Implications of an AI Metaphor Understanding Project

John Barnden

School of Computer Science, University of Birmingham, UK Email: J.A.Barnden@cs.bham.ac.uk

I shall explore the implications for lexical resources of my work on ATT-Meta, a reasoning system designed to work out the significance of a broad class of metaphorical utterances. This class includes "map-transcending" utterances, resting on familiar, general conceptual metaphors but go beyond them by including source- domain elements that are not handled by the mappings in those metaphors.

The system relies heavily on doing reasoning within the terms of the source domain rather than trying to construct new mapping relationships to handle the unmapped source-domain elements. The approach would therefore favour the use of WordNet-like resources that facilitate rich within-domain reasoning and the retrieval of known cross-domain mappings without being constrained to facilitate the creation of new mappings. The approach also seeks to get by with a small number of very general mappings per conceptual metaphor.

The research has also led me to a radical language-user-relative view of metaphor. The question of whether an utterance is metaphorical, what conceptual metaphors it involves, what mappings those metaphors involve, what word-senses are recorded in a lexicon, etc. are all relative to specific language users and shouldn't be regarded as something we have to make objective decisions about. This favours a practical approach where natural language applications can differ widely on how they handle the same potentially metaphorical utterance because of differences in lexical resources used.

The user-relativity is also friendly to a view where the presence of a word-sense in a lexicon has little to do with whether that sense is figurative or not. This stance is related to, Patrick Hanks' view that we should focus on norms and exploitations rather than on figurativity.

The research has furthermore led me to a deep scepticism about the ability to rely in definitions of metaphor on qualitative differences between domains. Scepticism about domains then causes additional difficulty in distinguishing between metaphor and metonymy. At the panel I will outline a particular view of the distinction.