressure on nativist claims about language acquisition?
- What is the broader relevance of LLMs to cognitive science?
- Do we need a 'psychology' of LLMs?
- Can we go beyond behavioral evaluation of LLMs and interpret their internal mechanisms?

Bio: Raphaël Millière is a Lecturer (Assistant Professor) in Philosophy of Artificial Intelligence at Macquarie University in Sydney, Australia. Prior to joining Macquarie in 2023, he was the Robert A. Burt Presidential Scholar in Society and Neuroscience at Columbia University. His research interests lie at the intersection of philosophy, cognitive science, and artificial intelligence. His current work focuses on assessing the linguistic and reasoning abilities of large language models, drawing on philosophy and computer science to shed light on the potential of these models to advance our understanding of human cognition.