

## Mainland Scandinavian Object Shift, Match Theory and Prosodic Displacement

Nomi Erteschik-Shir, Gunlög Josefsson, Björn Köhnelein

In this paper we argue for an analysis of Object Shift (OS) in Mainland Scandinavian (MSc) in which the shifted word order is the result of a prosodic repair to enable weak pronoun incorporation. Our analysis builds on the observation that varieties with optional OS also have a tone accent contrast. We argue that the in-situ word order is licensed in these dialects because tonal accent creates a prosodic domain that makes the incorporation of the weak pronoun possible. The proposal has important implications for our understanding of the architecture of the grammar – it adds to the evidence that at least some cases of word order can better be attributed to phonological computation, rather than to narrow syntax. Pronominal OS in the Mainland Scandinavian languages refers to the placement of a weak object pronoun to the left of an adverb (1a), instead of in the canonical position for objects to the right of the sentence adverb (1b).

- (1) a. *Jeg mødte ham ikke/aldrig.* Standard Danish  
 I met him not/never
- b. \**Jeg mødte ikke/aldrig ham.*  
 I met not/never him  
 'I didn't meet him/ I never met him.'

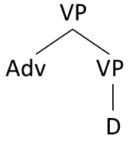
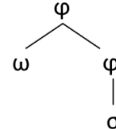
Whether or not OS is obligatory varies among the MSc languages and varieties. For instance, OS is obligatory in Standard Danish but optional in a number of southern Danish dialects, for example the dialect spoken on the island of Ærø. In Swedish OS is optional in most dialects.

OS is contingent on V-2, the raising of a finite main verb to 'second' position in main clauses ("Holmberg's Generalization"). OS does not occur when the auxiliary raises (2a) or in subordinate clauses (2b).

- (2) a. *Peter har ikke set=ham*  
 Peter has not seen=ham
- b. ... at *Peter ikke så=ham*  
 ...that Peter not saw=him

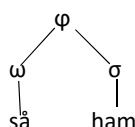
Much attention has been devoted to OS but it has been notoriously difficult to give it a satisfactory syntactic account. The restriction of OS to structures that have undergone verb-movement is problematic since there is no obvious way of linking the occurrence of one rule to the occurrence of another in syntax. OS has no semantic or even information structural motivation nor is there any obvious syntactic motivation. Furthermore, there is no way to *syntactically* constrain optionality of OS by making reference to language/dialect specific *prosodic* properties.

It is well known that weak pronouns must prosodically incorporate (e.g. Selkirk 1996). Verbs, Prepositions (and in MSc also Nouns) are legitimate hosts for incorporation, adverbs are not. This is how we derive this distinction: The prosodic structure in (3b), in which the weak pronoun follows the adverb, is derived by Match Theory (MT) (Selkirk 1986, 2011) from the syntactic structure of the VP in (3a).

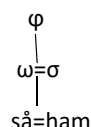
- (3) a. 
- b. 

The prosodic structure of (3b), according to MT, should be flattened further eliminating the lower  $\varphi$ -phrase. We propose that MT relates differently to adjoined phrases, maintaining the adjoined structure in the prosody. We further adopt Elfner's 2012 distinction between maximal (non-minimal) phrases and minimal ones and argue that incorporation of a weak pronoun requires that the weak pronoun and its incorporating host be included in the same minimal prosodic phrase. This is the case when such a pronoun is incorporated in a verb in the unshifted version (4a) (resulting in the incorporated (4b) = (2a)). Holmberg's Generalization now falls out easily because in these cases the pronoun is already adjacent to the verb and can incorporate without further ado.

(4) a.



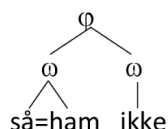
b.



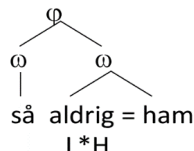
Since the weak pronoun cannot be incorporated into the adverb in (3b) it is left stranded. Following Bennet et al.'s proposal that elements may move in the phonology in cases of prosodic repair, we propose that prosodic repair applies to (3a), enabling the weak pronoun to incorporate. The pronoun preposes by right adjunction to the verb at the prosodic word level as shown in (5). This gives the result we want for Standard Danish in which OS is obligatory.

For Swedish and  $\text{\AA}$ erø Danish this is only one of two possible options. Here we claim that tonal accent, whose surface realization creates a span from one accent item to the next (or end of the phrase), creates a higher prosodic domain (along the lines of Kristoffersen, 2000, Myrberg & Riad 2015), which licenses the prosodic word formation of the adverb and the weak pronoun allowing the pronoun to remain in situ. Similar to Irish pronoun postposing (see Bennet et al., 2016) there can be more than one way to repair structures that are prosodically flawed. For  $\text{\AA}$ erø Danish and Swedish we derive the structure (6) for the unshifted version (3) in which the tonal accent of the adverb extends to include the pronoun.

(5)



(6)



Our proposal also explains seeming exceptions: Both the Lolland-Faster Danish dialect and Fenno-Swedish have been noted to allow the order in (1b) although they do not have tonal accent. As it turns out, the former allows this order only when the adverb itself is a clitic and forms a clitic cluster with the pronoun and in the latter, weak pronouns are fully pronounced and therefore do not require incorporation.

The proposed analysis proposes a slight modification of MT distinguishing between syntactically adjoined phrases and complements. Employing MT in this way, allows for an elegant phonological analysis of OS and its variations.