Title: An Implementation of Methods of Structural Analysis of Czech Complex Sentences

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Abstract: This paper discusses automated analysis of complex sentences in Czech language. It summarizes the results of preceding research, uses therein described method for splitting complex sentences into segments using well defined set of separators and proposes three methods of automated assignment of levels to segments (which also describe relations between the segments) in sentences based on rules presented in the research. First method directly applies the rules presented in referenced research papers, the second method uses a genetic algorithm and the third makes use of a neural network. This paper includes an implementation of these methods and an analysis of the results using manually annotated data from the Prague Dependency Treebank.