

Beyond lexical explanations of argument structure semantics

Florent Perek, Université Lille 3 / Freiburg Institute for Advanced Studies

Symbolic theories of grammar hold the view that when people understand a sentence, they construct meanings both from individual words and from larger syntactic units, so-called constructions. My doctoral project is concerned with an investigation of the nature of constructional meaning, particularly as it pertains to how it relates to lexical meaning and usage.

In constructional approaches to grammar, argument structures are taken to be symbolic pairings of a syntactic structure with a schematic meaning independent of the verbs instantiating them (cf. Goldberg 1995, 2006). For example, under this view, the ditransitive construction (e.g., *John offered the children a new merry-go-round*) is a pairing of the double object syntactic pattern with a core meaning of caused possession. Evidence from experiments (Goldberg *et al* 2004) and corpus studies (Stefanowitsch and Gries 2003) suggests that the meaning of a construction closely corresponds to the elements that typically occur in it. As Goldberg (2006:92) puts it, “grammatical constructions may arise developmentally as generalizations over lexical items in particular patterns”; in other words, this means that the meaning of verbs occurring in a given syntactic pattern determine to a large extent the meaning that will be associated with this syntactic pattern. This meaning will in turn be productively available to new, possibly creative uses of the construction (such as *John built the children a tree house*, conveying intended caused possession). This view of the origin of constructional meaning can be called the 'lexical generalizations hypothesis'.

Most of the research done so far has focused almost exclusively on a limited set of argument structure constructions. One of the major goals of this thesis will be to check to what extent the lexical generalizations hypothesis holds for other types of constructions in English and whether we can identify other explanations for constructional meanings. In our first investigations, we identified a problematic case for the lexical generalizations hypothesis: the conative construction, which realizes the theme argument of a transitive verb as a prepositional phrase headed by *at* and is generally associated with an interpretation of attempted achievement of an intended result (Levin 1993:42, Goldberg 1995:63-64, Broccias 2001), as exemplified by such contrasts as *John kicked at the ball* vs. *John kicked the ball*. Stefanowitsch and Gries (2003:227) show that “strong collexemes [i.e., verbal collocates] of a construction provide a good indicator of its meaning”; however, in Perek & Lemmens (2009, *subm.*) we presented evidence from corpus data in the ICE-GB that it is not straightforwardly so in the case of the conative, since the most typical collocates of the *at*-frame are verbs of visual perception (*look* and its hyperonyms). Even if we accept Goldberg's suggestion that the conative conveys 'directed action' (which is not clearly borne out by other studies), we still lack an explanation of why this particular semantic component is carried over to the construction. We argued in Perek & Lemmens (*subm.*) that we might in fact deal with at least two constructions that may but must not be related: the directional *at*-construction and the conative *at*-construction, the latter of which do not seem to have a straightforward lexical origin. How then could the constructional meaning of the conative construction be accounted for? We suggest that the alternation with the transitive frame might play a significant role in meaning construction, which calls for a reassessment of the cognitive reality of alternations as a possible language-internal motivation, which have been strongly downplayed if not denied by previous cognitive linguistics studies (cf. Goldberg's (2002) surface generalizations hypothesis). In subsequent work, we plan to address these issues on two fronts: corpus-based analysis and experimental methods.

As to the corpus investigations, we are currently analyzing the lexical preferences of the conative with a wider and different sample drawn from the narrative fictions in the BNC. While the verbal collocates do not seem to identify straightforwardly with the semantics of the construction in this sample either, the first results of this still on-going study indicate that if we analyze instantiations of semantically defined verb classes as separate constructions, the statistically preferred verbs are

those whose meaning is more congruent with the semantic import of the construction. For example, in the class of verbs of ingestion, the most preferred verbs *nibble*, *sip* and *gnaw* already imply an iterative and 'bit-by-bit' reading, whereas verbs that do not feature such semantic components are less preferred, the least preferred verb in this class being the highly general *eat*. If this turns out to be true for all verbal classes, it would suggest that the conative construction can be described as a family of lexical generalizations over classes of verbs, without there being any necessary relation with the directional *at*-construction. It would also provide empirical evidence that local generalizations are a more psychologically valid mental representation where the semantic contribution of constructions is more straightforwardly grasped.

We also intend to use experimental methods to test the role of potential non-lexical factors in the emergence of constructions. First we would like to test the psycholinguistic reality of a recurrent claim that the insertion of a preposition before the direct object argument of a transitive verb cues a shift in transitivity (Dixon 1991:280, Croft 1998:45), which by itself would provide the indication that the action is a mere attempt at an intended result and would eschew the need for a lexically grounded constructional meaning. This could be tested by checking to what extent speakers of a language lacking a productive conative construction (such as French) arrive at the intended interpretation when exposed to instances of this transitivity alternation in their own language without prior input. Such an experiment would help to determine whether lexical contingencies necessarily plays a role in the acquisition of this construction and would provide a starting point for further experiments investigating further the cognitive reality of alternations.

References

- Broccias, C. (2001). "Allative and ablative *at*-constructions". In M. Andronis, C. Ball, H. Elston, and S. Neuvel (Eds.), *CLS 37: The Main Session. Papers from the 37th Meeting of the Chicago Linguistic Society*, Volume 1, pp. 67–82. Chicago: Chicago Linguistic Society.
- Croft, W. (1998). Event Structure in Argument Linking. In Butt, M. & W. Geuder (eds.), *The Projection of Arguments: Lexical and Compositional Factors*. Stanford: CSLI, 97–134.
- Dixon, R. (1991). *A New Approach to English Grammar; on Semantic Principles*. Oxford: Clarendon Press.
- Goldberg, A. (1995). *Constructions: a construction grammar approach to argument structure*. Chicago: University of Chicago Press.
- Goldberg, A. (2002). Surface generalizations: An alternative to alternations. *Cognitive Linguistics* 13.4, 327–356.
- Goldberg, A. (2006). *Constructions at Work: The Nature of Generalization in Language*. Oxford: Oxford University Press.
- Goldberg, A., D. Casenhiser, & N. Sethuraman (2004). Learning argument structure generalizations. *Cognitive Linguistics* 15.3, 289–316.
- Levin, B. (1993). *English Verb Classes and Alternations*. Chicago: Chicago University Press.
- Perek, F. & M. Lemmens (2009), "Item-based generalizations and argument structure acquisition: some relevant corpus findings". Talk given at the 3rd AFLiCo conference in Nanterre, 26th May 2009.
- Perek, F. & M. Lemmens (subm.). Getting at the meaning of the English *at*-construction: the case of a constructional split. Submitted to *CogniTextes*.
- Stefanowitsch, A. & S. Gries (2003). Collostructions: investigating the interaction between words and constructions. *International Journal of Corpus Linguistics* 8.2, 209–243.