
Understanding is Simulating: a Defence of Embodied Linguistic Comprehension

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CONTENTS

1. Is Understanding Simulating?	7
Inquiring into Linguistic Comprehension	7
ELC in Context.....	8
Defending ELC: How to Proceed	10
Conclusions to be Drawn.....	12
2. Embodied Linguistic Comprehension and Embodied Cognition.....	14
4E Cognition and the Critique of Classical Cognitive Science	14
EC: Grounding (Higher) Cognition in Perception and Action	26
ELC as a Special Case of EC	30
Conclusion	32
3. The Case for ELC	34
Perceptual Symbol Systems	34
The Indexical Hypothesis	43
The Immersed Experiencer Framework.....	52
Considering ELC in General.....	56
4. Alleged Amodal Advantages.....	59
Introduction.....	59
The Problem of Abstraction	60
Comprehending the Unimaginable.....	79
Productivity and Systematicity.....	84
5. Alleged ELC Advantages.....	88
Introduction.....	88
Accounting for the Evidence	89
The Symbol Grounding Problem.....	96
6. The Enactivist Challenge.....	103
Introduction.....	103
Enactivism and Cognitivism.....	104
The Necessity Question	109
The Simulation Constraint.....	117
Conclusion	119
7. Conclusion and Future Directions.....	120
The ELC vs. Amodal Debate.....	120
Theory Comparison Issues and Directions for Future Research	124
Conclusion	129

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.

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In the economy of understanding, words are merely money

JOHN HAUGELAND