Implications of the Danish definiteness alternation for concord in Nanosyntax

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Overview

In a nutshell, this poster makes the following arguments:

- Multiple Merge (Caha, 2019), the highly restrictive state of the art in Nanosyntax for handling concord, cannot handle the Danish definiteness alternation
- We can handle the data (including its structural allomorphy) quite elegantly if we use the less restrictive formulation of prefix workspace closure in Starke (2018) and the substantially less restrictive copying agreement mechanism from Taraldsen (2010)
- Nanosyntax's prediction of "last resort" prefixes is borne out
- We need to find a balance between restrictiveness and expressiveness for Nanosyntax, e.g. by revising Multiple Merge to be more flexible (but less flexible than Taraldsen, 2010)

Nanosyntax: prefixes, suffixes and Multiple Merge

Nanosyntax is characterized by two claims:

- There is a universal merge order of functional features, and a succinct universal algorithm for how they merge
- Lexical entries spell out phrases (trees of features)

To analyze the Danish data, we will draw on the following mechanisms:

- Suffixes are default, prefixes are a "last resort" (Starke, 2018)
- Disagreement on limits to prefix construction, specifically prefix workspace closure:
  - Immediate workspace closure (Caha, 2019)
  - Late closure (Starke, 2018)
  - Allow multiple features but only single morphemes (Caha et al., 2019)

  (Caha, 2019; Starke, 2018; Caha et al., 2019)
- Multiple Merge (Caha, 2019) allows concord (multiple expression of a feature) and multi-morpheme prefixes
- Crucially, Multiple Merge allows a concord feature F (case, gender, ...) to "skip" an intervening adjective in the configuration [F [A N]] and be expressed on the noun N

Note that in Nanosyntax, any material that is generated on the left (in specifier position) is considered a prefix, even if it is not a traditional affix.

The Danish definiteness alternation

Danish noun phrases show structural allomorphy between a definiteness suffix and a freestanding definiteness marker, depending on the presence of an adjective (Hankamer and Mikkelsen, 2018). We also observe concord between the noun and definiteness marker:

(1) a. kant-**en**
edge-DEF
`the edge'

b. *den kant
DEF edge
≈ `the edge'

(2) a. *skarpe kant-en
sharp edge-DEF
≈ `the sharp edge'

b. **den** skarpe kant
DEF sharp edge
`the sharp edge'

(3) a. kant-**en**
edge-DEF.SG.C
`the edge'

b. **den** skarpe kant
DEF.SG.C sharp edge
`the sharp edge'

(4) a. hus-**et**
house-DEF.SG.N
`the house'

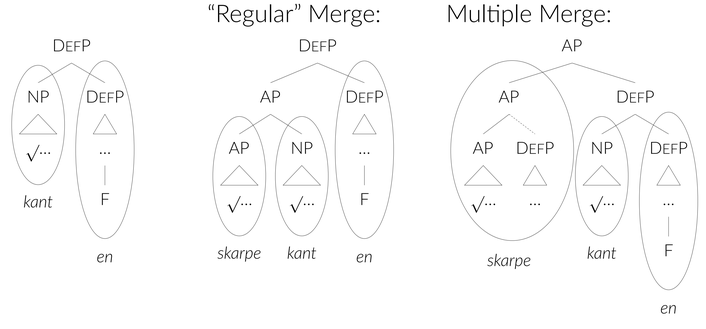
b. **det** store hus
DEF.SG.N big house
`the big house'

Glosses: DEF = definite, C = common gender, N = neuter gender

Note the commonality of form between *-en/den* and *-et/det*: we would like to explain this by analysing this as *d-en/-et* (a multi-morpheme "prefix").

Problems with Multiple Merge

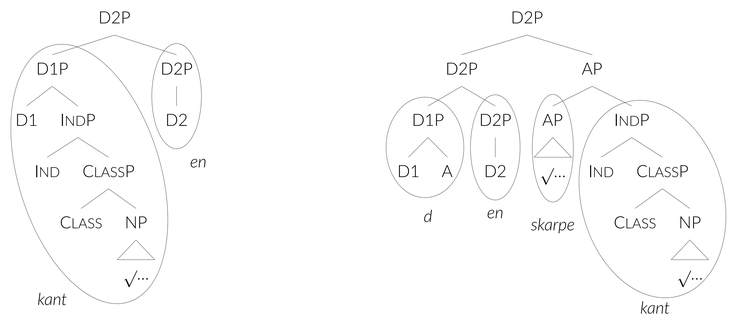
Given a derivation of *kant-en* with *-en* footed in some feature F, Multiple Merge only triggers if F is merged before the adjective but DEF is merged after (otherwise, we merge regularly and get *[skarpe kant]-en*). However, because Multiple Merge can skip the adjective, we still get *skarpe [kant-en]*.



Furthermore, without Multiple Merge, there is no way to yield *d-en/et* as a multi-morpheme prefix under Caha (2019).

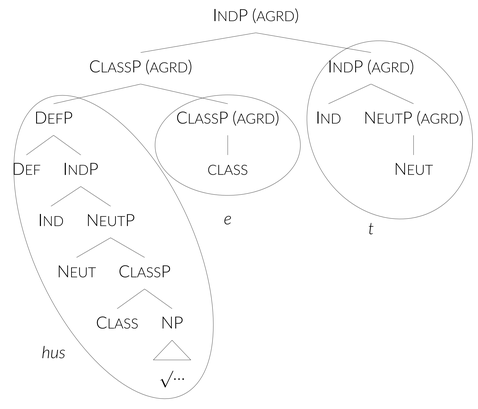
Definiteness alternation with late workspace closure

We decompose definiteness into two heads, provisionally D1 and D2. The noun spells out D1 unless an AP intervenes, which instead triggers building the prefix *d-en* – provided we assume late prefix workspace closure (Starke, 2018), which allows D2P to suffix to D1P while still in the prefix workspace.



Handling concord with Taraldsen (2010)

We interpret D1 as DEF and D2 as a placeholder feature AGRD which, using Taraldsen's copying agreement, copies CLASS, NEUT (if present) and IND.



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