Octavian Popescu, PhD  
Human Language Technology  
Center for Information and Communication Technology  
Fondazione Bruno Kessler, Provo, Italy

**Title:** Sense Discriminative Patterns and Verb Clustering

**Abstract:** Almost any word in natural language has a great potential of expressing different meanings. However, in certain contexts, this potential is limited up to the point that one and only one sense is possible. When this happens, we are not dealing with an individual phenomenon, but, rather, all the words in that context have their own meaning potential limited.

In this talk, we properly define such meaning restricting contexts, analyze their properties and propose an automatic procedure for their identification in large corpora. We show that these contexts are patternable and that the words are completely disambiguated. We therefore call such contexts sense discriminative patterns (SDP). By comparing minimally different SDPs, we discover a set of lexical semantic features that are used in devising a learning algorithm.

While we will also present the applications of SDPs to various meaning related natural language processing tasks, like word sense disambiguation, textual entailment and meaning preserving translation, we will focus primarily on verb clustering and we present our analysis carried out on the verbs in the OntoNotes corpus.

Bibliography

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