Crosslinguistic Compositional Semantics

- Maria Bittner | session 2 | MW 8:30 – 10:15, 101 Moffitt Hall
- Course notes at http://rci.rutgers.edu/~mbittner (under Teaching)

DESCRIPTION
Natural languages vary widely in their morphology and syntax. For example, English is an isolating language with rigid word order and a grammatical system of tenses and modals. At the other extreme, Kalaallisut (Esquimo–Aleut: Greenland) is a polysynthetic language with “free” word order and a tenseless grammatical system that marks illocutionary mood and centering. Nevertheless, a discourse in one language can be translated into any other language.

An influential approach to crosslinguistic compositional semantics attributes this semantic convergence to an abstract syntactic level of “Logical Form” (LF), which on this view serves as the input to universal compositional rules. However, there is still no formally precise syntactic theory that would generate all and only the requisite input LF’s independently of the desired semantic output.

In this course we will explore an alternative approach, without any LF. Instead, linguistic forms are built and interpreted directly by universal compositional rules of Combinatory Categorial Grammar (CCG, Steedman 2000). Each CCG-rule consists of a syntactic rule and a correlated semantic rule. Given a language-specific lexicon the syntactic rule builds a well-formed (morphological or syntactic) string. The correlated semantic rule translates this natural language string into a typed logic with explicit syntax and model-theoretic semantics. The typed logic we will use is Update with Centering (UC, Bittner 2009), a dynamic system which formally represents changing states of information and focus of attention in discourse (formalizing Grodz et al. 1995).

The resulting formal system captures semantic convergence across linguistic diversity in semantic terms—to wit, universal combinatory rules (CCG), universal ontology of possible discourse referents (UC), universal discourse-initial defaults (UC), and so on. The general claim is that all natural languages (e.g. both English and Kalaallisut) agree on these semantic universals even though they may express equivalent meanings by very different grammatical forms.

REFERENCES

Bittner, M. 2009. Tense, mood, and centering. Under review for Tense across Languages (R. Musan and M. Rathert, eds.)


