

## **LAS Verticum: A Supralexical Content Analyzing Software**

Janos Laszlo<sup>1</sup> and Bea Ehmann<sup>2</sup>

<sup>1</sup>Institute for Psychological Research of the Hungarian Academy of Sciences  
H-1132 Victor Hugo str. 18-22, Budapest, Hungary  
[laszlo@mtapi.hu](mailto:laszlo@mtapi.hu)

<sup>2</sup> Institute for Psychological Research of the Hungarian Academy of Sciences  
H-1132 Victor Hugo str. 18-22, Budapest, Hungary  
[ehmannb@mtapi.hu](mailto:ehmannb@mtapi.hu)

**Keywords.** LAS Verticum, LINTAG, content analysis, narrative psychological content analysis

The LAS Verticum is composed of three different softwares: the LINTAG supralexical content analyzing program, and two commercial ones, the ATLAS.TI conceptual network builder program and the SPSS statistical program pack.

LINTAG is based on the principle of the HUMORESK Morphological Analyzer developed by the Morphologic Ltd. The HUMORESK Program is based on a new Hungarian grammar that includes the natural vocabulary as broken down according to morphemes. This particular feature makes the software capable of word level content analysis. The other main component of LINTAG is a series of grammar and lexicon files filled up with narrative psychological contents. This part of the software is a development of the Narrative Psychology Team formed by the Institute for Psychological Research of the HAS, the University of Pecs and The Szent Istvan University of Godollo, in cooperation with the Morphologic Ltd. All institutions are in Hungary.

LINTAG would be a novelty in the content analysis of Hungarian texts even if it were only a traditional word frequency analyzer, because it is able to indicate the frequency of validated word categories of psychological relevance.

The supralexical nature of LINTAG is manifested in two main fields. One is that its word categories are composed not only of single words, but may contain composite phrases as well. The other, more important, aspect is that the text analyzing process is based not on word categories only, but on supralexical pattern searching algorithms.

LINTAG inputs can be word lists and supralexical pattern searching algorithms. LINTAG outputs are word list based modules and algorithm based modules, which then serve as inputs to Atlas.ti as automatic codes. Outputs of Atlas.ti may form inputs to SPSS.