



# AIUB DSpace Publication Details

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## Abstract

A network-text analysis is a way to extract the knowledge from texts and then generate a network of words. A central premise is that the network represents a mental model of the author. After transforming an unstructured text into a structured network, it is possible to use text analytic methods for analyzing the network, conducted by specific networks. Moreover, this kind of information representation can be one technique to achieve the underlying semantic structure of a text and make mental models of different authors comparable. In evolving knowledge resources such as wiki articles, the extracted networks can be utilized to compare the uncovering misconceptions, knowledge conflicts between authors, or the identification of latent relations between concepts of a particular knowledge domain. A network text analysis and visualization are used for the concept network. There are three main steps in the process concept identification, relation identification, and network generation. Various techniques are available for each of these steps. Identified concepts for extracting concepts and relations is based on an open information extraction tool (ClausIE). Three steps supported to extract labeled relations between concepts: extraction of candidate relations and a-posteriori filtering by the user. The solution which can be easily incorporated in existing process chains for network extraction from texts is compatible with arbitrary approaches for concept extraction.

