

Hierarchical Clustering of Abstract and Concrete Nouns

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Abstract: What types of organization characterize the conceptual system? We used linguistic cluster analysis to explore organization in separate samples of concrete and abstract nouns. Text co-occurrence vectors were used to determine similarities of words in the two samples. The resulting solutions of hierarchical clusters were coded for the type of organization: word associations, taxonomic relations, paronymic relations, or thematic relations. We used the co-occurring context words extracted from the text corpus to guide the coding of each cluster. The coding analysis revealed larger proportions of thematic clusters in the abstract sample than the concrete sample at all levels of the hierarchy. In both samples, however, the proportion of thematic clusters was greater than or equal to 40