

Sarcasm detection for sentiment analysis: From linguistic to machine learning approaches

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This lecture consists of three parts. First, I introduce what is *Sentiment Analysis of big data*, illustrating how to conduct it using an existing sentiment dictionary. Second, I discuss *linguistic analysis of senti-words and sarcasm*. I briefly review my prior works on the Semantics and Pragmatics of various senti-words that reflect the speaker's emotional attitudes in Korean such as racial slurs, emotive color terms, or emotive taste terms. In particular, I show how the dynamic paradigm of multiple expressives, a target emotive term and other emotive expressions within the sentence, can be predicted by the *Compatibility Condition Model* and the *Compatibility Condition Index* (Yoon 2015, 2018, 2021a). Crucially, however, I suggest a secondary mode of pragmatic sanctioning in exceptional cases of co-occurrences of conflicting attitudinal components, which is predicted by the *sarcasm/irony regions* in the *Compatibility Condition Model*. Finally, I tackle the question of how to detect sarcasm. In exploring various cues for detecting sarcasm, I review the literature of Machine Learning approaches for Sarcasm detection and discuss implications from a linguistic perspective.

Structure of Lecture:

I. Sentiment Analysis of Big Data

II. Linguistic Analysis of Senti-words and Sarcasm

III. Machine Learning Approaches for Sarcasm Detection