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Constructions at work: The nature of generalizations in language

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Full book review

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Constructions at work: The nature of generalizations in language. By ADELE E GOLDBERG. Oxford: Oxford University Press, 2006. Pp. vii, 280. ISBN 0-19-9-268517 978-0-19-9268511, 0-19-9-268525 (pbk) 978-0-199268528 (pbk). ?$.

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Adele Goldberg's *Constructions at work* is a welcome sequel to her (1995) *Constructions*, by now a landmark in linguistics. The new book extends her previous analyses and explores new and exciting territories. Since G is arguably the leading figure in Construction Grammar currently, the theory is here pitched against the background of alternative approaches, functional syntax and Generative grammar, in order to convince the reader that whether one agrees with G or not, the book is must reading.

Part I of *Constructions at work* (Chs. 1-3) sums up the basic claims of Construction Grammar. Constructions are form-function pairings, and the idea is that grammar is "constructions all the way down" (p. 18). In other words, clause-level syntactic constructions, phrases, collocations, words, and morphemes are all analyzed in a similar, "construction" fashion. In addition, linguistic expressions (constructions) are taken to reflect both very high-level, abstract generalizations (elegant rules), as well as low-level generalizations, and even idiosyncratic phenomena. These analyses, moreover, are not mutually exclusive, so the same linguistic string may receive multiple representations. The assumption is that we store "redundant" representations (e.g. both the general, abstract *-ed* rule for forming English past tense verbs and concrete representations for individual, regular past tense verbs– Verb+*ed*).

G's main research program concerns argument structure constructions, those clause-level form/function pairings used to express basic meanings, such as TRANSFER (as in the ditransitive construction -- *I gave him a red pepper*, SBC: 011),[1] CAUSED MOTION (Subject, Verb, Object, a directional Oblique -- *I was thinking of* [*sending Matt up there*] SBC: 014), etc. Her argument has been that the computation of meaning must take into account constructional meaning, and not only the individual lexical items according to their syntactic roles (the usual way compositionality is applied).

As G acknowledges, hypothesizing a constructional meaning in the above two examples seems unnecessary (redundant). After all, the verbs *give* and *send* in any case denote TRANSFER and CAUSED MOTION (respectively). But, as G has convincingly demonstrated, verbs which do not denote TRANSFER (e.g. *throw*) or CAUSED MOTION (e.g. *squeeze*) can nonetheless be so interpreted if incorporated into the appropriate constructions (e.g. *They usually* ***throw*** *me stale corn bread*, LSAC; *See if* [*I can* ***squeeze*** *that in*], LSAC). Once we assume constructional meanings, we avoid unnecessary multiple meanings and argument structures for verbs. *Throw* need not (also) be analyzed as a transfer verb requiring a recipient, nor is *squeeze* treated as (also) a motion verb requiring a locative. The recipient in the former and the directional oblique in the latter are contributed by the constructions instead.

G does not shy away from assuming constructions which only have limited productivity (e.g. the *go*VPing construction, as in *So they go barging in on Mar*, SBC: 006). At the same time, metaphorical interpretations, e.g. *Let's throw her a good party*

[1] SBC=The Santa Barbara Corpus of Spoken American English DU BOIS, JOHN W., CHAFE, WALLACE L., MEYER, CHARLES and THOMPSON, SANDRA A. 2000. Santa Barbara Corpus of Spoken American English, Part 1 Philadelphia: Linguistic Data Consortium, University of Pennsylvania. LSAC is the Longman Spoken American Corpus.

(LSAC), can extend construction meaning and use. No physical party is handed over in this ditransitive construction, but a metaphorical act of giving is conveyed, despite the lack of a transfer verb. This is due to the construction. G notes that pragmatic functions are quite relevant in accounting for how and why speakers use specific linguistic constructions. For example, *go*VPing is associated with negative actions. In fact, G argues that both individual grammars and cross-linguistic "universals" are motivated extra-linguistically.

Now, G is not the first to have argued for grammatically specified "added values" (meanings) for syntactic constructions. Kuno (1972), Prince (1978), Fillmore (1988), Thompson (1990) and others have convincingly shown that syntactic constructions convey more than what their components amount to. G shares some assumptions with these functional approaches. She too values subtle meaning distinctions (see the analysis of *go*VPing and other constructions in Ch. 3). She also fully recognizes the importance of procedural meanings (Ch. 7). Nonetheless, she has in effect challenged many of the assumptions and practices of functionalists.

G's is a much bolder proposal, with profound implications for what grammar is. First, her predecessors' proposals mostly concerned marked (more complex, less frequent) constructions (e.g. *wh*- and *it*-clefts, *let alone*), which had unmarked syntactic counterparts with roughly the same propositional content (compare *It's uh, Mark that bought the house* – [LSAC] with *Mark bought the house*). Second, the added meaning contributed by the constructions was mostly limited to procedural, rather than conceptual material, associating various information statuses with various (parts of) syntactic constructions (e.g. Givenness and Newness for *wh*- and *it*-clefts). Thus, the analyses were restricted to constructions selected optionally (speakers could have chosen the unmarked variants instead); the meanings discussed were generally seen as secondary, supplementing the main, propositional content which they shared with their unmarked counterparts; and their syntactic analyses were defined and accounted for by syntacticians (as derived structures).

G insists on defining the linguistic units considered constructions herself (nonderivationally). Constructions such as caused-motion and *go*VPing do not actually correspond to structures linguists commonly assume. G's analyses directly integrate syntactic aspects with semantic and pragmatic ones. Constructions may be unmarked (e.g. the caused-motion construction), and they do not necessarily have unmarked counterparts. If they do (as is the case with ditransitives), the relationship between the so-called paraphrastic pairs is not assumed to be fundamental to grammar (Ch. 2). Another important difference is that the meanings G proposes are often conceptual (pertaining to 'who did what to whom'). All in all, there is no comparison between the role of constructions in earlier functional thinking and in G's vision of Construction Grammar. In the earlier analyses they are an added peripheral feature to other, central grammatical accounts. In G's model, they are the very core of grammar. What grammar is is a set of constructions.

Parts II and III offer new answers to old questions, where G explicitly outlines an alternative to Generative Grammar. How do children learn grammar (Part II)? They don't, has been the Generativists' argument (re core grammar). How and why did grammars evolve to be the way they are? They didn't, claim Generativists. An innately specified set of Universal Grammar features and structures is offered as a unified answer to both questions. G, developing others' proposals (especially Tomasello, 2003), sets out to argue otherwise.

Part II is devoted to the question of how children learn argument structure constructions. Conservatism (closely matching representations and production with

caretakers' inputs) and (over)generalizing (abstracting away from actual inputs, creating novel uses) are both involved. Children (and adults) are highly sensitive to statistical patterns, but they then abstract generalizations out of these patterns. G cites psycholinguistic experiments that show that construction meanings are learnable instantaneously (Ch. 4). The question is then: When are children conservative and when are they (over)generalizers? Why are they more willing to innovate a causative use for *vanish* than for *disappear*? Why are novel uses of *sneeze* possible, such as *Then the wolf sneezed the hay house down* (from a child)?[2]

These intriguing questions are tackled in Ch. 5, where G argues that statistical pre-emption provides one key to resolving these puzzles (another is type frequency): More specific knowledge pre-empts general knowledge. Having heard the specific *make disappear* (which adults do use) blocks the application of the general convention for deriving causative verbs, since it would create a synonymous (competing) causative *disappear*. Not having been exposed to *make vanish* (as much), causative *vanish* is not as blocked, since it doesn't compete with an attested synonymous form. Similarly, the innovative *sneeze* is not blocked by an attested synonymous *cause to move by sneezing*. Moreover, the extension is here encouraged by analogy. Corresponding to the above example, the original caused motion verb was *blow*, just as G predicts, where the causal force involves air (as *sneeze* does). Another type of verb possibly paving the way for this innovative extension according to G is *knock*, which is a caused-motion verb, although the action may not be intended (just like *sneeze*). So, on the one hand, the construction is open to incorporating *sneeze* by analogy, and on the other hand, no attested *sneeze* form blocks it. Such findings demonstrate that children are after all provided with (indirect) negative evidence which restricts their overgeneralizations, contra Generative assumptions. (Non) readiness to innovate is thus not as puzzling on G's account.

Based on mothers' corpora, G argues that given a caused-motion construction, a CAUSED MOTION interpretation is indeed intended by speakers in 62-83% of the cases, and vice versa, when a CAUSED MOTION interpretation is sought, the caused-motion construction is used in 83% of the cases. These are very useful patterns for the child to rely on, whereas verbs alone are quite variable in how well they predict (and are predicted by) the CAUSED MOTION interpretation. G's conclusion (based on additional findings) is that constructions are at least as reliable as verbs in testifying to clausal meaning, but are more salient (due to priming). In a nutshell, Part II supports the conclusion that children can and do generalize over syntactic constructions. They rather quickly learn "core", and not only "peripheral", aspects of language, based on linguistic input.

In Part III G offers alternative explanations for linguistic generalizations which seem to support the autonomous syntax hypothesis. Developing previous analyses, G argues that island constraints can be motivated extralinguistically (by reference to information status, Ch. 7). Ch. 8 motivates Subject-Auxiliary Inversion (SAI) as one construction (with a few sub-constructions), despite the variety of meanings it participates in (e.g. yes/no questions, counterfactual conditionals, exclamatives, comparatives). The argument is that linguistic categories, like all cognitive categories, are built around a prototype ('non-prototypical sentence' in this case), which is extended to sub-categories, each lacking some of the prototypical features.

In Chs. 9 and 10 G takes on claims of universality for UG. G's argument here is that not only can children learn linking rules (mapping semantic roles to syntactic

[2] See www.amazon.com/True-Story-Three-Little-Pigs/dp/customer-reviews.

roles), they must do so, because, on close inspection, so-called UG features are not quite universal. Despite universal tendencies, linguistic realizations are not identical. This makes the innate UG hypothesis problematic. A functional explanation, on the other hand, such as 'actors and undergoers are expressed in prominent syntactic positions' is cognitively plausible, allowing some language variability, while avoiding problems that an exceptionless linking rule such as 'agents are expressed as grammatical subjects' encounters.

The general picture that G draws is of a grammar which has evolved in a motivated (external) fashion, consists wholly of form/function associations, is learnable, and is in fact learned by children using their general cognitive abilities, through exposure to natural discourse. Her explanations only refer to surface representations. This is obviously quite different from the Generativist model. Linguists of all persuasions would therefore do well to read G's fascinating book in order to judge whether they are convinced by Construction Grammar.

While much of G's argumentation is very persuasive, there do remain problems and challenges which Construction Grammarians should address. One problem is the conflation between diachronic motivation and synchronic function (see also Tomasello, 2003). Grammaticization is most probably always motivated, but its product, the synchronic grammar, isn't necessarily motivated in the same way. Synchronically arbitrary conventions can be just as functional. Even if radial categories have arisen by extension via analogy, at some point the original analogy may no longer be available to speakers. Consider first a case favorable to G's approach. *At the foot of* seems a good example for the double storage thesis. While its motivated semanticization into a meaning of 'bottom of' is (still) quite transparent, it must also have a "list" attached to it (mostly mountains, furniture, buildings and statues can take this preposition – see Ariel, 2008). But, can G be sure that the same is true for the SAI construction? Is the motivating function ('nonprototypical sentence') synchronically available to speakers, or do they simply memorize the list of contexts in which it must be used? The more some category is extended, and the fewer salient features the sub-constructions share, the higher are the chances that the representation of the higher category will be lost to speakers. This is one way in which a diachronically motivated change may become arbitrary. G and other Construction Grammarians need to take note of such processes, if they are to avoid imposing yesterday's motivations on today's grammar.

Another potential weakness of G's approach is that despite the commitment to a "usage-based" approach to language, it is mostly conceptual categories that inform the linguistic claims, rather than discourse profiles for specific constructions. G tends to assume that function drives form, but it could (also) be the other way around. For example, are the different distributional patterns of *aid* and *help* (pp. 56/7) derivative of their subtle semantic differences (G's implicit assumption), or are the semantic differences derived from their different discourse profiles, which speakers initially adhered to out of pure conservatism? *Help*, of course is much more frequent. Bresnan's (2007) findings for dative alternations in various English dialects are possibly another case in point, where discourse profiles may not (initially) be based on symbolic differences between forms.

Many interesting challenges await Construction grammarians. G very briefly addresses languages with rich morphological markings on verbs (6.9), noting that even when such markings exist a constructional analysis is still relevant. Semitic verbal morphological paradigms are probably ripe for an analysis as a set of constructions with a variety of sub-constructions, diachronically motivated, but partly

arbitrary currently. Finally, while G has discovered meanings where nobody thought they existed (for argument structure constructions), can the analysis be extended to even more unmarked (sets of) constructions, such as the transitive and the intransitive constructions?

Even if the ultimate conclusion is that we cannot push the Construction approach all the way, because grammar is to some extent arbitrary, or rather, partially meaning-blind, we will have learnt a lot about grammar. G's research program aims high, and has already proved that this leads to important and quite revolutionary conclusions. *Constructions at work*, clear, engaging and persuasive, is recommended for anyone who is interested in understanding grammar. All linguists, in other words.

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