Semi-lexicality, or, how to grammaticalise a root

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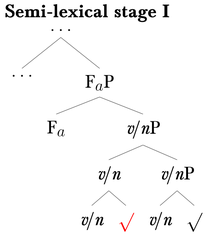
Main proposal: two stages of semi-lexicality

Main question: how do we analyse elements that show both functional and lexical properties, i.e. 'semi-lexical' elements?

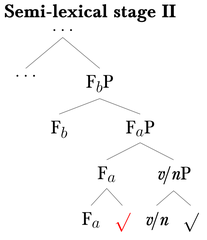
Theoretical assumptions:

1. A lexical item is a featureless root; a functional item is a (bundle of) functional feature(s) (Halle & Marantz 1993; Harley & Noyer 1999; Borer 2005a);
2. Semi-lexicality is the result of a root being inserted in the functional domain of another root (Klockmann 2017; Cavirani-Pots 2020; Cavirani-Pots et al. 2021; see also Song 2019);
3. *v* and *n* a mere categorizers of roots, not introducing any arguments (Kratzer 1996; Lin 2001; Marantz 2005; Bowers 2010; Lohndal 2014; cf. Borer 2005b).

(1) **Semi-lexical stage I**



(2) **Semi-lexical stage II**



→ The red root is the semi-lexically used root.

Semi-lexicality is the result of grammaticalisation:

Lexical > semi-lexical st. I > semi-lexical st. II > functional

Today's empirical domain: Dutch verbs

Lexical verbs select a *te*-complement:

(3) Hij heeft **besloten** ***te werken***.
he has decided to work
'He decided to work.'

Functional verbs never do:

(4) Hij heeft **moeten (*te)** ***werken***.
he has must to work
'He had to work.'

Verbs like *hoeven* 'need' do so optionally:

(5) Hij heeft niet **hoeven (te)** ***werken***.
he has not needed to work
'He didn't need to work.'

→ *Hoeven* adds modality.

Main empirical observation:
Hoeven shows different morphosyntactic behavior compared to both functional and lexical verbs.

Main gist of the analysis
Hoeven is a semi-lexical verb, which is grammaticalising from stage I of semi-lexicality into stage II.

The data

Based on a large-scale questionnaire study (459 speakers):

Low-*te*

(6) Hij zal morgen niet **hoeven**$_1$ ***te werken***$_2$.
he will tomorrow not need to work
'He won't need to work tomorrow.' 46,8%

High-*te*

(7) Hij zal morgen niet ***te*** **hoeven**$_1$ ***werken***$_2$.
he will tomorrow not to need work
'He won't need to work tomorrow.' 19,3%

***Te*-drop**

(8) Hij zal morgen niet **hoeven**$_1$ ***werken***$_2$.
he will tomorrow not need work
'He won't need to work tomorrow.' 22,4%

***Te*-doubling**

(9) Hij zal morgen niet ***te*** **hoeven**$_1$ ***te werken***$_2$.
he will tomorrow not to need to work
'He won't need to work tomorrow.' 7,1%

High degree of intraspeaker variation: 139 speakers allow 2 versions, 96 speakers allow 3 versions, 29 speakers allow 4 versions.

Prerequisites for the analysis

Three theoretical prerequisites:

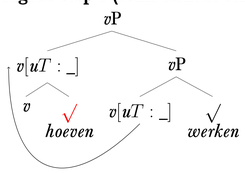
1. Every verbal head enters the derivation with a unvalued [*u*T]-feature; every functional verbal head has a valued [*i*T]-feature corresponding to its semantic interpretation (e.g. *v*: [*u*T:_], Mod: [*i*T:Mod], Wurmbrand 2012);
2. Only *v* can spell out *te*, and only when its [*u*T]-feature has been valued for [irrealis];
3. Verbal feature valuation in Germanic is the result of Reverse Agree (Wurmbrand 2012).

The analysis: *Hoeven* in semi-lexical stage I

Root *hoeven* is used to add modality of (absence of) necessity; Dutch has no formal means yet to add this functional information.

In stage I (cf. (1)), the semi-lexical root is merged with a verbaliser, and then inserted low in the functional structure of the other root.

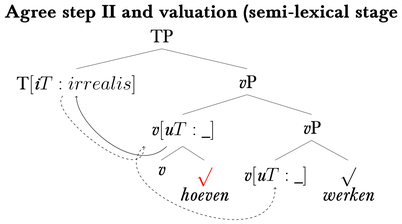
(10) **Agree step I (semi-lexical stage I)**



[*u*T] on the lower *v* probes up and Agrees with [*u*T] on the higher *v*.

No valuation is possible, but a feature link is established (cf. Pesetsky & Torrego 2007; Haegeman & Lohndal 2010).

(11) **Agree step II and valuation (semi-lexical stage I)**



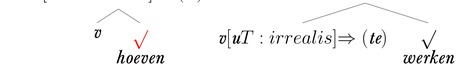
T is Merged, and comes with an [*i*T]-feature valued for [irrealis] (due to modal *zal* 'will' in V2 (cf. (6-9)).

[*u*T] on the higher *v* probes up and Agrees with [*i*T] on T.

Since the two [*u*T]'s in the structure Agreed before and formed a feature chain, they both get valuated for [irrealis].

Based on both [*u*T]-features present in the structure being valuated for [irrealis], we expect *te* to be spelled out twice: i.e. ***te*-doubling**.

(12) **Spell out (semi-lexical stage I)**



→ Why is *te*-doubling not the only option (and in fact the least common option)?

Proposal: spelling out only one of the valued [*u*T]-features of the feature chain of both *v*'s suffices at PF (and is fact preferred).

Given that both the higher *v* position and the lower *v* position can be used to spell out [*u*T:irrealis], we find both **high-*te*** and **low-*te***.

Furthermore, since the choice for spell out is arbitrary, we expect a high degree of intraspeaker variation, which is indeed the case.

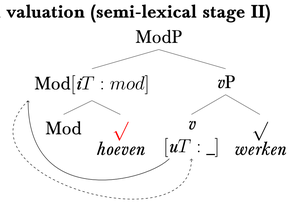
→ What about *te*-drop?

The analysis: *Hoeven* in semi-lexical stage II

Van de Velde (2017) shows that over the last 50 years, *hoeven* is rapidly occurring more without *te* than with *te*.
V → *Hoeven* is grammaticalising into stage II of semi-lexicality.

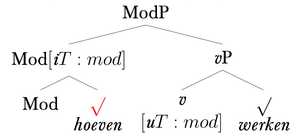
In stage II (cf. (2)), *hoeven* is merged with a functional head Mod, and then inserted in the functional projection.

(13) **Agree and valuation (semi-lexical stage II)**



The [*u*T]-feature on *v* probes up, and finds the [*i*T:Mod]-feature on Mod: the [*u*T]-feature on *v* gets valued for *Mod*.

(14) **Spell out (semi-lexical stage II)**



[*u*T:Mod] on *v* cannot be spelled out as *te*: *werken* 'work' gets spelled out as a bare infinitive.

I.e. in the second stage of semi-lexicality *hoeven* uniformly shows ***te*-drop**.

Conclusion

High degrees of morphosyntactic variation and optionality of semi-lexical items can be accounted for by assuming two stages of semi-lexicality, with different underlying syntactic structures.

Outlook

In Cavirani-Pots (2020), I extend this analysis to the semi-lexical use of *zitten* 'sit'. This verb adds aspectual information (progressive/durative aspect) and shows a high degree of variation in the presence and position of *te*:

(15) Hij zal wel weer **(*te*) zitten**$_1$ **(*te*) *werken***$_2$.
he will aff again to sit to work
'He is probably working again.'

→ The variation regarding *te* can be explained if we assume *zitten* is grammaticalising from stage I of semi-lexicality into stage II.

Selected references

•**Cavirani-Pots**, C. 2020. *Roots in Progress. Semi-lexicality in the Dutch and Afrikaans verbal domain.* Amsterdam: LOT Dissertation Series. •**Cavirani-Pots**, C., **De Belder**, M. and **Klockmann**, H. 2021. Semi-lexicality: Syntax or lexicon? Talk to be presented at GLOW 44 (April 15 2021). •**Klockmann**, H. 2017. *The design of semi-lexicality. Evidence from Case and Agreement in the nominal domain.* Utrecht: LOT Dissertation Series. •**Wurmbrand**, S. 2012. Parasitic participles. Evidence for the theory of verb clusters. *Taal en Tongval* 64: 129–156.

Acknowledgments

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