

Beyond lexical explanations of argument structure semantics

Re-appraising the role of alternations in construction grammar

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Overview

- Overview
 - Field of research: argument structure constructions
 - Corpus-based pilot study: the *at*-construction
 - Theoretical implications
 - Suggestion: the role of the conative alternation
 - Conclusion and prospects

Field of research

- Verbs have several argument structures

Bill kicked the ball.

(transitive)

Bill kicked at the ball.

(conative)

Bill kicked Bo the ball.

(ditransitive)

Bill kicked the ball to Bo.

(to-dative)

Bill kicked the ball off the field.

(caused-motion)

Bill kicked the man unconscious.

(resultative)

- Different kind of events
- How to account for this variation?

Field of research

- The constructional approach
 - Argument structures = meaningful constructions
 - Meaning: event structure
 - Form: syntactic structure
 - Verbal information reduced to a minimum
 - Core verbal meaning
 - Set of verb-specific participant roles
 - Clause = integration of constructional bottom-up information and verbal top-down information

Field of research

- Example: the ditransitive construction
(Goldberg 1995)
 - Syntactic pattern: Subject-V-Object1-Object2
e.g., *Mary gave her sister a penny.*
Sam kicked Peter the ball.
 - Constructional meaning:
'Agent CAUSE Recipient TO HAVE Theme'

Syntax: Subject_{Agent} V Object1_{Recipient} Object2_{Theme}

Semantics: Agent CAUSE Recipient TO HAVE Theme

Field of research

- Constructional meaning can be polysemic
 - A central meaning + extensions
 - Example: the ditransitive construction (Goldberg 1995)



Field of research

- The source of constructional meaning
 - The lexical abstraction hypothesis (LAH)
“grammatical constructions may arise developmentally as generalizations over lexical items in particular patterns” (Goldberg 2006:92)
 - Constructional meaning = abstraction over the meaning of verbs occurring in a syntactic pattern
 - Supported by:
 - Experiments (Goldberg et al 2004)
 - Corpus studies (idem, Stefanowitsch & Gries 2003)

Field of research

- Consequence of the LAH
 - Verbal distribution in usage is a predictor of constructional meaning
 - Importance of 'basic purpose verbs'
 - Distributional bias => identified as prototype
 - Corresponds to the central meaning

Construction	Syntax	Central meaning	Most frequent verb
Ditransitive	Subj _X -V-Obj1 _Y -Obj2 _Z	X CAUSE Y TO HAVE Z	<i>give</i> (50%)
Caused-motion	Subj _X -V-Obj _Y -Obl _Z	X CAUSE Y TO GO Z	<i>put</i> (24%)
Intransitive motion	Subj _X -V-Obl _Y	X GO Y	<i>go</i> (32%)
Resultative	Subj _X -V-Obj _Y -Obl _Z	X CAUSE Y TO BECOME Z	<i>make</i> (40%)
Intransitive resultative	Subj _X -V-Obl _Y	X BECOME Y	<i>become</i> (38%)

(source: ICE-GB spoken)

Field of research

- Outline of my project:
 - Closer investigation of the relation between constructional meaning, lexical meaning and usage
 - Starting goal: enlarge empirical coverage of ASCs
 - Pilot study on the *at*-construction
 - Does not fully corroborate the LAH
 - Focus on the conative construction
 - Investigation of another factor plausibly influencing constructional meaning => alternations

Pilot study: the *at*-construction

- Pilot study: the *at*-construction
 - An argument of a two-participant verb is realized as a PP headed by *at*

“NP V *at* NP”
 - Usage-based perspective
 - Study of verbal distribution of the construction in corpora
 - Collexeme analysis: account of statistical significance

“strong collexemes of a construction provide a good indicator of its meaning” (Stefanowitsch & Gries 2003:227)
 - What does the LAH predict?

Pilot study: the *at*-construction

- The various uses of the *at*-construction
 - Visual perception of *at*-object: *look, stare, glance, ...*
 - Action oriented towards *at*-object
 - sound emission: *shout, yell, bark, whine*
 - facial expressions: *smile, grin, wince*
 - reaction to a stimulus: *grunt, moan, laugh*
 - Conative use: non-effective action

John kicked at the ball

Mary wiped at the counter

Bill shot at the sheriff

(vs. *John kicked the ball*)

(vs. *Mary wiped the counter*)

(vs. *Bill shot the sheriff*)

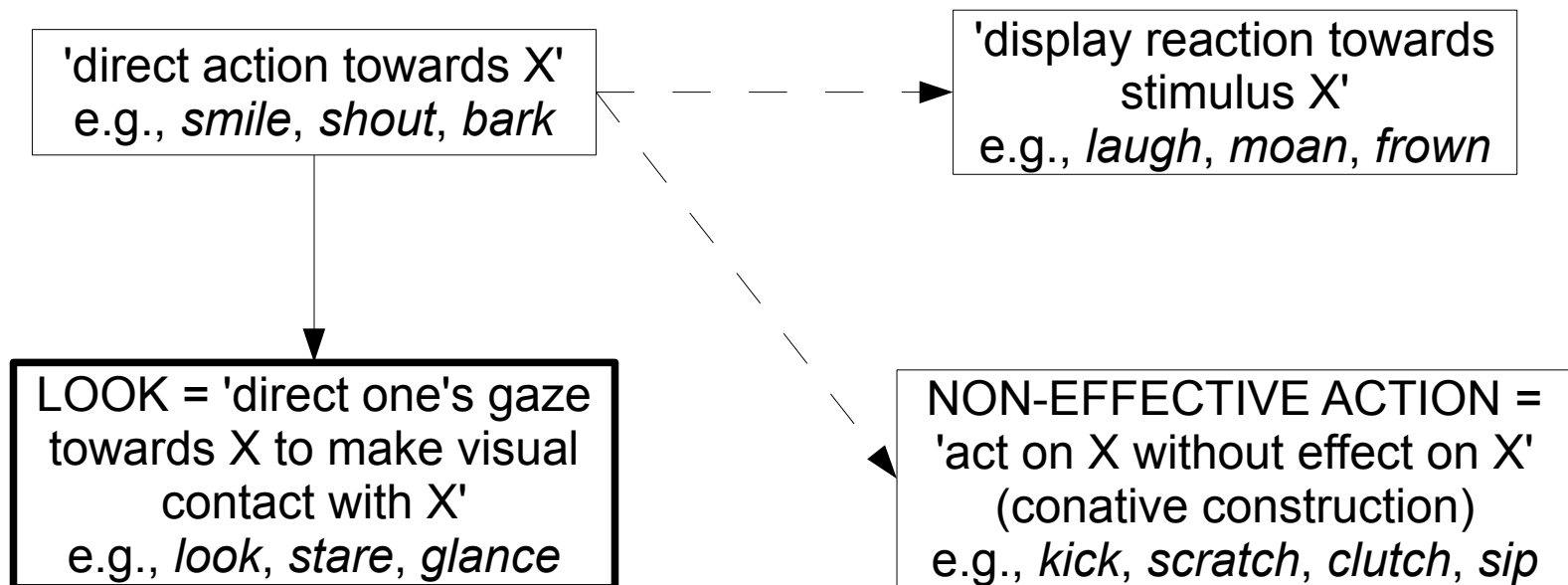
Pilot study: the *at*-construction

- The *at*-construction in use



Pilot study: the *at*-construction

- Suggested polysemy network (cf. Perek and Lemmens, to appear)



Theoretical implications

- A different network topology
 - The central meaning is unclear
 - Following the distribution, it should be 'look' (huge bias!)
 - But the meaning of 'visual perception' does not straightforwardly carry over to the other uses
 - A more abstract meaning is needed
 - => “directed action”
 - Less frequent but more productive



- Extensions more likely drawn from this abstraction

Theoretical implications

- Observations:
 - The study shows that the *at*-construction does not clearly support the LAH
 - It does however not disprove the view that lexical semantics is the 'fabric' of constructional meaning
 - But lexical abstraction is not the whole story
 - Probably the starting point
 - Other factors are yet to be identified and investigated

Theoretical implications

- A case in point: the conative uses
 - e.g., *I kicked at the ball*
 - No plausible lexical origin of its own
 - No verb lexicalizes the meaning 'non-effective action'
 - Few instances in the input anyway
 - Token/types: 6/5 in Manchester, 31/17 in BNC-conv
 - Still: a productive generalization, supports the idea of a constructional meaning
 - Where does the conative meaning come from?
 - Suggestion: the alternation with the transitive plays a role
 - Begs the question of the mental representation of alternations

The role of the conative alternation

- Alternations in construction grammar
 - “pairs of sentences with the same verb, related by paraphrase or subsumption” (Levin & Rappaport 2005)
 - e.g., the dative alternation:
I gave Mary a book vs. I gave a book to Mary
 - The surface generalizations hypothesis (Goldberg 2002)
 - “generalizations surrounding particular surface forms [...] are more broad than those captured by derivations or alternations” (p. 327)
 - Alternations are NOT part of the grammar
 - They supposedly have no influence on generalizations

The role of the conative alternation

- The conative construction stands out with the alternation behavior of its verbs
 - Directed-action construction: intransitive verbs
 - I looked at him vs. *I looked him vs. ?I looked*
 - I smiled at him vs. *I smiled him vs. I smiled*
 - I shouted at him vs. *I shouted him vs. I shouted*
 - Conative construction: transitive verbs
 - I clutched at it vs. I clutched it vs. *I clutched*
 - I tugged at it vs. I tugged it vs. ?I tugged*
 - I kicked at him vs. I kicked him vs. I kicked ?(out)*
- Is that a coincidence?

The role of the conative alternation

- Plausible motivating metaphor:
 - ACTION IS MOTION: transitive action = motion to a goal; cf. the billiard-ball model (Langacker 1987)
 - Analogy:
 - effective action ↔ target reached
 - non-effective action ↔ target not reached
 - This motivation involves the alternation



The role of the conative alternation

- The relevance of the transitive counterpart
 - Non-effective actions, but for various reasons
 - No contact *vs.* no effect *vs.* no intention
 - The transitive variant constrains the interpretation, e.g.:
 - *kick at a wall/door* => missed action is unlikely
 - *nibble at an apple* => always affectedness
 - Explicit contrast with the transitive is more informative than abstract meaning
 - Gricean reasoning: « why inserting *at* when a direct object would do the job? »
 - Better characterized as an operation on the transitive meaning

Conclusion and prospects

- Conclusion & prospects:
 - Reopens the constructions vs. alternations debate
 - Alternations seem to be needed at least in some cases
 - Both can be represented in CxG; a false dichotomy?
 - Essentially an empirical question
 - Need for empirical evidence
 - Still on-going corpus investigations
 - Experimental evidence; a first experiment: sorting task
 - Follow-up of Bencini and Goldberg (2000)
 - Q: are alternations a sorting dimension consciously available to speakers?
 - According to the results, other experiments should be planned (e.g., priming experiment)

Thanks for your attention!

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