Storing and Visualizing Semantic Annotation for Treebank Applications

Mark-Matthias Zymla
Universität Konstanz

Mark-Matthias.Zymla@uni-konstanz.de

Tag
Datum
Zeit
Raum

Introduction: In this poster we present ongoing work on an application for storing and visualizing semantically annotated treebanks. In particular we focus on the ParGram treebanks available via the INESS infrastructure. These treebanks together form a parallel corpus that is parsed syntactically in terms of Lexical Functional Grammar (LFG). A part of these treebanks is additionally annotated with semantic information, however, there is no tool yet available to store and work with these semantically marked up sentences. To remedy this situation and make semantic annotation of treebanks more accessible, we provide an application that allows for: storage, visualization, comparison, search and modification of semantically annotated structures.

The system: The core functionality of the application is specifically tailored towards semantically annotated LFG treebanks. The underlying annotation scheme proposes a modular representation of syntax and semantics and provides mapping principles between the two modules. The application allows you to modify both the mapping principles and the semantic features. Thereby, it checks if the changes made in one part of the treebank are consistent with the annotation of the complete treebank, i.e. if the proposed mapping principles from syntax to semantics remain sound throughout the treebank. Thus, it is capable of testing whether automated annotation is viable based on the given mapping principles.

Applications: The system presented here may be used for research on semantic markup within a language and in different languages. The main functionality lies in storing and visualizing semantic information in combination with existing syntactic resources as well as the possibility to explore the syntax/semantics interface.

References: • Butt, M. et al (2002): The parallel grammar project. In *Proceedings of the 2002 workshop on Grammar engineering and evaluation* 15, 1–7. • Rosén, V. et al. (2012):An Open Infrastructure for Advanced Treebanking. In *META-RESEARCH Workshop on Advanced Treebanking at LREC2012.* • Sulger, S. et al (2013): The ParGram Parallel Treebank. In: *ACL*, 550–560.