

AUXILIARY DOUBLING AND THE SYNTAX-PF INTERFACE

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In this talk we report on empirical research conducted on dialects of Dutch which possess doubling of an auxiliary in compound tenses, as in (1b).

- (1) a. Ik heb vandaag nog niet gerookt. *Standard Dutch*
I have today yet not smoked
b. Ik heb vandaag nog niet gerookt gehad. *Dialectal Dutch*
I have today yet not smoked had
'I have not smoked yet today.'

We argue that, underlyingly, all varieties of Dutch construct a verbal cluster of the type in (1b) to form compound tenses. Whether the participial auxiliary is spelled out or not is a decision made at the interface between syntax and PF. We propose that *gehad* is not spelled out if its formal features (i.e. [auxiliary] and [participle]) are locally redundant, i.e. expressed by other heads in the same local domain. The way PF makes the decision, we suggest, is uniform across dialects, but the syntactic input it receives varies considerably, since the syntax of verbal clusters is subject to substantial variation within Germanic.

On the basis of the empirical research we conducted, we discard two analytical options for the phenomenon as manifested in Dutch dialects: one is that perfect doubling makes a semantic contribution (reference to remote past, pluperfect semantics) lacking in the non-doubling version (e.g. Carruthers 1994, Poletto 2006). The other analytical possibility is that perfect doubling is the perfect tense of the so-called undative possessive construction (cf. Broekhuis & Cornips 1994), as in (3).

- (2) a. Ik heb de broek gewassen. *Heerlen Dutch*
I have the trousers washed
'I have a clean pair of trousers.'
b. Ik **heb** de broek gewassen **gehad**.
I have the trousers washed had
'I have had a clean pair of trousers.'

As we show, the geographic distribution of perfect doubling and the undative construction does not show the overlap expected under such an approach.

In the spirit of Vikner (1985), Zagona (1988), Hornstein (1990), Giorgi & Pianesi (1991), Cinque (1999), we assume the existence of two T-heads, one denoting the relation between utterance and reference time, and one between reference and event time. In all varieties under investigation, both T-heads are syntactically present in a perfect tense. The basic structure is one in which the higher auxiliary selects the lower one, and the lower one selects the lexical verb. This results in the standard Dutch 1-2-3 word order. For the doubling construction, the dialects under consideration display either a 3-2-1 or a 1-3-2 order, derived by movement of VP into specTP2 (1-3-2, Eksel dialect) followed by movement of TP2 into specTP1 (3-2-1, Bosvoorde dialect). At PF the following choices are made:

- (3) a. Only spell out the highest copy of a chain (i.e. ignore lower copies).
b. Do not spell out terminals with locally redundant features.

The locality that (3b) makes reference to is the prosodic phrase, which is computed on the basis of Selkirk's (1986) mapping algorithm which aligns right boundaries of syntactic XPs with prosodic phrase boundaries.

- (4) Selkirk (1986): Close a prosodic domain when encountering ...XP]

Recoverability of the deleted participle is ensured if the features [+aux] and [+part.] are also expressed by the finite auxiliary and lexical participle respectively within the same domain.

When the order of the cluster is 1-2-3, all verbal elements map onto a single prosodic phrase (cf. 5a'). The features of *gehad* are then locally redundant, hence this auxiliary is not spelled out. In the dialects, however, the roll up movements create additional prosodic boundaries, hence the features of *gehad* are no longer locally recoverable (cf. 5b'/5c'). Hence, the participial auxiliary is expressed.

- (5) a. [TP₁ heb [TP₂ gehad [VP gerookt]]] = 1-2-3
 a'. { heb ~~gehad~~ gerookt }
 b. [VP₁ [TP₂ [VP₃ gerookt] gehad t₃] heeft [TP₂ t₂ [VP t₃]]]] = 3-2-1
 b'. { gerookt } { gehad } { heeft }
 c. [TP₁ heb [TP₂ [VP gerookt] gehad t_{VP}]] = 1-3-2
 c'. { heb gerookt } { gehad }

On this analysis, the fact that one auxiliary surfaces as a participle follows from it being selected by an auxiliary. This fact cannot be easily captured by an alternative theory that would postulate only one auxiliary and treat the doubling effect in terms of multiple spell out of a chain, in the spirit of Nunes (2004). In the remainder of the talk we address the consequences of our analysis. We predict that Dutch varieties with a 3-2-1 cluster order should display perfect doubling. This is not correct for e.g. Frisian. We show that the full spectrum of variation can be captured by acknowledging that the mapping from syntax to phonology comprises several stages (Nespor & Vogel 1986) and that the computation of locally redundant features is parametrized, in that it takes place at these different stages in this mapping. Another prediction is that a 1-2-3 order will usually constitute (part of) a prosodic domain so that no doubling is expected. This seems to be correct for languages like standard English, French and Italian. We show that in 1-2-3 varieties that nevertheless do have perfect doubling, the semantics of these constructions goes beyond that of a present perfect, so that deletion of the participial auxiliary makes this semantics unrecoverable from the input. We show that this is correct for varieties like Franco-Provençal (Carruthers 1994) and Northern Italian dialects (Poletto 2006).

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