

Improving Proverb Search and Retrieval with a Generic Multi-dimensional Ontology / Orna Bloch

Abstract

The goal of this research is to develop a generic ontological model for proverbs that unifies potential classification criteria and various characteristics of proverbs to enable their effective retrieval and large-scale analysis. Since proverbs can be described and indexed by multiple characteristics and criteria, we built a multi-dimensional ontology suitable for proverb classification. To evaluate the effectiveness of the constructed ontology for improving search and retrieval of proverbs, a large-scale user experiment was arranged with 70 users, who were asked to search a proverb repository using ontology-based and free-text search interfaces. The comparative analysis of the results shows that the use of this ontology helped to substantially improve the search recall, precision, user satisfaction, efficiency and to minimize user effort during the search process. A practical contribution of this work is an automated web-based proverb search and retrieval system which incorporates the proposed ontological scheme and an initial corpus of ontology-based annotated proverbs.

MMS Number: 9926852712405776