# Minimalist construction grammar

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## 1. Setting the stage

(1)    Construction Grammar (Goldberg 2006, Croft 2001)

- analysis:      "All levels of grammatical analysis involve constructions: learned pairings of form [and meaning]" (Goldberg 2006:5)
  "Constructions are the basic units of syntactic representation" (Croft 2001:4)
- acquisition:    "Constructions are understood to be learned on the basis of the input and general cognitive mechanisms" (Goldberg 2006:12)

(2)    Minimalist (generative) grammar

- analysis:      "A key component of [the faculty of language] is a computational system that generates internal representations and maps them into the sensory-motor interface by the phonological system, and into the conceptual-intentional interface by the (formal) semantic system." (Hauser et al 2002:1571)
- acquisition:    application of the computational system to learned items (words); setting parameters in structure-to-order mapping and other spell-out rules (morphology)

(3)    Main difference: usage based learning vs. innateness (not discussed today)

(4)    Towards a reconciliation:
a.  minimalist approach to constructions: what is the structure of constructions?
b.  constructionist approach to minimalism: what is a construction in minimalist grammar?

## 2. Constructions and derivations

(5)    Catalogue of constructions (Goldberg 2006:5)

|  | filled | partially filled | schematic |
|---|---|---|---|
| morpheme | *-ing* | | |
| word | *avocado* | | |
| complex word | *daredevil* | N-*s* | |
| idiom | *going great guns* | *jog* X's *memory* | |
| covariated | | *the* Xer *the* Yer | |
| ditransitive | | | Subj V IO DO |

(6)    "All verbs are to some extent phrasal idioms, that is, syntactic structures that must be learned as the conventional 'names' for various dynamic events." (Hale & Keyser 1993:96)

(7)     Lexical decomposition: a verb is the result of **conflation** of various elements in a syntactic structure (acategorial root, agentive element, phrase structural head)

(8)     Opposition between **words** and **phrases** is artificial

(9)     Ultimately: a lexical item is defined relative to a derivation, i.e. a single element within a single numeration

(10)    NUMERATION    >    DERIVATION    >    INTERFACES
        *list of items        merge items        spell-out*

(11)    A construction is an item in a numeration N,
                    **which may be the output of a previous derivation**
        and therefore shows  a)  regular structure
                             b)  idiosyncratic sound-meaning properties
                             c)  opacity in the context of the derivation building on N


## 3.  Constructions are real

(12)    a.  hij is **een beetje** ziek          *een beetje*: formally NP, used as Degree element
            he is a little bit sick
        b.  hij eet altijd **van die** koekjes      *van die X*: formally PP, used as Determiner
            he eats always of those cookies = that familiar type cookies
        c.  een **bij de hand**-e knaap          *bij de hand*: formally PP, used as Adjective
            a by the hand guy = smart guy
        d.  een **verre van** eenvoudige oplossing     *verre van X*: formally AP, used as Neg-Det
            a far from simple solution

(13)    intuitive criteria for distinguishing words and phrases

|    | *word* | *phrase* | **een beetje** | **van die** | **bij de hand** | **verre van** |
|----|--------|----------|----------------|-------------|-----------------|---------------|
| a. | atomic | molecular | both | both | both | both |
| b. | meaning opaque | meaning transparent | both | word | word | both |
| c. | formed in morphology | formed in syntax | phrase | phrase | phrase | phrase |
| d. | learned | created | word | word | word | word |
| e. | paradigm | no paradigm | phrase | phrase | word | phrase |
| f. | contiguous | separable | phrase | word | word | word |
| g. | no internal movement | internal movement | word | word | word | word |
| h. | integrity | no integrity | word | word | word | word |
| i. | word-level prosody | clause-level prosody | phrase | phrase | phrase | both |
| j. | construction obscure | construction clear | phrase | word | phrase | phrase |

(14)    Every numeration has **structured items**

(15) Not just idioms/grammaticalized phrases but also:
- adjuncts
- opaque clauses (incl. nominalizations)
- conflated lexical items (transitive verbs)
- incorporation structures
- clusters/complex predicates
- etc.

## 4. The origin of structured items

(16) How do structured items end up in a numeration?

(17) **layered derivations**

DERIVATION 1

| NUMERATION | DERIVATION | INTERFACES |
|---|---|---|
| { een, beetje } | [ een [ beetje ]] | / een beetje / meaning: **somewhat** category: Deg |

DERIVATION 2

| NUMERATION | DERIVATION | INTERFACES |
|---|---|---|
| { hij, is, [een beetje], ziek } | [ hij [ is [ [een-beetje] [ ziek ]]]] | / hij is een beetje ziek / |

(18) Layered derivations are independently needed for noncomplements

*no layered derivation*

NUMERATION {the, man, hit, the, ball}

DERIVATION [ the [ man [ hit [ the [ ball ]]]]]
*wrong constituents*

*layered derivation* { [the man], hit, the, ball } [ [the-man] [ hit [ the [ ball ]]]]
*right constituents*

(19) VP/complement *may/may not* be output of layered derivation

{ he, kicked, the, bucket } > [ he [ kicked [ the [ bucket ]]]] *nonidiomatic*
{ he, [kicked the bucket] } > [ he [ [kicked-the-bucket] ]] *idiomatic*

(20) No conflict between the minimalist computational system and the idea that 'it's constructions all the way down':

"Both [constructionist and generative] approaches acknowledge that there must be a way to combine structures to create novel utterances." (Goldberg 2006:4)

## 5. Schematic constructions

(21) partially schematic: *pull* X's *leg*, *take* X *to the cleaners*, *the* COMP X *the* COMP Y
fully schematic: inversion, double object construction, passive construction, etc.

(22) *Idioms/constructions allow for variation:*
a.   He kicked the **proverbial** bucket
b.   een **klein** beetje ziek
     a small little-bit sick   'a tiny bit sick'

(23) Interface: point of connection between productive process and stored knowledge

(24) Morphology:   PRODUCTIVE PROCESS        STORED KNOWLEDGE
                   go+PAST                   = went/ging
                   be+2SG                    = are/bent
(25) Semantics:    kick the bucket           = die
                   een beetje                = somewhat

(26) Relevant cognitive ability: categorization (Jackendoff 1983:78, Croft 2001:52)
     = interpretation of *x* as a **token** of **type** *y*

(27) Construction grammar: essential part of the acquisition of fully schematic constructions
     (I don't know about that)
     Here: the process that allows us to deal with variation in constructions (including inflectional paradigms)

(28) *een klein beetje*        is a token of the type   *een beetje*   =   somewhat
     *(you're) pulling my leg*  is a token of the type   *pull X's leg*  =   tease, fool

(29) No need for funny trees (cf. Svenonius 2005)

(30) Room for playful use of idioms
     *I'm putting all my eggs in one basket*
     *I'm putting all my chips in one basket (casino)*
     *I'm putting most of my eggs in one basket*
     *I'm not putting any eggs in any baskets*



(31) Why no nonconstituent idioms?   *give X the creeps* vs. *V IO:FIXED DO:OPEN*
     > original type must be a constituent without (nonembedded) open positions

(32) Partially schematic constructions:   *the more I love you, the more I want you*
     ● regular merge with discontinous item *the--the*, comparative = dependency marking
     ● clauses are outputs of separate derivations, result is token of type *the-COMP-the-COMP*

(33) Fully schematic constructions:   productive/creative interpretation of regular structure
                                      not clear anything more (e.g. type PASSIVE) is needed

**Conclusion**:   minimalist generative grammar and construction grammar complement each other

**References** Croft 2001 *Radical construction grammar* OUP ● Goldberg 2006 *Constructions at work* OUP ● Hale & Keyser 1993 On argument structure and the lexical expression of syntactic relations. In *The view from building 20*, MIT Press ● Hauser/Chomsky/Fitch 2002 The Faculty of Language: what is it, who has it, and how did it evolve? *Science* 298, 1569-1579 ● Svenonius 2005  Extending the Extension Condition to discontinuous idioms *Linguistic Variation Yearbook* 5: 227-263 ● Zwart 2008. Prospects for top-down derivation (http://ling.auf.net/lingBuzz/000802)

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