Architectures and Mechanisms

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Abstract

When we measure human language processing, we often do so with the intention of figuring out how it works. That is, we aim for mechanistic explanation. But what mechanisms could actually work? This talk discusses several theoretical models of sentence parsing, spanning the attachment heuristic theories of the 1970s and 80s (Kimball, Frazier) up to the probability-based theories of the 2000s (Hale, Levy). It connects them using the idea of a *search space*, locating this idea in relation to unified theories of cognition. Against this backdrop, two tasks for experimental psycholinguistics emerge: (1) probe the nature of intermediate representations and (2) infer the priorities of the search process.

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