Motivations for Scandinavian Negative Indefinite Shift

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BIG QUESTIONS:

- What are the triggers for movement?

- In what ways can prosody interact with syntactic movement?

- Does prosody play a role in Negative Indefinite Shifting in Scandinavian languages?

ANSWERS:

- NegShift occurs as a result of feature valuation.

- Prosody controls and moderates the heaviness of moved copies.

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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 1).

(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.'

2 Distributional properties of NegShift versus OS

(8) OS and NegShift appear on the surface to be similar to one another.

(9) Both OS and NegShift operate 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.'

(10) Unlike OS, NegShift also operates on full negative DPs.

    a. Jens har   *ingen hunder* [$_{VP}$ **sluppet** t$_o$ ud].   Da
        Jens have no   hounds   let   out
        'Jens haven't let out any dogs.'

    b. Jeg har   *ingen bøger* [$_{VP}$ **lånt** børnene   t$_o$].   WJ/Scan1
        I   have no   books   lent children-the
        'I haven't lent the children any books.'

(11) Additional evidence from Engels (2012) shows that NegShift is allowed out of a wider range of contexts than OS, which are summarized in Table 1.

    a. We see a strong preference for NegShifting across the verb and phonological material as crucially seen in the bolded and colored rows.

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

3   Comparison of NegShift and OS

(12)   By comparing NegShift's patterns against OS's patterns, we can determine whether they are governed by the same or different factors.

(13)   There are three different metrics that we can use to determine the governing factors:

     a.   Obedience to Holmberg's Generalization.

     b.   Where the loci of movement are.

     c.   How NegShift and OS interact with one another.

(14)   If OS and NegShift are derived by the same trigger then we expect them to behave the same in each of the three metrics.

(15)   I show that this is not the case and claim that NegShift and OS are governed by different movement triggers.

3.1   Holmberg's Generalization

(16)   OS only occurs if the verb has moved to V2 and must obey Holmberg's Generalization.

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

(17)   Examples of OS

     a.   Peter så$_v$ **ham$_o$** ikke [$_{VP}$ t$_v$ **t$_o$**]   (Across negation)
        Peter see.PST him   not
        'Peter didn't see him.'

b. Peter så$_v$ **ham$_o$** ofte [$_{VP}$ t$_v$ **t$_o$**]   (Across adverbials)
   Peter see.PST him   often

   'Peter often saw him.'

(18) NegShift does not obey Holmberg's Generalization. In fact the verb has to remain in situ
      for it to occur.

(19) Examples of NegShfit with the verb in situ.

      a. Ég hef *engan$_o$* [$_{VP}$ **séð** t$_o$.]   Ic
         I   have nobody   seen

         'I haven't seen anybody.'

      b. Í dag hevur Petur *einki$_o$*   [$_{VP}$ **sagt** t$_o$].   Fa
         today has   Peter nothing   said

         'Peter hasn't said anything today.'

      c. Manden havde måske   *ingenting$_o$* [$_{VP}$ **sagt** t$_o$].   Da
         man-the had   probably nothing   said

         'The man hadn't said anything'

(20) Additionally, it occurs across any phonological material in the VP.

      a. Jón hefur *ekkert*   [$_{VP}$ **sagt Sveini** t$_o$].   Ic
         Jón has   nothing   said Sveinn

         'John hasn't told Sveinn anything'

      b. Í dag hevur Petur *einki*   [$_{VP}$ **givið Mariu** t$_o$].   Fa
         today has   Peter nothing   given Mary

         'Today, Peter hasn't given Mary anything.'

      c. Jeg har *ingen bøger* [$_{VP}$ **lånt børnene**   t$_o$].   WJ/Scan1
         I   have no   books   lent children-the

         'I haven't lent the children any books.'

(21) This behavior is called the *Anti-Holmberg Effect* (Fox & Pesetsky 2005, Engels 2012)

> CLAIM: NegShift does not obey Holmberg's Generalization.

3.2   Landing site

(22) OS occurs to the left of all adverbials.

      a. Jeg lånte *hende$_{IO}$* faktisk$_{Adv}$ aldri$_{Adv}$ [$_{VP}$ t$_{IO}$ bøgerne].
         I   lent her   actually   never   books-the

         'I actually never lent her the books'

(23) NegShift occurs to the right of most adverbials with the exception of low adverbials (Nilsen 1997, Svenonius 2002).

    a. Jeg har   faktisk$_{Adv}$ *ingen bøger*$_{DO}$ [$_{VP}$ lånt Othilia t$_{DO}$].
        I   have actually no   books   lent Othilia
        'I didn't actually lend Othilia any books.'

    b. Fænsene har   på *intet tidspunkt*$_O$ tidlig$_{Adv}$ slått   av TV'en.
        fans-the have at no   time   early   turned off TV-the
        'The fans have at no time turned the TV off early'

> CLAIM: OS and NegShift move to different locations.

3.3   Interaction of NegShift and OS

(24) When there are both weak object pronouns and NIs in the sentence they both shift to their respective landing sites.

    a. Jeg lånte *hende* fraktisch *ingen bøger*.
        I   lent her   actually no   books
        'I didn't actually lend her any books.'

(25) When the verb remains in situ OS is blocked from occurring but NegShift is still allowed to occur.

    a. Jeg har   *ingen bøger* lånt *hende*.
        I   have no   books lent her
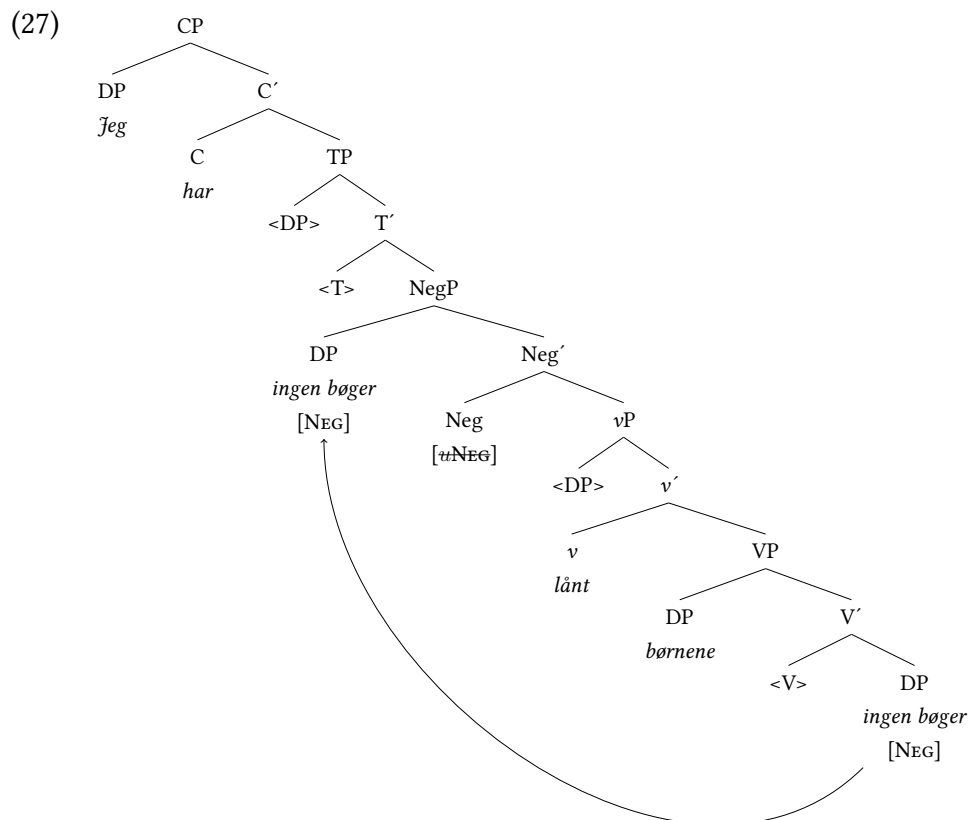   'I haven't lent her any books

> CLAIM: OS and NegShift are not the same.
> BIG CLAIM: OS and NegShift have different triggers for movement.

4   Deriving of NegShift

(26) Following Zeijlstra 2011, I assume the NI moves to Spec,NegP following the copy theory of movement (Chomsky 1993) to value a [uNEG] feature.

    a. Copy theory of movement required for NIs having split-scope (Iatridou & Sichel 2011, Zeijlstra 2011).

    b. Split-scope is evident when modals and other auxiliaries are present and the indefinite interpretation is in the lower copy while the negative operator is interpreted in the higher copy.

(27)

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                        CP
              ┌─────────┴─────────┐
             DP                   C′
             Jeg         ┌────────┴────────┐
                         C                 TP
                        har         ┌──────┴──────┐
                                  <DP>            T′
                                          ┌───────┴───────┐
                                         <T>             NegP
                                                  ┌───────┴───────┐
                                                 DP              Neg′
                                             ingen bøger   ┌──────┴──────┐
                                               [NEG]      Neg           vP
                                                         [uNEG]   ┌──────┴──────┐
                                                                <DP>          v′
                                                                       ┌───────┴───────┐
                                                                       v              VP
                                                                     lånt      ┌───────┴───────┐
                                                                              DP              V′
                                                                          børnene      ┌───────┴───────┐
                                                                                      <V>             DP
                                                                                              ingen bøger
                                                                                                [NEG]
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(28) The derivation is then sent to PF where the higher copy is pronounced and the lower copy is deleted.

(29) We see that following simple syntactic operations we derive the behavior of NegShifting.

    a. Simple feature valuing allows for the *Anti-Holmberg Effect.*

    b. Also explains the difference in landing sites between NegShift and OS.

    c. If OS is entirely prosodic in nature than this explains why it moves to different locations and interacts with NegShift in the way that it does.[1]

5 Prosodic restrictions on NegShift

(30) However, syntax does not appear to be the only factor determining NegShift.

(31) Christensen (2005: 65f) claims that the "weight" of the NI plays a crucial factor in whether or not NegShift occurs.

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[1]See Brinkerhoff 2021 for a more detailed discussion on this.

    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.'

(32) 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].

(33) 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.'

(34) This suggests that during the derivation part of the higher copy is deleted leaving only the NI. In the lower copy the NI is deleted.
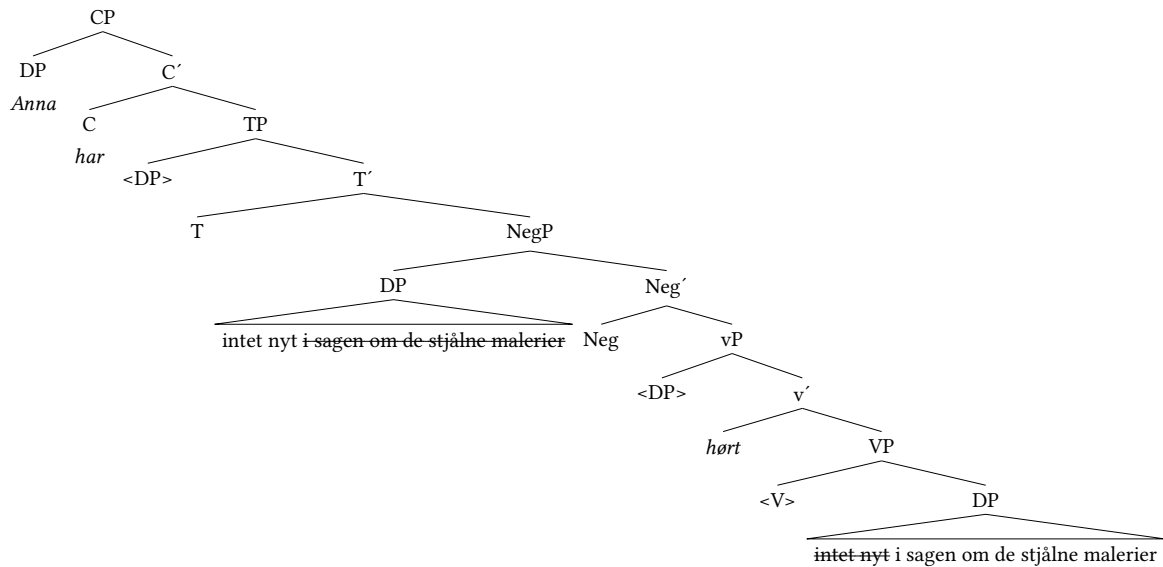
QUESTION: What decides which material is deleted?

CLAIM: Prosody is responsible for restricting and regulating the amount of material that is allowed in the *Mittelfeld*.

5.1 PF deletion

(35) Following the copy theory of movement Chomsky (1993), multiple copies of the NI will be present at PF spell-out.

(36) A question arises as to whether or not phases are have any bearing on the facts presented above.

(37) There are two potential answers

     a. Phases do not play a role in determining phonological/prosodic behavior.

     b. Phases do play a role in determining phonological/prosodic behavior.

(38) Recent evidence from Weber (2020) suggests that phases do in fact play a role in determining phonological behavior.

(39) In order for the phonology to interact with two copies at the same time, the base generated position and the landing site both must belong to the same phase.

     a. This requires that NegP and the rest of the Cinquean hierarchy of adverbials (Cinque 1999) belong to the same phase as *v*P.

(40) Kandybowicz (2008) makes the observation that multiple copies that are generated by the narrow syntax can be *phonologically* realized when there is a identifiable PF well-formedness condition is avoided.

  a. Similarly, I argue that PF can also dictate the amount of material that is deleted in those copies.

  b. PF being able to delete is not new and was argued for by Ott & Struckmeier (2016) to account for German clausal ellipsis.

(41) In the case of NegShift, there are restrictions on *Mittelfeld* well-formedness, which I will call the Light Mittelfeld Condition (LMC).

  a. It has been observed that only a limited amount of structure is allowed and a wide degree of variation is permitted in the *Mittelfeld* (see Haider 2017).

  b. I argue that the largest unit that is allowed to remain in the *Mittelfeld* in Scandinavian is a maximal prosodic word (ω_{max}).

(42) Evidence for this comes from the size of the material that is allowed to "shift" in these languages.

(43) As observed for Danish only a pronoun or DP, consisting of just a D and NP, is allowed to occupy the *Mittelfeld* when 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.'

(44) This difference between Danish, which allows full DPs, and Swedish which tolerates full DPs, but prefers pronouns, suggests the *Mittelfeld* in Swedish will delete copies until they are just the NI pronoun.

  a. This potential comes down to Swedish being a tonal language and Danish not being a tonal language.

(45) The LMC deleting different amounts of material in Danish and Swedish can also explain Norwegian's lack of NegShift.

  a. Norwegian deletes everything as it prefers not to have any copies in the *Mittelfeld*

  b. This deleteion would then leave the valued [Neg] feature which gets pronounced as negation which then causes the lower copy to surface with a NPI.

  c. This behavior of total deletion is also attested in Danish and Swedish where negation and a NPI is always a potential instead of NegShift.

(46) This results in a three-way system in Scandinavian languages.

     a. Those that delete until a full DP is left.

     b. Those that delete until a pronoun is left.

     c. Those that delete everything and have negation and a NPI.

(47) There seems to be some differences in behavior between the tonal and atonal Scandinavian languages.

     a. According to Thráinsson (2004, 2010) Faroese and Icelandic pattern the same as Danish in this regard.

     b. This further suggests that there is something unique about being a tonal language that limits the acceptability of NegShifting.

(48) This is summarized in Table 2.

     a. It will be noted that if you allow full NI DPs than you also allow pronouns and complete deletion, which results in a negation particle and an NPI.

     b. If you allow NI pronouns then you allow a negation particle and an NPI

Table 2: Scandinavian acceptance of NegShift or NPI

	Full DPs	Pronouns	NPI
Icelandic	✓	✓	✓
Faroese	✓	✓	✓
Danish	✓	✓	✓
Swedish	*	✓	✓
Norwegian	*	*	✓

5.2   Particle Shifting in Scandinavian

(49) Independent evidence for shifting full DPs into the *Mittelfeld* is observed in particle shifting in Scandinavian languages.

(50) Following Holmberg (1999: p. 2) and Faarlund (2019) there is a difference in behavior between the different Scandinavian languages with what is allowed to shift across a verbal particle.

     a. Danish objects, regardless of size, always precedes the verb particle.

     b. Norweigan, Icelandic, and Faroese are like English by shifting a pronoun across a particle and optionally for DPs.

     c. Swedish does not allow anything to shift across the particles.

(51) Jeg skrev (nummeret/det) op   (*nummeret/*det). Da
      Jeg skrev (nummeret/det) opp (nummeret/*det).   No
      Jag skrev (*numret/*det) upp (numret/det).   Sw
      I   wrote (the-number/it) up   (the-number/it)
      'I wrote the number/it down.'

(52) Additionally, Danish places restriction on the verbal compliment if it is too "heavy"
      (Müller & Ørsnes In preparation: 44f).

      a. If it is larger than a simple DP shifting is blocked.[2]

      b. […] så   må   partiet   melde [holdninger] [ud], […]
              then must party.DEF make   stances   out
          '[…] then the party must make its stances clear, […]'

      c. Den danske regering   bør   snart melde [ud], [at den støtter   de amerikanske
          the Danish government must soon make out   that it   supports the American
          planer]
          plans
          'The Danish government must soon make clear that it supports the American plans.'

(53) This is further evidence that the LMC is an active constraint in these languages.

(54) One explanation for this behavior is the difference in tonal quality between Danish,
      Norwegian, and Swedish (Erteschik-Shir, Josefsson & Köhnlein 2020).

> Prosody, in the form of the LIGHT MITTELFELD CONDITION, plays an active role in regulat-
> ing the size of the material in the *Mittelfeld*

6   Conclusion

> NegShift is derived by both syntactic and prosodic factors. It is syntactic in movement
> and prosody is responsible for restricting and regulating the amount of material that is
> allowed the surface in the higher copy.

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[2]Examples are from *KorpusDK* as reported by Müller & Ørsnes (In preparation).

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