

MAS 962: Computational Semantics

Assignment 4

Readings

Gardenfors, Peter. (1997). Symbolic, conceptual and subconceptual representations, pp. 255-270 in *Human and Machine Perception: Information Fusion*, ed. by V. Cantoni, V. di Gesù, A. Setti and D. Tegolo, Plenum Press, New York.

Terry Regier and Laura Carlson. (2001). Grounding spatial language in perception: An empirical and computational investigation. *Journal of Experimental Psychology: General*, 2001. vol. 130(2), 273-298.

Hofstadter, Douglas. (1995). Review of *Mental Leaps: Analogy in Creative Thought*. *AI Magazine*, pp. 75-80.

Questions

1. For each paper, summarize the main ideas and your reactions to them.
2. Where does Regier & Carlson's model of spatial semantics fit into Gardenfor's scheme?
3. Consider the following syllogism:

Cheap apartments are rare
Rare things are expensive

Cheap apartments are expensive

We can tighten the language and retain the result:

Cheap apartments (in Boston that are desirable) are rare (things)
Rare things (in Boston that are desirable) are expensive

Cheap apartments (in Boston that are desirable) are expensive

Provide an explanation for why this syllogism fails to produce a 'reasonable' conclusion.
