The Lexicon and Figurative Language

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Workshop Description

The problem of word-sense disambiguation is currently one of the central concerns of natural language processing. However, it is becoming increasingly apparent that WordNet-type approaches that list the different polysemous senses of a word without saying anything about how they relate to each other lead to considerable problems. Novel uses of words occur frequently and the problem is particularly acute when figurative language is being used. Figurative language, such as metaphor, metonymy, idioms and so on, is pervasive in normal discourse, but the source meaning of a word being used metaphorically is often far removed from the intended, target, meaning. Unless WordNet-type approaches are enriched with additional means to relate source and target domains, figurative language will continue to be a major problem for word-sense disambiguation.

An alternative is not to just list all the different senses but to have fewer senses and employ a different mechanism for generating new senses and treating the relations between them. The Generative Lexicon (Pustejovsky 1995) assumes a structure to the lexicon and much richer representations that determine how different senses combine in context. Whilst some success has been achieved with some of the more simple cases of metonymy, the question of how well the approach copes with metaphor is open to debate.

Another alternative would be to treat computationally the claim from Cognitive Linguistics that metaphor is not a matter of linguistic expression. Instead, the meanings of many different words are best related in terms of an underlying conceptual metaphor. However, if metaphor is a cognitive rather than a linguistic phenomenon, and word senses are related solely in terms of their underlying conceptual domains, then this implies that there need be no structure specifically in the lexicon that relates senses. Instead the lexicon can be a list of items, but metaphorical extensions of words would not be listed as a matter of course. The list approach is compatible with WordNet-type approaches, but puts the approach in conflict with that of the generative lexicon. Thus, we might pose the question as to how much structure is needed in the lexicon in order to cope with figurative language. Of course, if we are looking outside the lexicon to relate source and target domains, then this doesn't solve the problem of word-sense disambiguation, but passes the problem on to the designers of ontologies.

We therefore have three different approaches to the lexicon and the problems that figurative language poses for word-sense disambiguation, and the major theme of this workshop is to explore means for tackling these problems, particularly means that could be used in practical NLP applications.

However, papers that computationally address other aspects of figurative language, including metaphor, metonymy, idioms, and so on, will also be welcomed. In particular, since word meanings do not come marked with the information that they are metaphorical, metonymical, or not, papers that address the issue of how to distinguish literal from non-literal language will be very welcome, especially if this can be done automatically. Likewise, much work on figurative language has relied on intuitions and handcrafted relations, and in this respect research on figurative language has lagged behind recent work in the rest of computational linguistics. Consequently, there is an urgent need for computational corpus studies of figurative language.

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