

# Differences in use of Metaphor between Narrative and Non-narrative Texts. by Armando J. Ochoa

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Metaphors are widespread in human language and are used in all types of text. One of the most common text types are narratives, which share a number of unique structural traits which distinguish them from non-narrative types. We investigate if there is any difference in the use of metaphor between narrative and non-narrative texts. We first created a Java API to interface with the Vienna University Annotated Metaphor Corpus (VUAMC), which provides four different types of text (three non-narrative and one narrative) with word-by-word annotations of metaphor occurrences. We then contrasted narrative and non-narrative texts by calculating several similarity measures, including the intra-textual and inter-textual cosine similarity with regard to both lemmas and wordforms, as well as the Jaccard Index with respect to the metaphor lexicon. We also calculated the set of the metaphor lemmas common to each class, as well as the prevalence of the different metaphor types. The difference between narrative and non-narrative texts is most noticeable in (1) the most common metaphor lemmas, which vary widely even among the different types of non-narrative text, and (2) the most common metaphor types. We investigate the extent to which these differences may be a result of topical variation among the text types. This investigation is the first step in a research project to build a system which automatically detects metaphors. Such a system could be used to improve word-sense disambiguation in Natural Language Processing, and to enhance understanding of the meaning of the narrative texts.