The thesis presents tools for analysis at analytical and tectogrammatical layers that the Prague Dependency Treebank is based on.

The tools for analytical annotation consist of two parsers and a tool for assigning syntactic tags. Although the performance of the parsers is far below that of the state-of-the-art parsers, they both can be considered a certain contribution to parsing, since the methods they are based on are novel. The tool for assigning syntactic tags makes 15% less errors than a tool used for this purpose

previously. The tool developed for tectogrammatical annotation is the only one that can currently perform this task in such a breadth. Although other, specialized tools may have a better performance of some of its particular subtasks, my tool makes 29% and 47% less errors for the Czech language than the combination of existing tools for annotating the tectogrammatical structure and deep

functors, respectively, which are the core of the tectogrammatical layer. The proposed tools are designed the way they can be used for other languages as well.