## The Time Module of the LAS Verticum Content Analysis System

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Two basic principles of the narrative psychological analysis of time are that the patterns of subjective time experience have psychological relevance and can be identified by content analysis in personal documents (interviews, diaries, autobiographical recalls, etc.) of lay writers. Psychical time experience can be studied in three aspects, namely word frequency analysis, KWIC (Keyword-In-Context) analysis and conceptual or thematic analysis.

The two leading softwares of automatized word frequency analysis are the LIWC (Linquistic Inquiry Word Count, Francis és Pennebaker, 1993) and the RID (Regressive Imagery Dictionary, Martindale, 1995). Both programs have a time module, but they handle only the three classic aspects, the past, the present and the future.

The time module of the LAS Verticum is a novelty in two fields. Theoretically, it extends the scope of the investigation of psychical time experience, and structurally, the search function of the software is based not on simple words lists, but on morphological patterns.

The categories of the Module are able to identify the following qualities of time: time references fixed to a particular point of the linear (calendar) time axis, and the aspects of start, duration and endpoint. Another subset is a subjective quality of time referring to that a particular event has never happened, happens all the time, happens repeatedly or happens at an uncertain point of time. Further qualities are the slowing, stopping or accelerating of time experience, and the scale of time from the second to the century.

The Time Module of the LAS Verticum assigns codes to the above time categories automatically in the texts. Within the System, this word frequency analysis allows KWIC analysis, and the correlating patterns form a starting point to conceptual analyses, namely to structural investigations of the narrative chronology of stories produced by lay writers.