

## **Knowing a Word(sense) by its company**

Martha Palmer  
University of Colorado

Supervised word sense disambiguation requires training corpora that have been tagged with word senses, and these word senses typically come from a pre-existing sense inventory. Space limitations imposed by dictionary publishers have biased the field towards lists of discrete senses for an individual lexeme. This approach does not capture information about relatedness of individual senses. How important is this information to knowing which sense distinctions are critical for particular types of NLP applications? How much does sense relatedness affect automatic word sense disambiguation performance? Recent psycholinguistic evidence seems to indicate that closely related word senses may be represented in the mental lexicon much like a single sense, whereas distantly related senses may be represented more like discrete entities. These results suggest that, for the purposes of WSD, closely related word senses can be clustered together into a more general sense with little meaning loss. This talk will describe the relatedness of verb senses and its impact on NLP applications and WSD components as well as recent psycholinguistic research results.