

Yannick Parmentier (Langue Et Dialogue Project, LORIA/Nancy Universities)

SemTAG - a platform for Semantic Construction with Tree Adjoining Grammars

The SemTAG platform has been developed to perform semantic construction with real-size Lexicalised Tree Adjoining Grammars (TAG). It provides with an environment allowing to build an underspecified semantic representation (Predicate Logic Unplugged of (Bos, 95)) from a TAG lexicon and a sentence.

In order to facilitate lexicon management, the SemTAG platforms uses a metagrammar compiler. The goal of the compiler is to automatically produce a TAG from a reduced description. This description corresponds to (i) a hierarchy of tree fragments and (b) combinations of these fragments defined using a control language. Furthermore, each tree produced may be equipped with a syntax / semantic interface following (Gardent and Kallmeyer, 03).

The semantic construction is based on the result of the syntactic parsing. Parsing is done by a tabular TAG parser generated automatically from the input TAG by the DyALog system of (De La Clergerie, 05). This parser outputs a derivation forest, which encodes all TAG derivations, and from which the unifications of semantic indices are extracted. This platforms is currently under evaluation (in terms of semantic coverage) on the TSNLP test-suite.