On the Synchronic and Diachronic Status of the Negative Adverbials *ikke* and *not*

1 The paradox

In Danish and English, the negative operator *ikke/not* cannot be topicalized, whereas most other adverbials (but not all, cf. section 3 below) can.

(1) a. Da: *Ikke har jeg læst den dumme bog.*
   b. En: *Not have I read that stupid book.*

(2) a. Da: *Aldrig har jeg læst noget så dumt.*
   b. En: *Never have I read anything so stupid.*

As the target of topicalization is spec-CP, elements that can be topicalized must be XPs. Therefore, the fact that *ikke* and *not* can’t be topicalized might be taken to show that they are Xºs.

Analyzing negation as Negº would hold for English and Danish alone but not for the very closely related Faroese, Icelandic, Norwegian, and Swedish, where the topicalizable negation markers must be XPs (the same goes for Finland Swedish, cf. Bergroth 1917: 168, §251): 1

---

1 At least in Norwegian (cf. Faarlund et al. 1997: 814) and Swedish (Platzack, p.c.), fronting of negation is usually accompanied with focal stress, which seems to imply focalization rather than topicalization. According to the Split-CP Hypothesis (Rizzi 1997), the former is movement to FocusP, the latter is movement to TopicP. However, focalization in the Scandinavian languages as well as English is normally done with emphatic stress, while topicalization is always movement. Thus, Danish *ikke* and English *not* can be focalized (phonological process) but not topicalized (syntactic process) while the other languages in question have no such restriction. Furthermore, the focal stress is often on a constituent other than the fronted negation, e.g. Sw: *Inte vet JAG* ‘I don’t know’. In Icelandic, there has to be focal stress on one of the constituents following the topicalized negation, e.g. ég ‘I’ in (4).
In English as well as in Icelandic, Norwegian, and Swedish, it is clear that there are two versions of the negation marker, namely, English *not/-n’t, Icelandic ekki [chci]/-ekki [ic], Norwegian ikke/-kke, and Swedish inte/-nte.  

The two versions occupy different structural positions. The full version is an XP in spec-NegP, whereas the clitic version, which moves with the verb to Cº, is base-generated (or licensed) in Negº (as is the case with French pas and ne-, respectively):
In the case of *ikke* and *not*, however, cliticization is not possible; they don’t move with the verb to C⁰. This suggests that they are XPs, not X⁰s:

(12) En: a. Has John *not* read the book?
    b. *Has-*not John read the book?

(13) Da: a. Har Johan *ikke* læst bogen?
    b. *Har-*ikke Johan læst bogen?

Danish *ikke* appears to have the same categorical status as English *not*, which must be an XP as opposed to *-n’t*. The set of elements that can be topicalized is parallel in Danish and English: all negative adverbials except *not*.

(14) En: a. Under no circumstances will I read that nonsense.
    b. Never will I read that nonsense.
    c. *Not will I read that nonsense.

    b. Aldrig vil jeg læse det sludder.
    c. *Ikke vil jeg læse det sludder.

The paradox, then, is that *ikke* and *not* appear to be both Spec-NegP and Neg⁰ or neither:

---

5 Actually, there is another exception, namely, *hardly/næppe*:

(i) En: *Hardly will I read that nonsense.
(ii) Da: *Næppe vil jeg læse det sludder.

Both are fine with a temporal reading such as:

(iii) En: Hardly had I arrived before I had to leave again.
(iv) Da: *Næppe var jeg ankommet før jeg måtte tage af sted igen.
In this paper I shall argue that both *ikke and *not are in fact XPs, not Xºs, and that the lack of topicalizability is due to their semantic ‘lightness’.

2 Wh-movement

Sentential negation may trigger an island effect. Wh-extraction across NegP is not possible in (17)a, while the positive version in (17)b doesn’t block extraction. The fact that negation may block Ā-movement suggests that spec-NegP is filled.

(17) Da: a. *Det er frygteligt hvor klog, du ikke er t₁
   It is terrible how clever you not are
   
   b. Det er frygteligt hvor dum, du er t₁
   It is terrible how stupid you are

(Vikner 2001b: 203 (81a), (82a))

The same can be observed in English. However, the fact that the enclitic –n ’t has the same blocking effect shows that it doesn’t matter whether negation is realized as an Xº or as an XP.

(18) En: a. *It is terrible how clever, you are not t₁
   b. *It is terrible how clever, you aren’t t₁
   c. It is terrible how stupid, you are t₁

(Vikner 2001b: 203 (83); see also Haegeman 1995: 190)

In other words, negative islands do not give any conclusive evidence to choose between the Xº and the XP analysis. More importantly, it doesn’t give conclusive evidence against analyzing the negative markers as XPs.

It seems reasonable to analyse Danish *ikke and English *not as overt operators in spec-NegP rather than as the head of NegP, though there is no direct empirical evidence to support it. Hence, the structures in (16)b and d above are out and (16)a and c, repeated here as (19), are preferable:
In the next section, I present evidence that *ikke* and *not* are not the only XPs that can’t be topicalized and therefore the lack of topicalizability may not be used as conclusive evidence for Xº status.

3 The Lexical Topic Constraint

Following Rizzi (1997: 287), I assume that the movement of the topic to spec-CP is motivated by the Topic Criterion (on a par with the Wh-Criterion and the NEG-Criterion):

(20) *The Topic Criterion (TOPCRIT)*

The [TOP] feature must be overtly checked on Cº[\text{[top]}].

“The topic must be in spec-CP at Spell-Out.”

One of the characteristics of a topic is lexical content. For example, English *never* literally (as well as etymologically\(^6\)) means *not ever* or ¬ever, whereas the operator *not* itself has no lexical meaning, it only means “¬”. I propose that the constraint that regulates whether a language allows topicalization of non-lexical material or not is LEXTOP:

(21) *The Lexical Topic Constraint (LEXTOP)*

“Spec-CP must have lexical content.”

*Not* is [+NEG, ¬LEX], *never* is [+NEG, +LEX].\(^7\)

There are thus two different types of features, i.e. functional and lexical features. The following table is a simple example of the difference between the two (the list of features is not intended to be exhaustive, merely illustrative):

\(^6\) Etymologically, *never* is OE: nāfre < ne-ēfre (not-ever); *aldrig* is ON: aldri-gi (age-no = never) < ne aldri-gi (not age- any = not at any age/time).

\(^7\) Strictly speaking, [LEX] is not a feature just as there is no [FUNC] feature. It’s just shorthand for the presence of lexical features.
In Danish and English as well as in German, non-lexical negative operators can’t be topicalized, whereas in Faroese, Icelandic, Norwegian, and Swedish (and Middle Danish, cf. section 4 below) both lexical and non-lexical operators can be topic (again, the list is not exhaustive; there are of course other possible negative topics, such as Danish på ingen måde ‘in no way’):

In a theory with violable constraints such as Optimality Theory (OT; e.g. Grimshaw 1995, Kager 1999, Prince & Smolensky 1993, Vikner 2001a, b) this difference may be accounted for by differential ranking of constraints (» means “is ranked higher than”):

In Danish and English, even though the negative adverbs ikke and not may be marked [+TOP], they cannot be topicalized. Instead, in English nothing is topicalized (both spec-CP and C° are empty), whereas in Danish, the subject moves to spec-CP to satisfy the V2 requirement. The subject becomes the ‘default topic’ because it is the closest c-commanded element and therefore optimally satisfies the Minimal Link Condition.

---

8 Note that the functional feature [+FEM(ININE)] and the lexical feature [+FEMALE] are not the same. In German, the word for ‘girl’, Mädchen, is [+FEMALE] but [-FEM, -MASC], i.e. neuter. The Danish word for ‘girl’, pige, is [+FEMALE] and [+FEM, +MASC], i.e. common gender.

9 En. never translates into both Fa. ongantíð and aldri(n).
This difference in topicalization is also (partly) supported by differences in topicalization of other semantically ‘light’ adverbs. The sentence-medial adverbs in (26) can all occupy the underlined slot in (25) in the respective languages.\(^\text{10}\) (a ‘-’ in the table indicates that the language has no corresponding single term.)

(25)  
a. Da: Hun har _____ læst bogen  
b. En: She has _____ read the book  
c. Fa: Hon hevur _____ lisið bókina  
d. Ic: Hún hefur _____ lesið bókina  
e. No: Ho har _____ lest boka  
f. Sw: Hon har _____ läst boken

(26) Sentence medial ‘light’ adverbs:

<table>
<thead>
<tr>
<th></th>
<th>Danish</th>
<th>English</th>
<th>Faroese</th>
<th>Icelandic</th>
<th>Norwegian</th>
<th>Swedish</th>
</tr>
</thead>
<tbody>
<tr>
<td>ikke</td>
<td>not</td>
<td>ikki</td>
<td>eikki</td>
<td>ikke</td>
<td>inte</td>
<td></td>
</tr>
<tr>
<td>jo</td>
<td>-</td>
<td>jú</td>
<td>nú</td>
<td>jo</td>
<td>ju</td>
<td></td>
</tr>
<tr>
<td>også</td>
<td>also</td>
<td>eisini</td>
<td>lika</td>
<td>også</td>
<td>också</td>
<td></td>
</tr>
<tr>
<td>da</td>
<td>-</td>
<td>tá</td>
<td>sko</td>
<td>da</td>
<td>då</td>
<td></td>
</tr>
<tr>
<td>sikkert</td>
<td>probably</td>
<td>ivaleyst</td>
<td>örugglega</td>
<td>sikkert</td>
<td>säkert</td>
<td></td>
</tr>
<tr>
<td>nok</td>
<td>-</td>
<td>nokk</td>
<td>ábyggilega</td>
<td>nok</td>
<td>nog</td>
<td></td>
</tr>
<tr>
<td>kun</td>
<td>just</td>
<td>bara</td>
<td>bara</td>
<td>kun</td>
<td>bara</td>
<td></td>
</tr>
<tr>
<td>endda</td>
<td>even</td>
<td>enntá</td>
<td>-</td>
<td>%enda</td>
<td>ändå</td>
<td></td>
</tr>
<tr>
<td>vistnok</td>
<td>-</td>
<td>helst</td>
<td>eflaust</td>
<td>vistnok</td>
<td>visst</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>5</td>
<td>9</td>
<td>8</td>
<td>8(9)</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

Consider next topicalization of these adverbs:\(^\text{11,12}\)

\(^\text{10}\) Thanks to Peter Svenonius, Kristine Bentzen, Marit Julien, and Janne Bondi Johannessen for information on Norwegian, Kersti Börjars for Swedish, and Gunnar Hrafn Hrafnbjargarson for Icelandic.

\(^\text{11}\) In Icelandic, sentences with topicalized örugglega, ábyggilega and eflaust are better in the subjunctive (ii) than in the indicative (i). Both are grammatical but the indicative version is slightly marked:

(i) Ic: Örugglega/ábyggilega/eflaust hef ég lesið bókina  
Probably/possibly/may be have I read book.the

(ii) Ic: Örugglega/ábyggilega/eflaust hefði ég lesið bókina  
Probably/possibly/may be had I read book.the

\(^\text{12}\) My informants and Faarlund et al. (1997: 814) agree that Norwegian sikkert cannot be topicalized. Interestingly, I have found one example in the Bokmål corpus at Tekstlaboratoriet, www.tekstlab.uio.no:

(i) No: Sikkert kunne student-aktererne ha turnert med den på Vestlandsbygdene  
Probably could student-actors.the have toured with it on Vestland-towns.the

med stort hell om de kunne gi seg tid til slig t.  
with great luck if they could give SELF time to such.
(27) a. Da: _____ har hun læst bogen
b. En: _____ (has) she read the book
c. Fa: _____ hevur hon lisið bókina
d. Ic: _____ hefur hún lesið bókina
e. No: _____ har ho lest boka
f. Sw: _____ har hon läst boken

(28) **Fronted ‘light’ adverbs:**

<table>
<thead>
<tr>
<th>Danish</th>
<th>English</th>
<th>Faroese</th>
<th>Icelandic</th>
<th>Norwegian</th>
<th>Swedish</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Ikke</em></td>
<td><em>not</em></td>
<td><em>ikki</em></td>
<td><em>ekki</em></td>
<td><em>ikke</em></td>
<td><em>inte</em></td>
</tr>
<tr>
<td><em>jo</em></td>
<td>-</td>
<td><em>jú</em></td>
<td><em>nú</em></td>
<td><em>jo</em></td>
<td><em>ju</em></td>
</tr>
<tr>
<td><em>også</em></td>
<td><em>also</em></td>
<td><em>eisini</em></td>
<td><em>líka</em></td>
<td><em>også</em></td>
<td>%också</td>
</tr>
<tr>
<td><em>da</em></td>
<td>-</td>
<td><em>tá</em></td>
<td><em>sko</em></td>
<td><em>da</em></td>
<td>dá</td>
</tr>
<tr>
<td><em>sikkert</em></td>
<td><em>probably</em></td>
<td><em>ivaleyst</em></td>
<td><em>örugglela</em></td>
<td><em>sikkert</em></td>
<td><em>säkert</em></td>
</tr>
<tr>
<td><em>nok</em></td>
<td>-</td>
<td><em>nokk</em></td>
<td><em>ábyggilega</em></td>
<td><em>nok</em></td>
<td><em>nog</em></td>
</tr>
<tr>
<td><em>kun</em></td>
<td><em>just</em></td>
<td><em>bara</em></td>
<td><em>bara</em></td>
<td><em>kun</em></td>
<td><em>bara</em></td>
</tr>
<tr>
<td><em>ennda</em></td>
<td><em>even</em></td>
<td><em>enntá</em></td>
<td>-</td>
<td><em>enda</em></td>
<td>ändå</td>
</tr>
<tr>
<td><em>vistnok</em></td>
<td>-</td>
<td><em>helst</em></td>
<td><em>eflaust</em></td>
<td>visstnok</td>
<td>visst</td>
</tr>
</tbody>
</table>

(There are, of course, other light adverbs that can be fronted in all the languages, such as *maybe* and *naturally.*

The point is that topicalization of adverbs is significantly more restricted in Danish and English than in the other languages in question. None of the semantically light adverbs in (28) can be fronted in Danish and English, whereas it is possible to varying degrees in the other languages.

The fact that not all of these adverbials behave the same within each language suggests that some other constraint or constraints are involved besides LEXTOP and/or that [+LEX] is not binary: A certain amount of meaning or number of lexical features (such as e.g. [+TEMPORAL] and [+SPATIAL]) is necessary to license topicalization.

The question is not whether a language allows fronting of adverbials in general or not, because that is licensed in all the languages. The same goes for operators, because all the languages allow topicalization of (some version of) the operator *never.* The important distinction is whether semantically light adverbs may be topicalized or not.

Below I show how this can be derived from the relative ranking of LEXTOP and TOPCRIT and their interaction with one additional constraint.
4 The Development in Danish

Jespersen’s cycle (1917) (that is, oscillation between free word and affix) offers support for the XP status of Danish *ikke* as well as for negation in the other Scandinavian languages and English. The original negative marker *ni* was reduced to a clitic *ne*- and subsequently another marker was introduced, namely *ekki*, which started out as a negative polarity item (NPI). At some point *ne*-disappears and the adverbial *ekki* is used alone to mark negation.13

(29) $ni \ V > ne-V \ ekki_{NPI} > V \ ekki_{NEG} > V \ icke_{NEG} > V \ ikke_{NEG}$

Topicalized negation is found in Proto-Norse (PrN) (Da. *Urnordisk*; c. 200-800) runic inscriptions (I take *ni’s* to be phonological cliticization of -s in Cº to *ni* in spec-CP):

(30) PrN: *ni’s solu sot uk ni sakse stAin skorin*

"It is not hit by the sun and the stone is not cut with a knife."

(ca. 700, The Eggjium Stone in Norway, Krause 1971: 143)

(31) PrN:

I propose that this obligatory movement to spec-CP of the negative operator is motivated by the highly ranked constraint *Operator in Scope*:

13 The former status of the negative marker as an NPI receives some support from the etymology of Danish *ikke* and English *not* (both reminiscent of the French *ne pas*, literally ‘not a step’):

(i) Da: *ikke* < OD *ekki* < ON *ekki*, neuter of *engi* < *ne einn-gi* / *ne eitt-gi* (‘not one-at.all’)
(ii) En: *not* < ME weak variant of *naught* < ME, OE *nauht*, nāwith (nā ‘no’ + with ‘thing’)
(32) **Operators in Scope (OPSc)**
Operators must be in scope positions, i.e. c-command the clause.
“OPs must be in spec-CP”

With OPSc ranked higher than LEXTOP and TOPCRIT, it is more important to have the operator in spec-CP than to move a potential topic and to make sure that spec-CP is lexical.

(33) Proto-Norse: \[ \text{OPSc} \gg \text{LEXTOP}, \text{TOPCRIT} \]

According to Eythórsson (2002: 193), the negative marker *ne* (*ni*) is rare and not productive in Old Norse and when it is there, it displays the characteristics of an archaism (base-generated on the verb). Moreover, in Old Norse, the verb with the proclitic *ne* never occurs sentence-initially.

This suggests a hypothetical intermediate stage between Proto-Norse and Old Norse, Proto-Norse 2, where *ne/nI* has been reduced to a proclitic head. Being an Xº, it can't move to spec-CP and block topicalization:

(34) **PrN2:**

```
CP
  Spec
    C'
      Cº
        AgrP
          Agr' ne-verb
            Spec
              Subj
                Agrº NegP
                  AdvP NegP ekkI
                    Spec
                      Neg´
                        Negº TP
                          t_1
```

Note that in Proto-Norse 2, *ekki* is adjoined to NegP like other sentential adverbials, whereas it occurs in spec-NegP in later stages where is has the status of true negation. (It is, of course, also possible to analyse *ekki* as a VP-adverbial; the difference is string-vacuous as the negative *ne* is cliticized onto the verb in Cº.)
The semantically light NPI *ekki* cannot be topicalized, which can be accounted for by ranking \text{LEXTOP} above \text{OPSC} and \text{TOPCRIT}: It is more important to keep spec-CP lexical than to move a non-lexical topic (\text{OPSC} doesn’t apply to Neg° or NPIs).

(35) Proto-Norse 2: \text{LEXTOP} \gg \text{OPSC}, \text{TOPCRIT}

In short, two things separate Proto-Norse 2 from Proto-Norse 1. First, negation *ne* changes from being realized as spec-NegP to being realized as Neg°. It is therefore not subject to \text{OPSC} as this constraint only applies to operators (XPs). Second, constraint reranking; \text{LEXTOP} now outranks \text{TOPCRIT} and \text{OPSC}.

According to Iversen (1973: 158), in Old Norse (ON, c. 800-1100), topicalization of negation had developed into being quite common – i.e. optional, not obligatory. The same pattern is found in Old Danish (OD, c. 1100-1350), and Middle Danish (MD, c. 1350-1500):

(36) ON: \underline{Ekki} er þat várt ættnafn
\hspace{1cm} \text{Not is that our family-name} \hspace{1cm} \text{(Iversen 1973: 158)}

(37) OD: Ekki kan umbotzman mere for siin ret fangæ
\hspace{1cm} \text{Not can ombudsman more for his right catch}
\hspace{1cm} \text{“The ombudsman has no right to catch more.”}
\hspace{1cm} \text{(1241, \textit{Jyske Lov}, Udaler \& Wellejus 1968: 90)}

(38) MD: Icke tror ie g ath Gud kunde bliffue mand
\hspace{1cm} \text{Not think I that God could become man}
\hspace{1cm} \text{(1534, \textit{Karl Magnus' Kronike}, Ruus 2001)}

(39) ON, OD, MD:
\hspace{1cm} \begin{tikzpicture}[scale=0.8]
  \node (spec) at (0,0) {Spec\text{\textit{ekki}}};
  \node (topic) at (-2,0) {C'};
  \node (agrp) at (-4,2) {AgrP};
  \node (verb) at (-6,4) {Verb\text{\textit{fin}}};
  \node (spec1) at (-8,6) {Spec\text{\textit{ekki}}};
  \node (subj) at (-10,8) {Subj};
  \node (agr) at (-12,10) {Agr'};
  \node (agr1) at (-14,12) {Agr®};
  \node (negp) at (-16,14) {NegP};
  \node (spec2) at (-18,16) {Spec\text{\textit{ekki}}};
  \node (neg) at (-20,18) {Neg'};
  \node (neg1) at (-22,20) {Neg°};
  \node (tp) at (-24,22) {TP};
  \node (t1) at (-26,24) {t_1};
  \draw (spec) -- (topic);
  \draw (topic) -- (agrp);
  \draw (agrp) -- (verb);
  \draw (verb) -- (spec1);
  \draw (spec1) -- (subj);
  \draw (subj) -- (agr);
  \draw (agr) -- (agr1);
  \draw (agr1) -- (negp);
  \draw (negp) -- (spec2);
  \draw (spec2) -- (neg);
  \draw (neg) -- (neg1);
  \draw (neg1) -- (tp);
  \draw (tp) -- (t1);
\end{tikzpicture}
The change from Proto-Norse 2 to Old Norse is also two-sided. **First**, negation changes from Neg\(^{o}\) back to spec-NegP. *Ne* has disappeared and *ekki* has changed status from NPI to negative operator (and thus from being adjoined to NegP to being inserted into spec-NegP). Old Danish and Middle Danish, as well as all the other Scandinavian languages except Modern Danish, behave in the same way as Old Norse in allowing topicalization of the negative operator.

The **second** change is constraint reranking: **TOPCRIT** is now ranked above **LEXTOP** and **OPSc**. It is more important to move any topic, lexical or non-lexical than it is to make sure that spec-CP is lexical or to move the operator into spec-CP.  

(40) Old Norse (and descendants): **TOPCRIT** \(\gg\) **LEXTOP, OPSc**

Consider next Modern Danish, which doesn’t allow topicalization of the negative operator.

(41) **Da:**

---

14 There is another important difference between Old Norse and the descendant Scandinavian languages on the one hand and Modern Danish and English on the other. The former (with Danish at least up until Middle Danish) allow (stylistically marked) V1 declarative main clauses in certain contexts, primarily in written narrative texts, a phenomenon know as Narrative Inversion. If Narrative Inversion is analyzed as topic-drop (perhaps of something like “and then”), such structures probably contain an empty operator OP in spec-CP. This OP, being an operator and topic, is subject to **OPSc, LEXTOP** and **TOPCRIT**; in fact it violates **LEXTOP**. Some other highly ranked constraint or constraints render such V1 declaratives grammatical. Alternatively, the finite verb (or some property of it) is itself the topic and thus checks [**TOP**] on C\(^{o}\). It is interesting to note that Danish and English which are restricted in the topicalization of ‘light’ adverbials are also the languages that disallow Narrative Inversion. German is a counter example as it disallows topicalization of *nicht* but allows Narrative Inversion. However, I disregard Narrative Inversion in my analysis.
The difference between Modern Danish and Old Norse (and its descendants) is that in Modern Danish, LEXTOP has highest priority. As in Proto-Norse 2, making sure that spec-CP is lexical has highest priority. After that, moving the topic has priority over moving the operator to spec-CP:

(42) Modern Danish: \[ \text{LEXTOP} \gg \text{TOPCRIT} \gg \text{OPSC} \]

There is, however, an important difference between Proto-Norse 2 and Modern Danish: In the former, negation is the proclitic Neg\(^\circ\), \textit{ne-}, whereas in the latter, it’s an XP in spec-NegP, namely, \textit{ikke}.

That the differences between the stages are rather minimal becomes clearer once the hierarchies are set up in a box-diagram. (Vertical lines mean “is ranked higher than”, i.e., the same as “\(\gg\)”; ‘missing’ vertical lines indicate that rankings are non-crucial, i.e. the same as commas in the constraint hierarchies above.)

(43) **Diachronic Change and Parametric Variation:**

<table>
<thead>
<tr>
<th>Stage</th>
<th>LEX</th>
<th>TOP</th>
<th>CRIT</th>
<th>OP</th>
<th>SC</th>
</tr>
</thead>
<tbody>
<tr>
<td>PrN1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PrN2</td>
<td>LEX</td>
<td>TOP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ON+</td>
<td>TOP</td>
<td>LEX</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Da</td>
<td>LEX</td>
<td>TOP</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The syntactic change in grammaticality of NEG-topicalization, but not the cyclic change between spec-NegP and Neg\(^\circ\), is accounted for by the movement of a single constraint (ON+ is short for Old Norse, Old Danish, Middle Danish, Faroese, Icelandic, Norwegian, and Swedish).

In fact, it seems that Jespersen’s cycle and NEG-topicalization has little or nothing to do with each other, except that XP status is a necessary (but not sufficient) prerequisite for topicalization:
5 The Development in English
The morphosyntactic development in English is in a number of ways parallel to the one in Danish. For expository reasons I begin with the summary:

### Summary of the morphosyntactic developments:

<table>
<thead>
<tr>
<th></th>
<th>PrE</th>
<th>OE</th>
<th>ME</th>
<th>ENE</th>
<th>En</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OP</td>
<td>LEX</td>
<td>TOP</td>
<td>CRIT</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XP/Xº</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Xº</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEG-topicalization</td>
<td>Da</td>
<td>En</td>
<td>ON+</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

-o=Da, ◇=En, □=ON+

<table>
<thead>
<tr>
<th>Time Period</th>
<th>PrE</th>
<th>OE</th>
<th>ME</th>
<th>ENE</th>
<th>En</th>
</tr>
</thead>
<tbody>
<tr>
<td>200-500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>500-800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>800-1100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1100-1400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1400-1700</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1700-present</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Diachronic Change and Parametric Variation:

<table>
<thead>
<tr>
<th></th>
<th>PrE</th>
<th>OE</th>
<th>ME</th>
<th>ENE</th>
<th>En</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OP</td>
<td>LEX</td>
<td>TOP</td>
<td>CRIT</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The [NEG] OP no must be in spec-CP. [-V2]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The [NEG] OP ne must be in spec-CP. [+V2]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spec-CP must be lexical: not can’t be topic. [-V2] / residual [+V2]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spec-CP must be lexical: not can’t be topic. [-V2] / residual [+V2], +dummy do</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Note that the rankings for Proto-, Old, and Middle English are the same as the one for Proto-Norse 1, and that Early Modern and Modern English are the same as Modern Danish. Jespersen’s cycle for English looks as follows:

\[(46) \quad \text{no} \ V > \text{ne} \ V > \text{ne-V na}_{\text{nPI}} > V \text{not}_{\text{NEG}}\]

Van Kemenade (2000: 63) divides the language in *Beowulf* into two stages, namely 8th century Old English, for which I use the term Proto-English, and Early and Later Old English, which I merely call Old English. In Proto-English (PrE, c. 450-800), which is not a V2 language, negation is marked with the sentence initial *no/ne* (I ignore OV word order phenomena):

\[(47) \quad \text{PrE: } \text{no} \ \text{ōhē} \ \text{wiht} \ \text{fram} \ \text{mē} \ \text{flōdybūm} \ \text{feor} \ \text{fleotan} \not\text{he thing from me waves-DAT.PL far swim} \not\text{could, quicker in water; not I from him wanted} \]

“In no way could he swim far from me on the waves of the flood, more quickly on the sea; I would not consent to leave him.”

(c. 750, *Beowulf*, 541-543, Klaeber 1922; translation: van Kemenade 2000: 61, (11a))

\[(48) \quad \text{PrE:} \]

\[\text{CP} \quad \text{Spec} \quad \text{no}_{1} \quad \text{C'} \quad \text{AgrP} \quad \text{Spec} \quad \text{Subj} \quad \text{Agr}^0 \quad \text{NegP} \quad \text{Spec} \quad \text{Neg'} \quad \text{Neg}^0 \quad \text{TP} \quad \text{Topic} \]

It’s more important to have the operator in spec-CP than to make sure that spec-CP is lexical and to move a potential topic:

\[(49) \quad \text{Proto-English: } \quad \text{OPSc } \gg \text{LEXTOP, TOPCRIT} \]
Old English (OE, c. 800-1100) is a V2 language and sentential negation is realized as the sentence initial \( ne \) immediately followed by the finite verb:

\[
(50) \text{OE: } Ne \text{ seah ic elþeodige þus manige men modiglicran }
\]

\[
\text{Not see I all-people thus many men brave}
\]

\[
\text{“Among all the peoples, I haven’t seen so many brave men.”}
\]

(c. 750, \textit{Beowulf}, 336-337, Klaeber 1922)

\[
(51) \text{OE: }
\]

\[
\text{CP (cf. (31))}
\]

\[
\text{Spec } ne_1 \text{ C’}
\]

\[
\text{Cº AgrP} \text{ Verb} \text{ Spec Subj Agr’}
\]

\[
\text{Spec Agrº NegP}
\]

\[
\text{Spec t} _1
\]

\[
\text{Negº TP}
\]

\[
\text{Topic}
\]

As was the case with Proto-English, in Old English it is more important to have the operator in spec-CP than to make sure that spec-CP is lexical and to move a potential topic (the difference between the two is the setting of the ‘V2 parameter’).

\[
(52) \text{Old English: OpSc } \Rightarrow \text{ LEXTOP, TOPCRIT}
\]

In Middle English (ME, c. 1100-1450), the sentence initial \( ne \) has been weakened and it is now supported by the sentence medial NPI \( na \) or by some other negative element (such as a negative quantifier phrase or \( nougt \)). \textit{Ælfric} is normally classified as Old English but when it comes to negation, it behaves more like Middle English:

\[
(53) \text{ME: } Ne \text{ hate ic eow na } \text{ beowan }
\]

\[
\text{Not hate I you not slave}
\]

\[
\text{“I don’t hate you, slave.”}
\]

(c. 1000, \textit{Ælfric’s Lives of Saints}, 84, Skeat 1966)
The semantically light NPI *na* (adjoined to NegP) cannot be topicalized. It is more important to keep spec-CP lexical than to move a non-lexical topic:

(55) Middle English: \[ \text{OPSC, LEXTOP} \rightarrow \text{TOPCRIT} \]

The difference between Old and Middle English is two-sided: **one**, negation changes category from spec-NegP to Neg°; **two**, spec-CP has to be lexical. Recall that OPSC doesn’t apply the Neg°.

Early Modern English (or Early New English, ENE, c. 1450-1700; ‘Shakespeare English’) is not a V2 language (or rather, it’s ‘residual V2’). The negative marker is *not* in spec-NegP and it can’t be topicalized.

(56) ENE: So foul and fair a day I have *not* seen.

(1606, *Macbeth*, scene 3, William Shakespeare)
The change from Middle to Early Modern English involves, again, two things: one, negation changes back from Neg⁰ to spec-NegP and two, constraint reranking. As before, semantically light elements can’t be topic but the crucial difference is that the negative operator can’t occupy spec-CP. Hence, OpSc is ranked lower than TopCrit and LexTop.

(58) Early Modern English: LexTop » TopCrit » OpSc

It’s more important to move the topic to spec-CP and to make sure that it’s lexical than it is to move the operator to a scope position.

Finally, the rise of do insertion during the 17th century (cf. Rohrbacher 1999: 166) leads to Modern English where lexical verbs no longer move (overtly) to Agr⁰. With regard to category and topicalizability of the negation marker, however, there is no difference between Early Modern and Modern English. The ranking of the relevant constraints are identical.
6 Summary

I have argued that the negation markers *ikke* and *not* in Danish and English, respectively, can be analyzed as XPs rather than $X^0$ and that the fact they can’t be topicalized is due to their semantic ‘lightness’ – a property also found with other adverbials.

The synchronic variation among the Scandinavian languages and English is accounted by different rankings of the Lexical Topic Constraint (LEXTOP) and the Topic Criterion (TOPCRIT).

The diachronic development from obligatory clause-initial negation in Proto-Norse and Proto-English to the present non-topicalizability of the negation markers is accounted for by two mechanisms: 1) categorical oscillation known as Jespersen’s cycle, and 2) the relative ranking of one more constraint, namely, Operators in Scope (OpSc).

These two mechanisms are independent. XP-status is a necessary, but not sufficient, prerequisite for topicalization.
References

Udaler, Nelly & Gerd Wellejus, eds. (1968) Gammeldansk Læsebog, København: Gyldendal.
Vikner, Sten (2001b) Verb Movement Variation in Germanic and Optimality Theory. Habilitationsschrift, Universität Tübingen.