MAS 962: Computational Semantics

Assignment 5

Reading

Goldstone, R. L., & Rogosky, B. J. (2002). Using relations within conceptual systems to translate across conceptual systems, *Cognition, 83(3): 295-320.*

Questions

1. Summarize and critique the main ideas of this paper (one page maximum).

2. Implement the ABSURDIST model (matlab recommended, but any programming language is fine). Test your implementation on sample grounded and ungrounded networks and summarize your results.

3. ABSURDIST relies on complete knowledge of network structure to drive conceptual alignment. Consider adapting ABSURDIST for the problem of concept translation / communication between individuals. Assume that each communicating agent is using an ABSURDIST-like mechanism to align concepts with their communication partner. Although the agents can assume some shared concept nodes (i.e., grounded nodes), they cannot assume complete knowledge of each other's network structure since they are not mind readers. Sketch how you might adapt ABSURDIST to model this communication process. State what additional assumptions would be needed, and recommend changes to the ABSURDIST model.

4. ***Bonus, optional question:*** Implement and test the model you proposed in (3).