

## Microvariation as a Consequence of Context-Sensitive Spell-Out

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1. This paper deals with a type of morphological microvariation that can be exemplified with second person singular verbs in Dutch. These normally show a *-t* agreement ending (1a), but when there is subject-verb inversion the verb shows up in first person singular form, ending in (1b). However, this alternation is triggered only when verb and subject are adjacent; if not, the regular ending is used (1c).

- (1) a. Zelfs jij gaat/\*ga volgens mij op de heetste dag van het jaar naar het park  
*even you goes according-to me on the hottest day of the year to the park*  
b. Volgens mij \*gaat/ga zelfs jij op de heetste dag van het jaar naar het park  
c. Volgens mij ?gaat/\*ga op de heetste dag van 't jaar zelfs jij naar het park

This kind of morphological alternations triggered by certain XPs immediately following a particular head turn out to be rather common cross-linguistically, although at the same time the instantiations of the pattern seem to be highly language-specific.

2. The alternation in (1) is unexpected if agreement is a purely syntactic phenomenon. The problem is that it is conditioned by linear adjacency to a preceding head. However, adjacency seems to be a concept alien to syntax: this module is supposed to deal with hierarchical relationships rather than strictly linear ones. Hence, syntactic approaches to this type of phenomenon must claim that independently motivated structural conditions happen to have the adjacency effect as a by-product. An alternative account would involve PF, the interface level between syntax and phonology. PF deals with matters of linear order by its very nature, and it therefore provides a natural locus for the analysis of apparently syntactic adjacency conditions. In this talk we argue that PF accounts indeed provide more insight into data of the type in (1).

3. Phonology is not just a derivational continuation of syntax, but an independent generative system. This implies that a set of mapping rules between syntax and phonology must be formulated at PF. Such rules state that certain elements in the syntactic representation correspond to certain other elements in the phonological representation. For example, boundaries of certain syntactic categories are aligned with boundaries of certain phonological categories (Selkirk 1986, Truckenbrodt 1995). In the languages we discuss the right edges of syntactic XPs correspond to the right edges of prosodic phrases. The mapping rule stating this is given in (2), where  $\sigma$  is a mapping function.

- (2)  $\sigma([XP]) = \}$

A second type of mapping rule must be adopted for lexical items (cf. Jackendoff 1997). For example, the syntactic feature bundle [D, 3<sup>rd</sup> person, singular, feminine, accusative] corresponds to the phonological form /her/ in English:

- (3)  $([D, 3rd, sg, fem, acc]) = /her/$

4. Some lexical spell-out rules are context-sensitive (see also Halle & Marantz's (1993) discussion of 'conditioned allomorphy'). In other words, next to general mapping rules of the format in (4a), there can be mapping rules of the format in (4b) (where Dom is some local phonological domain).

- (4) a.  $(A) = /a/$   
b. In  $[_{Dom} (A), (B)]$ ,  $(A) = /a'/$

The rule in (4b) states that a syntactic feature bundle A receives a special spell-out if a feature bundle B is realized within the same domain. The rules in (4a) and (4b) stand in an elsewhere relation, with the more specific rule in (4b) taking precedence over the general rule in (4a) if its structural description is met. In this talk we explore rules of the type in (4b) with Dom specified as the prosodic phrase. If a language forms phonological phrases in accordance with (2), a special spell-out rule can only apply if the XP that carries feature bundle B immediately follows the head that carries feature bundle A. In other contexts, head and XP are not realized in the same prosodic phrase, which means that only the general spell-out rule in (4a) can apply.

5. Consider the prosodic phrasing of the Dutch examples in (1), as determined by (2):

- (5) a. {Zelfs jij} {gaat volgens mij} {op de heetste dag van 't jaar} {naar het park}
- b. {Volgens mij} {ga zelfs jij} {op de heetste dag van 't jaar} {naar het park}
- c. {Volgens mij} {gaat op de heetste dag van 't jaar} {zelfs jij} {naar het park}

Only in (5b) are verb and subject realized in the same prosodic phrase, so only here can a special spell-out rule sensitive to prosodic phrasing apply. Indeed, we argue that Dutch has a rule that suppresses the phonological realization of the syntactic feature [addressee] in this context. As a result, second person endings (specified as [participant, addressee]) are reduced to first person endings (specified as [participant]). We show that an account along these lines is superior over an account that relates the form of the agreement to the syntactic position of the verb (e.g. Zwart 1997). One straightforward argument to this effect can be based on the observation that while the verb is in the same syntactic position in (1b) and (1c) (namely C), only (1b) requires agreement reduction.

6. This type of analysis of Dutch second person agreement alternation carries over to many other examples of morphological microvariation conditioned by post-head adjacency. These involve Standard Arabic agreement alternation, Middle Dutch object cliticization, pro-drop in Celtic, Old French and Arabic, Germanic complementizer agreement and Dutch complementizer substitution.

7. Our overall conclusion will be that although spell out is by its very nature idiosyncratic and language-specific, there are conditions on context-sensitive spell out that give rise to patterns of apparent syntactic microvariation.

## References

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