

Empirical valency research and the problem of predicting syntactic behaviour from semantics

Susen Faulhaber and Thomas Herbst
Friedrich-Alexander-Universität Erlangen-Nürnberg

This paper will challenge the widely held assumption that syntactic configurations mirror certain underlying semantic conceptualizations and that semantic similarity consequently entails syntactic similarity. Goldberg (2006: 58), for instance, argues that “[s]emantically similar verbs show a strong tendency to appear in the same argument structure constructions” and Pinker (1989: 62) maintains that the “[s]yntactic argument structures of verbs are predictable from their semantic structures, via the application of linking rules”. Similarly, addressing the question of the syntax-semantics interface from a more data-driven perspective, Hunston and Francis (2000) argue in the corpus-based *Pattern Grammar* that verbs occurring in the same syntactic pattern often also share semantic aspects, and Levin (1993) claims the same for verbs allowing the same syntactic alternations. Yet while syntactic similarity is often (although clearly not categorically) correlated with semantic similarity, it cannot automatically be concluded that semantic similarity entails syntactic similarity. What the approaches mentioned above either fail to address or at least severely underestimate is the fact that there are cases where the same semantic proposition can be verbalized by different (albeit semantically similar) verbs, which cannot always be complemented with the same syntactic patterns: of all theoretically possible, i.e. semantically plausible, verb-pattern combinations only a sub-group represents acceptable uses of present-day English (cf. the notion of *constructeme* in Herbst 2009), i.e. there are also syntactic gaps (cf. Mukherjee 2005).

This paper will present the results of a corpus-based comparison (Faulhaber 2011) of semantically similar verbs and their various complementation patterns as attested in the *Valency Dictionary of English* (Herbst et al. 2004) and the BNC. It will be shown that such gaps do not just constitute minor exceptions and that semantically similar verbs can also differ with respect to which pattern they prefer in terms of frequency, if more than one pattern is available for the same pragmatic purpose. While different semantic aspects can be shown to have a certain influence on the choice of pattern, the syntactic behaviour of verbs can clearly not be predicted on the basis of their meaning, which provides a strong case against a deterministic role of semantics in verb complementation and in favour of strengthening the role of storage in the cognitive representation of language instead. It will be argued that while argument structure generalizations of the kind suggested by Goldberg (2006) are certainly justified to some extent, they should be seen as limited generalizations and that a component specifying not only the semantic (i.e. participant role) but also the formal valency properties of words will have to be part of any theory of complementation (Herbst and Schüller 2008).

Faulhaber, Susen (2010), *Verb Valency Patterns – A challenge for semantics-based accounts*. Berlin/New York: Mouton de Gruyter.

Goldberg, Adele (2006), *Constructions at Work. The Nature of Generalization in Language*. New York: Oxford University Press.

Herbst, Thomas (2009), “Valency – item-specificity and idiom principle”, in: Ute Römer and Rainer Schulze (eds.), *Exploring the lexis-grammar interface*. Amsterdam/Philadelphia: Benjamins, pp. 49-68.

Herbst, Thomas (2010), “Valency constructions and clause constructions or how, if at all, valency grammarians might sneeze the foam off the cappuccino”, in: Hans-Jörg

- Schmid and Susanne Handl (eds.), *Cognitive foundations of linguistic usage patterns. Empirical approaches*. Berlin et al.: Mouton de Gruyter, pp. 225-256.
- Herbst, Thomas, David Heath, Ian Roe, and Dieter Götz (2004), *A Valency Dictionary of English*. Berlin/New York: Mouton de Gruyter.
- Herbst, Thomas and Susen Schüller [now Faulhaber] (2008), *Introduction to Syntactic Analysis – A Valency Approach*. Tübingen: Narr.
- Hunston, Susan and Gill Francis (2000), *Pattern Grammar. A corpus-driven approach to the lexical grammar of English*. Amsterdam: Benjamins.
- Levin, Beth (1993), *English Verb Classes and Alternations – A Preliminary Investigation*. Chicago: The University of Chicago Press.
- Mukherjee, Joybrato (2005), *English Ditransitive Verbs - Aspects of Theory, Description and a Usage-based Model*. Amsterdam: Rodopi.
- Pinker, Steven (1989), *Learnability and Cognition: the Acquisition of Argument Structure*. Cambridge, Massachusetts: The MIT Press.