Predictions of a Model of Language Comprehension Compared to Brain Data

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Topics:
- Soar Agent
- World Model
- Ontology
- Lucia Comprehender
- Agent Operations
- Action System
- Rosie
- Action Messages
- Input Words
- Pick up the green block on the stove.
- Visual System
- Comprehension

Principles & Predictions
1. End-to-end, actionable comprehension
2. Form->Meaning mapping in small units called constructions
3. Incremental, chunk-and-pass
4. Immediate interpretation
5. Semi-repetitive construction cycles
6. Prediction (in process)
7. Sequence of memory accesses

Questions for a Neural Implementation
1. How is linguistic knowledge represented?
2. How are word senses retrieved?
3. How is the dynamic comprehension state represented?
4. How are composite constructions retrieved?
5. How is the integration process performed?
6. How are the ontology and world model represented?
7. How is grounding performed?

References