

Verbs, Constructions, Alternations

Usage-based perspectives on argument realization

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Overview

- Field of research: usage-based approaches to grammar
- Domain of investigation: argument realization in English
 - i.e., how the argument of verbs are realized
 - To what extent is it based on usage?
- My thesis ...
 - ... reports on a number of theoretical issues in current cognitively-oriented models of argument realization ...
 - ... attempts to find usage-based solutions to these problems with a combination of corpus studies and experiments ...
 - ... at three levels of analysis: **verbs, constructions, alternations.**

1. Verbs

- How much AR information is stored at the level of verbs?
 - Two sources of AR information in construction grammar
 1. Lexical entries: set of arguments, or **valency**
 2. Constructions: can add or remove arguments
 - e.g., [NP *bake* NP] + [NP V NP NP] (ditransitive) → *I baked you cakes*
 - In principle, only one verbal entry is needed, but:
 - Not always possible to determine which one
 - Likely more than one: trade-off between storage vs. computation
 - Hypothesis: the range of verbal entries is determined by usage

1. Verbs

- Testing the usage-based valency hypothesis
 - Prediction: more frequent valencies of a verb are more cognitively accessible, e.g., for language comprehension
 - Incremental reading experiment with commerce verbs
 - Does the integration time of a third argument for the following verbs varies according to its participant role?
 - BUYER *buy* GOODS { *from* SELLER vs. *for* MONEY }
 - BUYER *pay* MONEY { *for* GOODS vs. *to* SELLER }
 - SELLER *sell* GOODS { *to* BUYER vs. *for* MONEY }
 - Do these differences correlate with differences in the frequency of the corresponding valencies?

1. Verbs

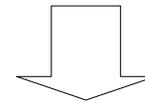
- The prediction does largely hold:
 - For *pay* and *sell*: the more frequent valencies are more cognitively accessible
 - For *buy*: no difference in cognitive accessibility
 - But maybe not incompatible with the hypothesis:
 - The frequency difference is markedly lower
 - Relative frequency might actually be the relevant factor
 - Conclusion: in line with the usage-based valency hypothesis

2. Constructions

- Pairings of a syntactic pattern with an abstract meaning
 - Specify how arguments of a verb are realized
 - Constructional meaning determines productivity and accounts for semantic differences

- Current hypothesis:
 - Constructional meaning is abstracted from frequent lexical material

... Could you **give** us a sheet of paper ...
... we **give** you a massive discount ...
... The quote that they **sent** me ...
... what Endsleigh have to **offer** me ...
... you couldn't **give** us a hand could you ...
... I 'll **send** you out that ...
... the programme Ailsa **showed** you ...
... the College is due to **give** us a response ...



NP V NP NP

“GIVE”

2. Constructions

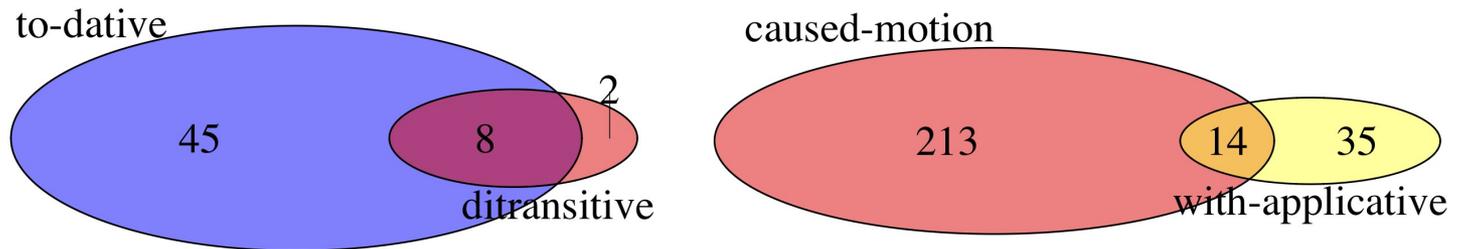
- Problem: constructions with abstract meaning
 - e.g., the conative construction (*John kicked at the ball*): means “focus on the agent’s activity” at the most abstract level
 - Not lexicalized by any verb
- Corpus study of the conative construction in the BNC
 - Main finding:
 - Within narrow semantic classes of verbs, frequent verbs provide an indication of the constructional meaning for that class
 - Ingestion-, striking-, cutting-, pulling-conative constructions rather than one single, general conative construction
 - => Lower-level constructions can be derived from usage
 - Conclusion: **lower levels of generalization are more basic in the emergence of constructions from usage**

3. Alternations

- Pairs of semantically related constructions
 - e.g., dative alternation: *give him the book / the book to him*,
locative alternation: *load hay onto the truck / the truck with hay*
 - In CxG: usually described as independent constructions, the relation between them is disregarded
 - Is it an adequate account of speakers' linguistic knowledge?
 - Some constructions can be largely seen as constructional variants for the realization of a particular event type
 - This warrants a generalization of their common aspects of form and meaning
 - Experimental evidence
 - Sorting task: subjects prefer an alternation-based sorting to a construction-based sorting
 - Priming studies: semantically similar constructions prime each other

3. Alternations

- How do alternations relate to usage?
 - Hypothesis: alternation-based productivity depends on usage
 - Experiment on productivity in the dative and locative alternation
 - Production of a sentence with a novel verb previously presented in one of the variants of an alternation
 - **Asymmetry** in the dative alternation: subjects “**stick to**” the **to-dative** variant but **do not “hold onto”** the **ditransitive** variant
 - No asymmetry in the locative alternation
 - These findings correlate with patterns of type frequencies:



=> effect of **relative** type frequency on productivity

Conclusion

- Argument realization is usage-based at all three levels:
 - Lexical entries of a verb depend on that verb's usage
 - Constructions emerge from frequently occurring verbs, albeit sometimes at lower levels of abstraction
 - Alternations influence productivity when there is a type frequency imbalance
- Complements earlier accounts based on introspection
- Shows that studies of argument realization should take usage data into account
- ... while still opening its host of new questions!

