Alternations vs. Constructions: a false dichotomy?

Florent Perek

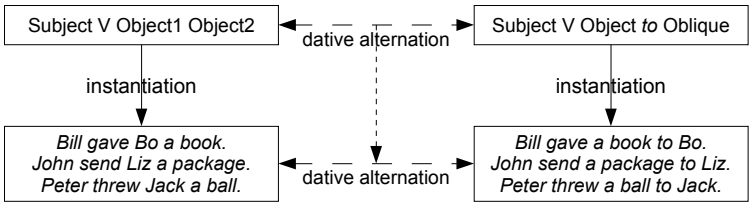
Erstbetreuer Martin Hilpert; Universität Freiburg
Zweitbetreuer (co-tutelle) Maarten Lemmens; Université de Lille 3

1. Field of research: Argument Structure

What is argument structure? The principles that govern in which syntactic constructions verbs can be used.

What is an alternation? A pair of minimally different constructions that can both be used with a number of different verbs, usually forming near-paraphrases.

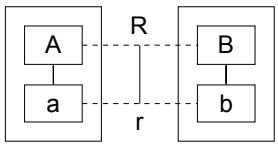
e.g., the **dative alternation**, cf. diagram on the right.



In **constructional approaches** to Argument Structure (Goldberg 1995, 2006), only constructions are **stored** and **instantiated**; it is assumed that alternations are **not stored** as part of the grammar.

Nevertheless, alternations are a plausible hypothesis about linguistic structure:

- Alternations could be stored as **second-order symbols:** pairing of a **contrast in meaning** with a **contrast in syntactic form**.
- Such second-order symbols could be used to create new forms on the basis of **analogy** involving attested forms.



A, B: syntactic structures (forms)
a, b: semantic structures (meanings)
R: formal contrast
r: semantic contrast

The status of alternations has widely been debated; however, it has never been investigated **empirically**.

➡ **Goal:** to empirically evaluate the cognitive reality of alternations

2. Research questions and methods

Research questions

➔ Do speakers actually store representations of alternations?

➔ Do they follow alternations to generalize constructions to new verbs?

Methods

- **quantitative corpus linguistics**, to check to what extent variants of alternations are similarly used;
- **experimental psycholinguistics**, to gain on-line evidence of the cognitive reality of alternations in language comprehension and production.

Frequency effects

- **Frequency under study**: type frequency of alternations, i.e., how many different verbs occur in two related constructions
- **Frequency effects:**
  - ➔ Storage: does a high type frequency lead to a cognitive representation of the alternation as a second-order symbol?
  - ➔ Productivity: can it be extended to other verbs? i.e.:

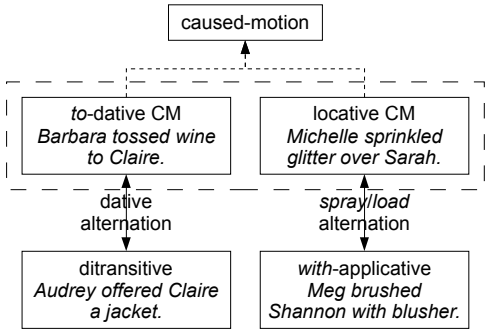
    IF a verb V has been heard in an argument structure A1 **AND IF** there are other verbs heard both in A1 and in another argument structure A2 **THEN** V can be used in A2

3. A first (ongoing) experiment

Sorting task, follow-up of Bencini and Goldberg (2000).

Questions: are alternations a sorting dimension available to speakers when they classify sentences, in addition to constructions? Can generalizations by alternations be stronger as generalizations by constructions?

Stimuli: 16 sentences, so designed as to exemplify three constructions related by two alternations:



Task: sorting into three groups: will speakers group the instances of 'caused-motion' together, or will they prefer grouping following one of the two alternations? Are both alternations equally likely to be selected?

Bencini, G. & Goldberg, A. (2000). The contribution of argument structure constructions to sentence meaning. *Journal of Memory and Language*, 43(4), 640–651.
Goldberg, A. (1995). *Constructions: a construction grammar approach to argument structure.* Chicago: University of Chicago Press.
Goldberg, A. (2006). *Constructions at Work: The Nature of Generalization in Language.* Oxford: Oxford University Press.

Florent Perek
Assoziierter Kollegiat des GRK 1624/1 „Frequenzeffekte in der Sprache“
Erstbetreuer Martin Hilpert
Zweitbetreuer (co-tutelle) Maarten Lemmens

Bio

2001-2006 Software engineering, IG2I, Lens, France
2006-2007 Maîtrise “Natural Language Processing”, Université de Lille 3, France
2007-2008 M.A. Linguistics, Université de Lille 3

Kontakt
Adresse FRIAS - Albertstr. 19
D-79104 Freiburg
Tel 0761 203 97361
Email florent.perek@gmail.com