

# Construction Morphology

Geert Booij



Word formation patterns can be seen as abstract schemas that generalize over sets of existing complex words with a systematic correlation between form and meaning.

$[[x]_V \textit{er}]_N$  ‘one who Vs



**“In Construction Grammar, the grammar represents an inventory of form-meaning-function complexes, in which words are distinguished from grammatical constructions only with regard to their internal complexity. The inventory of constructions is not unstructured; it is more like a map than a shopping list. Elements in this inventory are related through inheritance hierarchies, containing more or less general patterns.” (Michaelis and Lambrecht 1996: 216)**



# Ingredients of Construction Morphology

Both individual complex words and abstract generalizing schemas are part of the lexicon;

Hierarchical lexicon with layers of subgeneralizations;

Paradigmatic relations between (sets of) complex words can be expressed;

Constructional meanings

Word formation patterns are constructional idioms at the word level, and individual complex words are hence word-level constructs.

Default inheritance



hoofd-ingang  
head entrance  
'main entrance'

hoofd-bezwaar  
head objection  
'main objection'

$[[a]_X [b]_Y]_Y$

:

$[[a]_N [b]_N]_N$

:

$[[\text{hoofd}]_N [b]_N]_N$  'main x'



## *Semantic concentration*

scharrel-kip

scharrel-vlees

scratch-chicken

scratch-meat

‘free range chicken’

‘free range meat’

(5)  $[[\text{scharrel}]_V[\text{x}]_N]_N$  ‘free range x’



## *Intensifyier prefixoids*

reuze- ‘giant’                      reuze-leuk ‘very nice’, reuze-slim ‘very smart’

wereld- ‘world’ wereld-meid ‘fantastic girl’, wereld-vrouw ‘fantastic woman’

Repetitive coordination: *in- en in-triest* ‘very sad’, *dood- en dood-ziek* ‘very ill’

Noun Prefixoid > Adjective: reuze







# Affixoids are constructional idioms;

[[**reuze**]<sub>N</sub>[**x**]<sub>A</sub>]<sub>A</sub> ‘very x’

[[**x**]<sub>N</sub> [**baron**]<sub>N</sub>]<sub>N</sub> ‘rich dealer in x’



# Constructional idioms in Japanese: *suru*- compounding (Kageyama 1982)

kenyuu-suru

research-do

‘to do research’

hoo-bei-suru

visit-USA-do

‘to visit the USA’

saikuringu-suru

cycling-do

‘to cycle’



[VN] [*suru*]<sub>V</sub>]<sub>V</sub> ‘to perform the act denoted by VN’

Variants of *suru*:

*dekiru* ‘to be able to do’

*nasaru* (honorific)

*itasimasu* (humble form)



# Lexical prefixes in Japanese

dai- ‘big’, oo- ‘big’, tyuu- ‘middle’, syoo- ‘small’, ko- ‘small’, koo- ‘high’ tei- ‘low’, sin- ‘new’, ko- ‘old’, huru- ‘old’, zyuu- ‘haevy’, kei- ‘light’, tyoo- ‘long’, tan- ‘short’, kyuu- ‘sudden’, bi- ‘beautiful’, aku- ‘bad’, koo- ‘good’, etc. (Kageyama 1982: 226):



## Paradigmatic word formation

### (7) *deverbal noun*

arbeid-ster 'female labourer'

spreek-ster 'female speaker'

werk-ster 'charwoman'

zwem-ster 'female swimmer'

### *deverbal noun*

arbeid-er 'labourer'

sprek-er 'speaker'

werk-er 'worker'

zwemm-er 'swimmer'

### Idiomatic meaning, recurs in female derivative

(8) bet-wet-er 'lit. better knower, pedant'

bet-weet-ster  
'female  
pedant'

pad-vind-er 'lit path finder, boy scout'

pad-vind-ster  
'girl scout'



# Agent nouns without base word

- (9) rederijk-er 'rhetorician'  
rederijk-ster 'female rhetorician'  
reizig-er 'traveler' reizig-ster  
'female traveler'
- (10)  $[X - er]_{N_i}$  'human agent'  $\leftrightarrow$   
 $[X - ster]_N$  'female  $N_i$ '



## Short cuts and template conflation

$$(11) [\text{un-A}]_A + [\text{V-able}]_A = [\text{un}[\text{V-able}]_A]_A$$

unputdownable / ?putdownable

uncomeatable / ? comeatable

unsayable / ?sayable

unmentionable / ? mentionable

unbeatable / ? beatable



[*de* [[N] *ate*]<sub>V</sub>]<sub>V</sub>

[*de* [[x] *ize*]<sub>V</sub>]<sub>V</sub>

(possible words as intermediate step)

*noun*

*verb*

caffeine

decaffeinate

moral

demoralize

nuclear

denuclearize

Stalin

destalinize





## *Participia praeverbalia (pre-verbal participles) in Dutch*

- |                 |                      |
|-----------------|----------------------|
| a. tand ‘tooth’ | ge-tand ‘toothed’    |
| tak ‘branch’    | ge-tak-t ‘branched’  |
| spits ‘point’   | ge-spits-t ‘pointed’ |
| b. rok ‘skirt’  | kort-ge-rok-t        |
| ‘short-skirted’ |                      |
| jas ‘coat’      | wit-ge-jas-t ‘white- |
| coated’         |                      |



# breed-ge-schouder-d ‘broad-shouldered’

N to V conversion	$[[x]_N]_V$
Past participle conversion	$[ge [x]_V t/d]_V$
AA compounding	$[[ge [x]_V t/d]_V]_A$
	$[[x]_A[x]_A]_A$

Left A has scope over base N- of right A

$[[breed]_A[[ge[[schouder]_N]_Vd ]_V]_A]_A$



*Embedded productivity.* In Germanic NV compounding is not productive, but Dutch NV compounding is productive within VN compounds:

(16) [[[aardappel]<sub>N</sub>[schil]<sub>V</sub>]<sub>V</sub>[mesje]<sub>N</sub>]<sub>N</sub> ‘lit. potato peel knife, potato peeler’

[[[brand]<sub>N</sub>[blus]<sub>V</sub>]<sub>V</sub>[installatie]<sub>N</sub>]<sub>N</sub> ‘lit. fire extinguish installation, fire extinguisher’

[[[koffie]<sub>N</sub>[zet]<sub>V</sub>]<sub>V</sub>[apparaat]<sub>N</sub>]<sub>N</sub> ‘lit. coffee make machine, coffee maker’

Morphological idiom [[NV]<sub>V</sub> N]<sub>N</sub>



brand-bluss-er ‘fire extinguisher’

gif-meng-er ‘poison mixer, poisoner’

kinder-verzorg-ster ‘children’s care worker  
(fem.)’

kranten-bezorg-ster ‘newspaper deliverer  
(fem.)’

kinder-verzorg-ing ‘child care’

tempel-reinig-ing ‘temple cleansing’

[[[N][V]]<sub>V</sub> er]<sub>N</sub>

[[[N][V]]<sub>V</sub> ster]<sub>N</sub>

[[[N][V]]<sub>V</sub> ing]<sub>N</sub>



# Construction-dependent morphology: morphological elements as markers of constructions

## *Determiner genitive*

(19) Jan-s hoed ‘John’s hat’

Amsterdam-s rijke verleden ‘Amsterdam’s rich  
history’

ieder-s huis ‘everybody’s house’

iemand-s vriend ‘someone’s friend’

koning Salomo-s reputatie ‘king Solomon’s  
reputation’



## *The Determiner -s Construction*

[[ ... [N-s]]<sub>NP<sub>i</sub></sub> N<sub>j</sub>]<sub>NP</sub> ‘the N<sub>j</sub> of NP<sub>i</sub>’

Condition: NP<sub>i</sub> is

- a (simplex or complex) proper name, or,
- a (pro)noun denoting human beings (the noun must be preceded by a definite article or possessive pronoun).



# Partitive -s Construction

$[\text{NP } [\dots [\text{x-s}]_A]_{\text{AP}}]_{\text{NP}}$  ‘an indefinite quantity<sub>N</sub> with the property expressed by the AP’



## Conclusions

word formation schemas can be conceived of as constructional idioms, and complex words as constructs instantiating these constructional idioms;

both complex words and abstract schemas form part of a hierarchical lexicon;

in this conception of the lexicon we can account for the rise of affixes from compounds, effects of paradigmatic relationships between words, the co-occurrence of word formation processes, and embedded productivity;

the distribution of morphological forms requires constructional schemas in which morphological markers are specified.

