Syntax-Driven Semantic Frame Composition in Lexicalized Tree Adjoining Grammars

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The work presented in this talk is concerned with a compositional frame semantics formulated within Lexicalized Tree Adjoining Grammars (LTAG). LTAG, with its extended domain of locality and with its various possibilities of factorization within the lexicon, is a particularly interesting formalism for the composition and decomposition of semantic frames. On the one hand, linking can be done locally within elementary trees in LTAG. On the other hand, the grammar architecture, in particular the metagrammar underlying an LTAG, allows for a fine-grained decomposition of the semantic contribution of elementary trees, separating construction-based parts from lexical contributions. We take advantage of this and present a detailed analysis of motion events involving directional prepositional phrases and of the dative alternation in English. In order to formulate these analyses, we propose a formalization of the feature structures underlying the frames we use. This work shows that within LTAG and using frames, a large range of linguistic generalizations can be captured, exploiting the factorization possibilities coming with the formalism.