Understanding is Simulating: a Defence of Embodied Linguistic Comprehension

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Submitted for the degree of Master of Philosophy
April 2013
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ABSTRACT

A topic of debate in current cognitive science is the nature of language understanding. One traditional view holds that we understand expressions of a natural language by translating them into an inner, abstract, symbolic Language of Thought. Recently, however, an increasingly plausible alternative has been proposed: that we understand natural languages by means of sensorimotor simulations of real-world objects and situations. This view is known as Embodied Linguistic Comprehension (ELC).

Much evidence has been found for ELC in such disciplines as psychology, linguistics, and neuroscience. However, the position faces several serious challenges. One is accounting for our comprehension of abstract terms, and other terms which refer to things beyond our own sensory experience. Other challenges include the productive and systematic nature of human thought, and difficult questions about how to interpret the relevant evidence.

This thesis is an exposition and defence of ELC. I review a representative sample of empirical data and major theoretical proposals, and then respond to objections. I argue that ELC is well-equipped to meet the challenges mentioned above. In particular, it has rich resources with which to account for abstraction, reference beyond a comprehender’s own experience, productivity, and systematicity.

Responding to a recent challenge by proponents of a radical, anti-representational ‘enactivist’ theory of comprehension, I argue that ELC outperforms the enactivist view in accounting for the flexible and context-sensitive nature of language comprehension, and that rejecting mental representation is a costly and unnecessary step.

Perhaps the biggest challenge facing ELC at this point comes from powerful arguments purporting to show that the existing evidence is, at best, neutral between ELC and its rivals. I argue that, while the available evidence cannot rule out the existence of an abstract Language of Thought, we nonetheless have good reason to believe that sensorimotor simulation is a genuine constituent of all or most instances of comprehension, preserving the central point of the ELC proposal.
Declaration

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ACKNOWLEDGEMENTS

Thanks to Jon Opie and Matt Nestor for helping me find my way around a ground for thinking about the mind; to Andrew Gleeson for metaphilosophical challenges; and to John Mercier for early philosophical encouragement.

Thanks also to Denise Gamble for help and support throughout my candidature, and to Benjamin Bergen, Tyler Marghetis and colleagues for a copy of—and permission to cite—their forthcoming paper.
In the economy of understanding, words are merely money

JOHN HAUGELAND