Motivations for Scandinavian Negative Indefinite Shift

Mykel Loren Brinkerhoff

BIG QUESTIONS:

- What are the ways in which movement happens?
- What role does prosody play in movement?
- Does prosody play a role in Negative Indefinite Shifting in Scandinavian languages?

1 Introduction

(1) Negative Shifting (NegShift) is a process in the Scandinavian languages where a negative indefinite (NI) obligatorily shifts to a position outside of the VP.

a. Manden havde måske *ingenting* [$_{VP}$ sagt t_o].
man-the had probably nothing said
'The man hadn't said anything.'

b. Jeg har *ingen bøger* [$_{VP}$ lånt børnene t_o.]
I have no books lent children-the
'I haven't lent the children any books.'

(2) This process occurs to all NIs and is permissible from a large number of different contexts, depending on the variety and register (see Table 10).

(3) This process bears some resemblance to Scandinavian Object Shift (OS), which is where a weak object pronoun shifts to a position outside of the verb phrase (Holmberg 1986, 1999).

a. Jag kyssade$_v$ henne$_o$ inte [$_{VP}$ t_v t_o] Sw
I kiss.PST her NEG
'I didn't kiss her.'

(4) There has been some evidence that OS is prosodically driven (Erteschik-Shir 2005, Erteschik-Shir & Josefsson 2017, Erteschik-Shir, Josefsson & Köhnlein 2020, Brinkerhoff & Tengesdal 2021).

(5) Despite similarities between NegShift and OS, NegShift doesn't directly correlate to the accounts of OS.

(6) Chiefly, a wider range of material is allowed to undergo NegShift, which includes both pronouns and full DPs, whereas only prosodically weak object pronouns are allowed to undergo OS.

(7) However, not all NegShift is treated equal. Christensen (2005: 65f), speaking on Danish, claims that the "weight" of the NI plays a factor in whether or not NegShift occurs.

a. Jeg har [*intet nyt*]$_o$ hørt t_o.
I have nothing new heard
'I haven't heard anything new.'

b. * Jeg har [*intet nyt i sagen*]$_o$ hørt t$_o$.
I have nothing new in case-DET heard
'I haven't heard anything new about the case.'

I claim that NegShift is mostly a syntactic operation with prosody playing a supporting role in determining what material is allowed to surface at PF.

2 Distributional properties of NegShift versus OS

(8) As mentioned above there are some similarities between OS and NegShift with them both operating on pronouns and moving them to a position outside of the VP.

a. Jag kyssade$_v$ henne$_o$ inte [$_{VP}$ t$_v$ t$_o$]
I kiss.PST her NEG
'I didn't kiss her.'

b. Jag har ingen$_o$ [$_{VP}$ kyssat t$_o$]
I have no-one kiss.PST.PTCP
'I haven't kissed anyone.'

(9) However, NegShift also operates on full negative DPs and is not subject to Holmberg's Generalization (Fox & Pesetsky 2005, Engels 2012)

a. Verb in-situ NegShift
Ég hef *engan* [$_{VP}$ **séð** t$_o$]. Ic
I have nobody seen
'I haven't seen anybody.'

b. String vacuous NegShift
Jag **sa** *ingenting* [$_{VP}$ t$_v$ t$_o$]. Sw
I said nothing
'I said nothing'

(10) Additional evidence from Engels (2012) shows that NegShift is allowed out of a wider range of positions than OS, which are summarized in Table 10.

3 Comparison of NegShift and OS

3.1 Holmberg's Generalization

(11) OS obeys Holmberg's Generalization

(12) Holmberg's Generalization:
Object Shift cannot apply across a phonologically visible category asymmetrically c-commanding the object position except adjuncts (Holmberg 1999: p. 15)

(13) NegShift obeys Anti-Holmberg not HG

(14) The only case that could be seen as involving HG is *string-vacuous* NegShift

Table 1: Distribution of NegShift across the different Scandinavian languages. WJ = West Jutlandic, Ic = Icelandic, Fa = Faroese, DaL = Danish Linguists, SwL = Swedish Linguists, Scan1 = literary/formal Mainland Scandinavian varieties, Scan2 = colloquial Mainland Scandinavian varieties and Norwegian

NegShift across		WJ1	WJ2	Ic	Fa	DaL1	DaL2	SwL	Scan1	Scan2
String-vacuous		✓	✓	✓	✓	✓	✓	✓	✓	✓
Verb		✓	✓	✓	✓	✓	✓	✓	✓	*
IO	verb in situ	✓	✓	✓	✓	✓	✓	✓	✓	*
	verb moved	*	*	*	*	*	*	*	*	*
Preposition	verb in situ	✓	✓	✓	✓	?	?	*	*	*
	verb moved	✓	✓	?	*	*	*	*	*	*
Infinitive	verb in situ	✓	✓	✓	✓	✓	*	?	*	*
	verb moved	✓	*	*	✓	*	*	*	*	*

a. However it is not clear if this is actually the case because we do not see evidence for movement.

b. There is a lack of evidence

3.2 Landing site

(15)

3.3 Interaction of NegShift and OS

(16)

4 Prosodic restrictions on NegShift

(17) As noted earlier not all NegShift is treated equal. Christensen (2005: 65f), speaking on Danish, claims that the "weight" of the NI plays a crucial factor in whether or not NegShift occurs.

a. Jeg har *intet*$_o$ hørt t$_o$.
I have nothing heard
'I havn't heard anything.'

b. Jeg har [*intet nyt*]$_o$ hørt t$_o$.
I have nothing new heard
'I haven't heard anything new'

c. * Jeg har [*intet nyt i sagen*]$_o$ hørt t$_o$.
I have nothing new in case-DET heard
'I haven't heard anything new about the case.'

d. * Jeg har [*intet nyt i sagen om de stjålne malerier*]$_o$ hørt t$_o$.
I have nothing new in case-DET about the stolen paintings heard
'I haven't heard anything new in the case about the stolen paintings.'

(18) In those instances where the NI is too large one potential repair is to strand the PP while moving just the pronoun or using the negative particle *ikke* and a NPI.

a. Jeg har *intet*$_i$ hørt t$_i$ [$_{PP}$ i sagen om de stjålne malerier].

b. Jeg har *ikke* hørt [*noget* i sagen om de stjålne malerier].

(19) This same behavior has also been remarked upon by Penka (2011) for Swedish.

a. Men mänskligheten har *ingenting*$_o$ lärt sig t$_o$.
but mankind-the have nothing taught themselves
'But mankind haven't taught themselves anything.'

b. ? Vi hade *inga grottor*$_o$ undersökt t$_o$.
we have no caves explored
'We haven't explored any caves.'

5 Copy and partial deletion account

(20) One way to account for this behavior is following Zeijlstra 2011 account for the split-scope that these NIs introduce in Germanic languages.[1]

(21) Split-scope is evident when modals and other auxiliaries are present and the negation scopes higher than the modal/auxiliary's scope where the indefinite resides.

(22) Zeijlstra assumes that this behavior is the result of the compositional status of negative indefinites similar to the claims made by Iatridou & Sichel (2011).

a. Unlike Iatridou & Sichel, who simply claim that negation takes scope higher than the modal's scope and the indefinite scopes low, he claims that NIs are composed of a negative operator and an indefinite component.

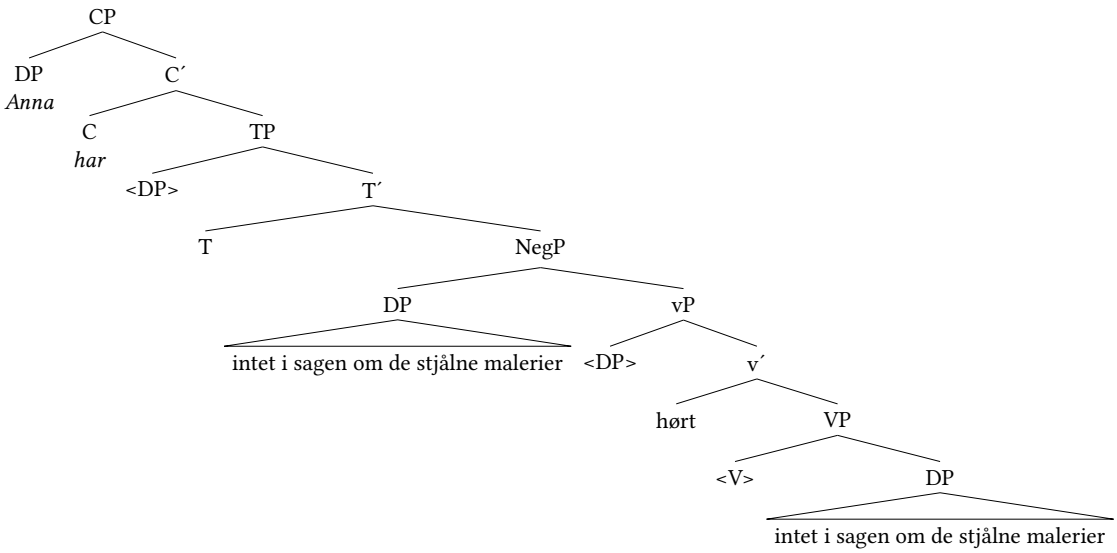
(23) He further claims that the split-scope interpretation is the result of a copy-theory of movement where the indefinite interpretation is interpreted in the lower copy while the negative operator is interpreted in the higher copy after quantifier rising.

(24) He claims that the when we move items we copy them entirely and remerge them into the syntactic structure. This results in multiple copies of the item being in the syntactic structure. Following Fanselow & Cavar (2001) and Fanselow & Ćavar (2002) only at a later stage, after the syntactic structure has been spell-out, parts of the copy are removed in PF or LF. This could result in either a partial or complete deletion of any of these copied-elements at any location that they are found.

(25) For example, we see this in the following syntactic structure.

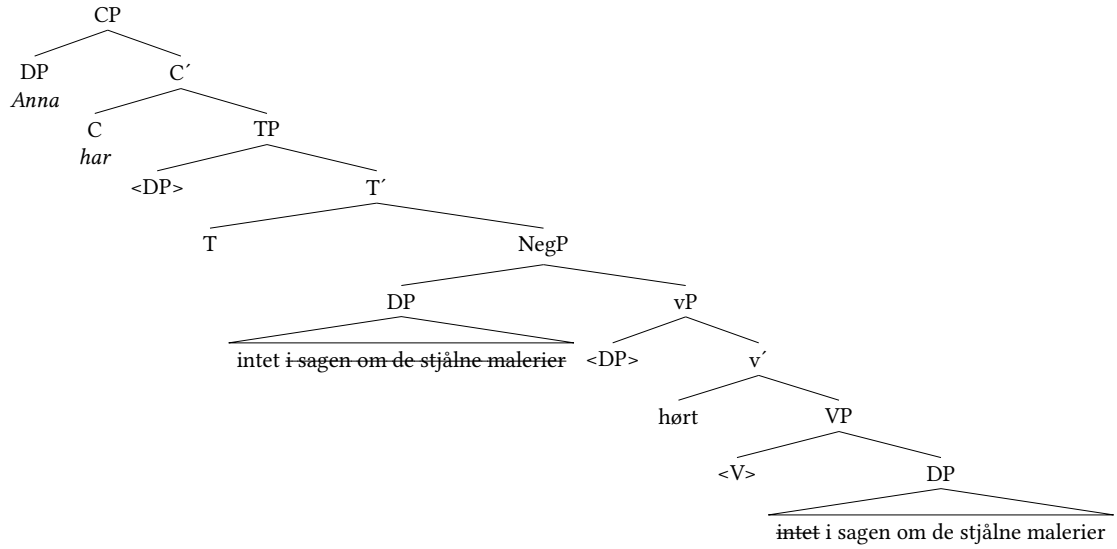
[1] See Svenonius (2002) which shows that there is some differences in interpretation depending on if NegShift has occurred or not.

a.



(26) At this point during PF, part of the higher copy is elided leaving only the NI pronoun. In the lower copy *intet* is deleted, resulting in the following structure.

a.



(27) The question arises as to what the motivation is for determining what amount of material is deleted during this process. I propose that the solution is similar to Heavy NP Shift and can be modeled using Optimality Theory (Prince & Smolensky 2004) and making reference to the prosody of these constituents.

6 Prosodic motivations for Heavy NP Shift

(28) According to Anttila, Adams & Speriosu (2010), prosody plays a supporting role in linearization and can be accounted for through OT style constraints on prosodic well-formedness.

(29) Anttila, Adams & Speriosu are concerned with explaining the three way patterning that dative constructions have and how the different verbal arguments are linearized with respect to each other.

(30) The three different constructions that are possible in dative constructions are:
   a. Double object constructions
   b. Prepositional constructions
   c. Heavy NP Shift constructions

(31) Of crucial interest is how they explain Heavy NP Shift and what their criteria for determining weight.

(32) Anttila, Adams & Speriosu (2010: p. 949) say that the “”weight” of an NP is “a function of the number of lexically stressed words in [the constituent]”.

(33) This means that the more lexical stresses a constituent has the heavier it is. This definition, crucially, leaves out functional items and pronouns because they lack lexical stress.

(34) Using this definition for weight, we can explain the behavior Danish and Swedish as discussed in §1. This means that Danish and Swedish have an upper bound on the weight of the shifted element. In the case of Danish only elements of weight ≤1 are allowed to shift from their base generated position.

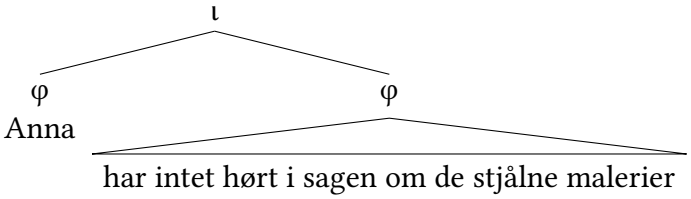
(35) Swedish on the other hand has a greater weight allowance before it is treated as ungrammatical.

6.1 OT Account for Heavy NP Shift

(36) Based on Anttila, Adams & Speriosu (2010), prosody plays a supporting role in linearization and can be accounted for through OT style constraints on prosodic well-formedness.

(37) This can be accounted for using Match Theory (Selkirk 2009, 2011).

(38) Following Myrberg (2013) and Myrberg & Riad (2013, 2015), I assume that the subject in Scandinavian languages forms its own phonological phrase, if it is not a pronoun, separate from the rest of the clause.
   a. Simplified prosodic structure for (26a)



(39) Crucially, what we are concerned with the weight of the item shifting. This can be accounted for using a type of NoShift (Bennett, Elfner & McCloskey 2016) which is sensitive to lexical stresses, following Anttila, Adams & Speriosu’s (2010) definition for phonological weight.

(40) NoShift(Stress): Assign one violation for every lexical stress that is not in the same linear order as in the input.

(41) This constraint operates by considering where a word bearing lexical stress is located in the input and whether it follows the same linear order as the input and assigns a violation for every lexical stress that is not in the same linear order.

(42) If we take the input of (26a) this constraint should assign a violation for every item bearing lexical stress that has been relinearized.

(43) Using OT we can model how this would behave with the input of (26a)

	Match(XP,φ)	Match(φ,XP)	NoShift(Stress)
a. ☞ (Anna$_{\omega}$)$_{\varphi}$ (har *intet*$_{\omega}$ hørt i sagen om de stjålne malerier)$_{\varphi}$	1	1	1
b. ☞ (Anna$_{\omega}$)$_{\varphi}$ (har *intet nyt*$_{\omega}$ hørt i sagen om de stjålne malerier)$_{\varphi}$	1	1	1
c. ☹ (Anna$_{\omega}$)$_{\varphi}$ (har *intet nyt*$_{\omega}$ *i sagen*$_{\omega}$ hørt om de stjålne malerier)$_{\varphi}$	1	1	2!
d. ☹ (Anna$_{\omega}$)$_{\varphi}$ (har *intet i sagen*$_{\omega}$ *om de stjålne*$_{\omega}$ *malerier*$_{\omega}$ hørt)$_{\varphi}$	1	1	

6.2 Alternative accounts

(44) However this could also be something to do either the maximal or minimal prosodic word that is shifting.

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Appendix

Cyclic Linearization

(45) Cyclic Linearization is a theory that was developed by Fox & Pesetsky 2005 as a way to account for OS and Holmberg's Generalization.

(46) This theory works by stipulating that spell-out of the morpho-syntax is cyclic and order preserving, which means that as you spell-out each successive phase you need to ensure that whatever orders existed when that phase was spelled-out persist at the next phase's ordering restrictions. This theory also had the benefit of accounting for when OS was allowed or not allowed to occur.

(47) This proposal was extended by Fox & Pesetsky (2005) and Engels (2011, 2012) to account for quantifier movement (QM), which NegShift is a subset of.

(48) Under this proposal QM is subject to an "Anti-Holmberg Effect" or an "Inverse Holmberg Effect", which are identical in principle

a. Under Holmberg's Generalization, OS can only apply if the verb has undergone movement from V to T to C.

b. The Anti-Holmberg Effect explains that only when the verb remains in situ can we have QM, which is the result of the ordering operations between the different phases being in agreement.

(49) In order to account for OS, Fox & Pesetsky propose that the during the spell-out of the VP phase the V is the leftmost element in its phase[2] and at which point the ordering restrictions are in place which state that the V must precede the O.

(50) At this point the V moves to T and then to C at this point the object is free to move to a position higher because the order that existed at the VP phase continues to hold.

(51) OS and string-vacuous Neg-Shift

a. $[_{CP}$ S V ... $[_{NegP}$ O adv $[_{VP}$ t_v t_o]]]

b. VP Ordering: **V>O**
CP Ordering: S>V, **V>O**, O>adv, adv>VP

(52) If the DO were to move instead of the IO this would now result in the DO being ordered before the IO at the spell-out at the CP phase.

(53) In the case of NegShift, where it is able to shift across various phonological material it is proposed that the NI first moves to the left edge of the VP before spell-out of that phase.

a. $[_{CP}$ S aux ... $[_{NegP}$ O $[_{VP}$ t_o V t_o]]]

b. VP Ordering: **O>V**
CP Ordering: S>V, aux>O, O>adv, adv>VP → **O>V**

[2]The position of the V at the left-edge of the phase could be due to the movement of V to *v* in which case it is actually the *v*P that acts as the phase not the VP.

(54) The benefit of using Cyclic Linearization comes from being able to account for why certain orders are fixed throughout the entire derivation.