# Multiple complementizers in Modern Danish and Middle English

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### Abstract

This paper expands the empirical coverage of the *c*P/CP-distinction proposed by Nyvad, Christensen & Vikner (2015) by applying it to a range of embedded clause types involving multiple complementizers in Middle English and Modern Danish, and offering a uniform analysis. Due to the fact that a number of the structures investigated do not violate the Doubly Filled COMP Filter, but involve multiple heads inside the CP-domain, the proposed CP-recursion analysis is an attempt to integrate more material into the CP-domain than a single X-bar projection level. Based on examples from adverbial clauses, complement clauses and relative clauses, I will show that the *c*P/CP-partition captures the data better than an account based on Rizzi's (1997) fine-grained left periphery.

## 1. Introduction

A clause is constituted by three different domains, namely CP, IP and VP. As pointed out by Rizzi (1997:281-283), the complementizer system is the interface between a propositional content (expressed by IP) and the superordinate clause. Hence, the CP-domain expresses at least two kinds of information, one facing the outside (potentially dependent on a higher selector, determining the specification of Force) and the other facing the inside (relating to finiteness). The syntax literature suggests that languages set their parameters as to how expansive the structure of the CP-layer may be. Specifically, complementizer doubling can either be viewed as a violation of the Doubly Filled COMP Filter (cf. e.g. Riemsdijk & Williams 1986), as argued by Müller & Sternefeld (1993:484), or as an instantiation of CP-

recursion, cf. Vikner (1995:119-120). A number of the structures under investigation in this paper do not violate the Doubly Filled COMP Filter, because two different head positions are filled, and the question of whether CP-recursion is subject to a parametric setting thus presents itself. The CP-recursion analysis proposed is an attempt to integrate more material into the CP-domain than a single X-bar projection level (cf. Authier 1992; Hoekstra 1993; Roberts 1993; Rizzi 1997).

Nyvad, Christensen & Vikner (2015) demonstrate that a wide range of long-distance extractions is possible in Modern Danish (MD). Given that extractions are possible out of e.g. embedded questions, there are implications for the syntactic tree, as there needs to be an escape hatch (i.e. an extra specifier position) in the embedded CP-domain. Current minimalist theory assumes multiple specifiers for such structures or a fine-grained left periphery, but Nyvad, Christensen & Vikner (2015) propose a *c*P/CP-distinction for Danish, relating to whether the clause in question is V2. This account not only has the advantage of minimizing the number of postulated phrase types inside the CP-domain, adhering to Occam's razor, but also captures the islandhood of V2 clauses in MD.

This paper will expand upon the account in Nyvad, Christensen & Vikner (2015) by looking at new syntactic structures and applying the *c*P/CP-distinction previously proposed for MD to a range of embedded clause types involving multiple complementizers in Middle English (ME). ME displays a number of remarkable parallels to MD and the two languages appear to be subject to some of the same restrictions. The purpose of this paper is thus to offer a comparative analysis of the phenomenon of multiple complementizers, and the central claim proposed here is that both languages may employ two basic types of CP-recursion in the embedded clause that occur independently of each other, and hence data from MD and ME can be captured in a uniform manner.

The data that form the basis of the syntactic analyses proposed may not be representative of standard varieties of MD and ME at all times. Complementizer stacking is a phenomenon that is principally found in spoken Danish, and some of the judgments that the analyses are built on may not be representative of Standard Danish, but rather the Eastern Jutland dialect of Danish, as suggested by a ScanDiaSyn survey (see Larsson 2014). In a similar vein, given the scarcity of surviving written records of e.g. northern ME dialects, questions concerning the nature of e.g. the Verb Second (henceforth V2) constraint in embedded clauses cannot be fully explored.

The syntactic environments investigated here are embedded V2, adverbial clauses, complement clauses and relative clauses. Comparing MD and ME, section 2 below investigates the role of embedded V2 in connection with the proposed *c*P/CP-distinction; section 3 looks at complementizer stacking in adverbial clauses (section 3.1), complement clauses (section 3.2) and relative clauses (section 3.3).

## 2. Embedded V2

Nyvad, Christensen & Vikner (2015) propose a *c*P/CP-distinction, whereby head positions in the CP-domain filled by a finite verb are heads of CP, while those filled by any other types of elements are heads of *c*P (see Koizumi 1995 for a similar suggestion). The type of CP-recursion found in non-V2 clauses involves *c*P-*c*P, whereas embedded V2 with complementizer stacking is argued to have the structure of *c*P-CP. The function of *c*P is thus reminiscent of *v*P as the upper layer of the VP-domain (Chomsky 1995:347). Long-distance extraction and embedded V2 are mutually exclusive in MD (see Nyvad, Christensen & Vikner 2015), which supports the *c*P/CP-distinction: V2-clauses of the CP-type are strong islands and thus have a "freezing" effect rendering extraction impossible, while long-distance extraction is allowed through an intermediate landing site of the *c*P-type. Another advantage of the distinction between *c*P and CP is that the V2 phenomenon receives a syntactic analysis in the form of the CP-type that embraces both main clauses and embedded clauses, whereas *c*P hosts complementizers, unambiguously subordinating in nature (for further details, see Nyvad, Christensen & Vikner 2015).

The V2 phenomenon involves movement of the finite verb to C° immediately following a constituent in CP-Spec (cf. Besten 1977). In Danish embedded clauses, the absence of a complementizer is not a prerequisite for V2 (Vikner 1995). In (1a), the verb does not move to C°, even though the complementizer is not present and in (1b) its absence leads to ungrammaticality.

(1a)   Jeg tænkte professoren ikke havde læst den artikel.          (MD)
       *I thought professor-the not had read that article*
       ("I did not think that the professor had read the article")

(1b)   Jeg tænkte *(at) den artikel havde professoren ikke læst.          (MD)
       *I thought that that article had professor-the not read*
       ("I thought that the professor had not read that article")

Embedded V2 in ME and MD occurs in clauses that structurally resemble matrix clauses, and it has been assumed to be dependent upon the properties of the matrix predicate as a "bridge verb" (i.e. a verb functioning pragmatically as assertions, e.g. *tro* 'believe', *sige* 'say', *mene* 'think') (see Vikner 1991; Johnson & Vikner 1994; see, however, Vikner 1995:70, fn 7; Julien 2007). The sentences in (2) have been analyzed according to the *c*P/CP-partition: The complementizer is in *c*°, the topicalized element in CP-Spec and the finite verb in the embedded V2 clause is in C°:

(2a)   ...as   ha   soð  seið  $[_{cP}[_{c°}$ þat $[_{CP}$ <u>þurh      unweotennesse</u>
        *as    she   truly says       that   through  ignorance*

       $[_{C°}$ ne  mei]  ha   nawt  sunegin __ ]].                    (ME)
          *not  can   she   not    sin*
       "as she truly says that through ignorance she may not sin"
              (Sawles Warde 255.33, cited by van Kemenade 1997:24)

(2b)   Vi  ved $[_{cP}[_{c°}$ at] $[_{CP}$ <u>om morgenen</u> $[_{C°}$ drikker] Peter ofte kaffe __ ]].
                                                                     (MD)
       *We know      that    in morning-the   drinks  Peter often coffee*
       "We know that Peter often drinks coffee in the morning"
                                               (Vikner 1995:47, (33h))

(2c)   Jeg sagde $[_{cP}[_{c°}$ at] $[_{CP}$ <u>det dér</u> $[_{C°}$ kunne] jeg gøre __ langt bedre]].
                                                                     (MD)
       *I    said       that  that there   could  I   do      much better*
       "I said that I could do that much better"

In MD embedded V2 clauses such as (2b), the complementizer *at* 'that' may be argued to be in Force, *om morgenen* 'in the morning' in Topic and the finite verb *drikker* 'drinks' in Fin. Wiklund, Bentzen, Hrafnbjargarson & Hróarsdóttir (2009) argue that the availability of embedded V2 in the Scandinavian languages is linked to illocutionary force in such a way that assertive (e.g. *sige* 'say', *tro* 'believe') and semi-factives (e.g. *vide* 'know') select a ForceP, while non-assertive (e.g. *benægte* 'deny') and truly factive verbs (e.g. *fortryde* 'regret') select a clause with a less articulated left periphery (see also Hooper & Thompson 1973). However, assertion is clearly not the only relevant criterion, given that semi-factive complements are presupposed. The role of the subcategorizing verb as central in the

licensing of embedded V2 (see Brandtler 2012 for an overview) is also challenged by data from adverbial clauses of reason in Danish; in the following example from the online corpus *Korpus.dk*, June 2015, the embedded V2 is found in an adjoined clause that is not licensed by a lexical head by nature:

(3) …så der    blev    en helvedes ballade, fordi    beboerne
    *so there   became  a  hell's    trouble  because  residents-the*

    <u>ville</u>   <u>ikke</u>   af   med den.                          (MD)
    *wanted  not    off  with it*
    "so there was a world of trouble because the residents did not want to part with it"

In a similar vein, van Gelderen (2004) notes that data from Middle English requiring an expansion of the CP-domain typically start to appear in adverbial clauses, to which we now turn in the context of complementizer stacking.

### 3. Complementizer stacking in Danish
Complementizer stacking is not dependent on the matrix verb in MD complement clauses, as we saw in the case of embedded V2 above. It can for instance occur after semi-factive, (4a), strong assertive, (4b) and non-assertive, (4c), verbs alike. (Strictly speaking, the following examples do not show complementizer stacking in the form of an embedded clause being introduced by two complementizers. Instead an initial *wh*-element is followed by the complementizer *at*, and given that *at* on its own can never introduce an embedded question, but only an embedded declarative, it is assumed that the *wh*-element is in the specifier position of a different CP from the CP that is headed by *at*).

(4a)  **Semi-factive**
      Han havde glemt <u>hvornår</u> <u>at</u> apoteket lukkede.          (MD)
      *He had forgotten when that the pharmacy closed*
      "He had forgotten when the pharmacy closed"

(4b)  **Strong assertive**
       Klovnene fortalte <u>hvaffor nogle tricks</u> <u>at</u> børnene bedst kunne lide.
                                                                  (MD)
      *Clowns-the told what tricks that kids-the best could like*
      "The clowns said which tricks the kids liked best"

(4c)   **Non-assertive**
       Jeg ville aldrig benægte <u>hvorfor</u> <u>at</u> jeg farvede mit hår lyseblåt.   (MD)
       *I would never deny why that I colored my hair light blue*
       ”I would never deny the reason why I dyed my hair light blue”

This syntactic flexibility echoes the many possibilites of extracting from an embedded clause in Danish (Nyvad, Christensen & Vikner 2015). Thus, it appears that *c*P-recursion is widely available in Danish. The addition of a non-obligatory *at* 'that' after another complementizer is virtually unrestricted and very prevalent in spoken Danish. In what follows, I will visit some of the possibilities and limitations of its distribution in adverbial clauses, complement clauses and relative clauses, demonstrating the parallels between Modern Danish and Middle English, and finally show that the *c*P/CP-division captures the data better than an account involving Rizzi's fine-grained left periphery.

### 3.1 Adverbial clauses

The combination of *fordi* 'because' and embedded V2 is very frequent in Danish, and the complementizer *for* 'for' also commonly allows a topic in the CP-domain. However, whereas the complementizer *fordi* can be followed by *at* 'that' in an embedded V2-clause, (5a), and extraction can take place across it, (7a), the complementizer *for* appears to be a lot more restrictive in the sense that neither complementizer stacking, (5b) and (6b), nor extraction, (7b) are possible. As explained above, extraction is not possible from embedded V2 clauses, hence the ungrammaticality of (8a) and (8b):

(5a)   Jeg glæder mig, <u>fordi</u> <u>(at)</u> i morgen skal jeg møde nogle nye
       mennesker.                                                            (MD)
(5b)   Jeg glæder mig, <u>for</u> <u>(*at)</u> i morgen skal jeg møde nogle nye
       mennesker.
       *I delight myself because (that) tomorrow shall I meet some new*
       *people*
       ”I am thrilled because tomorrow I will meet some new people”

(6a)  Jeg glæder mig, <u>fordi</u> <u>(at)</u> jeg skal møde nogle nye mennesker i
      morgen.                                              (MD)
(6b)  Jeg glæder mig, <u>for</u> (*at) jeg skal møde nogle nye mennesker i
      morgen.
      *I delight myself because (that) I shall meet some new people*
      *tomorrow*
      "I am thrilled because will meet some new people tomorrow"

(7a)   <u>Hvem</u> glæder du dig, <u>fordi</u> <u>(at)</u> du skal møde __ i morgen?    (MD)
(7b)  *<u>Hvem</u> glæder du dig <u>for</u> du skal møde __ i morgen?
      *Who delight you yourself because you shall meet tomorrow*
      "Who are you thrilled because you are going to meet tomorrow?"

(8a)  *<u>Hvem</u> glæder du dig, <u>fordi</u> (<u>at</u>) i morgen skal du møde __?    (MD)
(8b)  *<u>Hvem</u> glæder du dig <u>for</u> (at) i morgen skal du møde __?
      *Who delight you yourself because tomorrow shall you meet*
      "Who are you thrilled because you are going to meet tomorrow?"

These data suggest that *for* can select a CP, but not a *c*P, whereas *fordi* can
select both. This distinction has consequences for the *c*P/CP-analysis as a
whole; even though *c*P/CP-recursion can be found across the board with
virtually all complementizers, the difference in restrictions found between the
(a) and (b) examples in (5)-(7) above suggests that choice of complementizer
itself (and not e.g. the matrix predicate) plays an important role in whether or
how a CP-domain has a recursive structure.

     The complementizer *fordi* 'because' has its origin in Middle Danish
*for thy (at)* 'for it.DAT (that)'. Interestingly, van Gelderen (2004) notes that
the first occurrence of the complementizer *for* introducing a finite clause in
English is from the Peterborough Chronicle in 1123, and that complementizer
doubling starts shortly thereafter (for further examples, see Klima 1964:267ff;
Geoghegan 1975:48ff). The example in (9) (cited by van Gelderen 2004:18)
may suggest that *for* is in Force and *that* in Fin, but they may just as well
occupy different *c*°s, as shown here:

(9)    I trowe I loved hym best, [$_{cP}$[$_{c°}$ <u>for</u>] [$_{cP}$[$_{c°}$<u>that</u>] he   Was of   his love
       dangerous to me] ].                                              (ME)
        *I think  I loved him best      for        that  he was of  his love*
       *dangerous to me*
       "I think I loved him most because he was of his love was standoffish
       to me"

                               (c. 1386. Chaucer, cited by Benson 1987:112)

Colloquial MD allows *at* 'that' to follow an element that is undoubtedly in
*c*°, such as *hvis*, 'if', a feature also found in e.g. ME and West Flemish (see
Vikner 1995:121-122 for further details and examples):

(10)   <u>Hvis</u> <u>at</u>    det ikke  havde været så sørgeligt…          (MD)
       *If     that it   not   had   been  so sad*
       "If it had not been so sad…"
                               (Tom Kristensen, 1921, cited in Hansen 1967, III:388)

According to Hansen & Heltoft (2011:1651ff), the combination of a
conjunction (e.g. *mens, '*while' and *når*, 'when') and *at '*that', cf. (10), is
very common in spoken Danish and has occurred in Danish since the 16th
century.
       Complementizer doubling in adverbial clauses is optional, and it
is assumed here to be a recursion of *c*P. It can co-occur with both long-
distance extraction, (11b), and embedded V2, (11a). Given that extraction
from embedded clauses to a large degree is a phenomenon found in spoken
language (Hansen 1967:110), its frequency in ME will probably remain an
unanswered question:

(11a)  Jeg bliver   nem at finde [$_{cP}$ [$_{c°}$ <u>fordi</u>] [$_{cP}$ [$_{c°}$ <u>at</u>] [$_{CP}$i morgen [$_{C°}$ vil]
       *I    will-be easy to find       because    that tomorrow     will*

       jeg ikke gemme mig.]]]                                         (MD)
       *I    not hide    myself*
       "I will be easy to find because I will not hide tomorrow"

(11b)  <u>Hvem</u> blev    du   sur [$_{cP}$ __ [$_{c°}$ [OCC]] [$_{cP}$ [$_{c°}$ <u>fordi</u>] [$_{cP}$ [$_{c°}$ <u>at</u>]
       *Who  became you mad*                         because     that

       du   ikke kunne  finde __ ?]                                  (MD)
       *you not could   find*
       "Who couldn't you find which made you mad?"

The sentence in (11a) cannot be accounted for with reference to the fine-grained left periphery in Rizzi (1997). With the complementizer *fordi* 'because' in Force° and the topic *i morgen* 'tomorrow' in Topic°, there is no available intermediate position for *at* 'that' in the structure. In other words, the cartographic approach is unable to account for the Danish data without making further stipulations, whereas the *c*P/CP-distinction deals with them in a straightforward manner. Hence, Occam's razor would lead us to prefer the *c*P/CP-account over a cartographic approach, if not crosslingustically then at least for MD and ME.

### 3.2 Complement clauses
Whereas complementizer doubling (with *þæt þe*) was possible in OE complement clauses, *wh*-words followed by *that* in embedded questions were an ME innovation, (12b), given that the *wh*-word in this type of embedded clause was not accompanied by the complementizer *þet* or *þæt* in OE, (12a):

(12a) hi       nysten      <u>hwæþer</u> he þat þing   worhte.            (OE)
      *they   not-know   whether he that thing   did*
      "they did not know whether he did that thing"
                                            (Guthlac, cited by Lightfoot 1979:322).

(12b) men shal   wel   knowe    <u>who</u> that I am.            (ME)
      *men shall well   know       who that I am*
      "men will know who I am well"
                        (1485, Caxton, R67, cited by Lightfoot 1979:322)

Van Gelderen (2008:22) argues for a grammaticalization cycle for complementizers that looks as follows for English *whether*:

(13)  *Whether*        >  *Whether*          >  *Whether*
      Pronoun           CP-Specifier           head
      Semantic          [i-Q]                  [u-Q]

Van Gelderen (2008) argues that *whether* became a head early on, because it was only accompanied by a complementizer very infrequently. However, as she notes, extraction data suggest that it is in a specifier position in ME, because it blocks *wh*-movement across it. Similarly, given that extraction was possible out of ME *þæt*-clauses, *þæt* has been argued also to be in a head position:

(14)  <u>hwæt</u>  hi    wendon  <u>ðæt</u> he wære.                    (OE)
      *what   they  thought  that he was*
      (Anglo-Saxon Homilies, from Allen 1980:285, cited by Van Gelderen
      2008:28).

In addition, Kroch & Taylor (1997:315 (16a)) found a number of examples
of topicalization over a complementizer in the northern *Rule of St. Benet*
(ed. Kock):

(15)  I  sal  yu    lere    þe  dute  of  God, <u>his wille</u> þat 3e may do.
                                                      (Benet 2.5)   (ME)
      *I  shall your  teach    the  duty  of  God, his will  that ye may do*
      "I shall teach you the duty of God, that you may do his will"

According to van Gelderen (2004), *that* starts out in the specifier position
(after the initial phase where it had semantic content as a demonstrative
pronoun, see e.g. Lockwood 1968:222 and Hopper & Traugott 2003:191-
2), but as a consequence of the Head Preference Principle, which says that
language users prefer heads over full phrases (hence (13) above), it becomes
a head position.

    The stacked complementizers in the CP-domain of MD complement
clauses also follow the Head Preference Principle (even if stacked
complementizers lead to a violation of a principle of Economy, given
that because of the extra complementizer, the clause ends up longer than
necessary). In sentences containing complementizer stacking, any *wh*-
element present must be in the topmost *c*P-Spec, given that it is selected by
the matrix verb.

(16)  Jeg ved…                                              (MD)
      *I know*
      …[$_c$P <u>hvem</u> [$_{c°}$ <u>som</u> [$_c$P __ [$_{c°}$ <u>at</u> [$_c$P __ [$_{c°}$ der [$_{IP}$ __ vil  læse
         *who     that          that         that      will read*
      den her bog]]]]]]].
      *this here book*
      "I know who will read this book"

The sentence in (16) is not uncommon in informal contexts, suggesting
that *som, 'that'*, may not require an empty operator in its *c*P-Spec, contra
Vikner (1991).

**3.3 Relative clauses**

With respect to relative clauses the parallels between MD and ME are admittedly less straightforward. Curme (1911) argued that Proto-Germanic did not have a relative pronoun, and there was no specific relative pronoun in OE. Clauses were primarily introduced by "the indeclinable *þe* or an inflected form of the demonstrative pronoun *se*, where the case is determined by its function in the relative clause, or by a combination of the two" (Lightfoot 1979:322):

(17)   hwæt se    ðonne unryhtlice talað,   <u>se</u>   <u>þe</u>   talað   ðæt he
       *what there then    wrongly    argues    that that    argues   that he*

       sie   unscyldig.                                    (OE)
       *is    innocent*
       "he argues, therefore, wrongly, who argues that he is innocent"
                    (Gregory's Pastoral Care, cited by Lightfoot 1979:322).

*Wh*-relatives are introduced in late ME and, despite a considerable timelag, Lightfoot (1979:333-334) suggests that this change may partially result from the instability of the demonstrative pronouns which starts around 1200 (homophony of *þe* as a nominative demonstrative, as a definite article and as a complementizer must have led to parsing difficulties). *Wh*-pronouns had previously only been used as interrogatives and in indefinite (headless) relatives. The complementizer *that* was retained as an option in the new ME *wh*-relatives, and "the innovative *which that* surface patterns were similar to the former *se þe.*" (Lightfoot 1979:334).

   ME relatives differ from MD ones in the sense that a complementizer can follow a *wh*-relative pronoun immediately in ME, but not in MD, in structures such as the following:

(18a)  *Kun synet af hende hvem (at) jeg tjener…                (MD)

(18b)  Only the sight of hire *whom that* I serve …            (ME)
         (c. 1386, Chaucer, Knight's Tale 1231, cited by Lightfoot 1979:321).

It might be argued that the ungrammatical combination in (18a) above is due to feature incompatibility in the CP-domain (see Vikner 1991 for a discussion) or the *hv*-forms in MD having only an interrogative interpretation (see Lightfoot 1979:331 for a similar account for OE relatives). However,

other types of *hv*-words can introduce relative clauses in Danish (optionally
followed by another *that*-complementizer, *at* or *der*):

(19a) Jeg kender det sted hvor at dronningen bor __ .   (MD)
      *I know the place where that queen-the lives*
      "I know the place where the queen lives"

(19b) *Jeg kender den mand hvem (at) bor på slottet.   (MD)
      *I know the man who that lives in castle-the*
      "I know the man who lives in the castle"

(19c) Jeg kender den mand hvis hus der er et slot.   (MD)
      *I know the man whose house that is a castle*
      "I know the man whose house is a castle"

In addition, Lightfoot (1979:329) describes ME relatives in terms of obligatory
pied-piping and the grammaticality of the constructed examples that he lists
(1979:329) are completely parallel to MD counterparts (even though (20b) is
archaic. See Vikner 1991:112 for an elaboration on Danish relatives):

(20a) this bok of which that I make mencioun    ...            (ME)
(20b) Den bog til hvilken jeg refererer ...                  (MD)

(21a) this bok that I make mencioun of ...                 (ME)
(21b) Den bog som jeg refererer til ...                     (MD)

(22a) *this bok which (that) I make mencioun of ...    (ME)
(22b) *Den bog hvilken (som) jeg refererer til ...      (MD)

(23a) *this bok of that I make mencioun ...            (ME)
(23b) *Den bog til som jeg refererer ...               (MD)

As argued by Vikner (1991), only maximal projections can be complements
of prepositions, which accounts for the ungrammaticality of (23), and the
status of (22) is due to the obligatory pied-piping that takes place in *wh*-
relatives. In other words, ME and MD relative clauses display a range of
parallels. Moreover, Lightfoot (1979:321) notes that nominative *who* did
not exist as a relative pronoun until after the use of *that* with *wh*-words had
begun to decline in the sixteenth century (*which* served for both inanimate

and animate nouns), so the combination of *who that* has never been a part of the English language (Klima 1964:271).

Not counting *wh*-relatives, MD allows a wide range of complementizer stacking constructions in relative clauses, which Vikner (1991) argues involve CP-recursion with each of the complementizers residing in its own C°. The combination of *som at der* (all complementizers corresponding to English "that") in Danish relative clauses is only possible in one specific order, namely the one in (24) from Vikner (1991:132, modified):

(24)  Vi kender de lingvister…                                              (MD)
      *We know the linguists*
      …[$_c$P OP [$_{c°}$ som [$_c$P __ [$_{c°}$ at [$_c$P __ [$_{c°}$ der [$_{IP}$ __ vil læse den
                    *that*           *that*          *that*    *will read this*
      her   bog]]]]]]].
      *here book*
      "We know the linguists who will read this book"

The fact that stacked complementizers in Danish relative clauses must occur in a specific order might be viewed as suggesting an analysis in terms of Rizzi's fine-grained left periphery, e.g. *som* in Force, *at* in Fin and *der* in IP-Spec. However, Vikner (1991) presents data to suggest that *der* must select an IP, and hence it must be an element inside the CP-domain, in which case the cartographic approach does not offer a position for it. The *c*P/CP-account would view these variations of complementizer stacking straightforwardly as recursion of *c*P, an analysis that is also compatible with the ME data (see Vikner 1991 for an account of the order of the complementizers in Danish), and Occam's razor thus leads us to prefer the cP/CP-account over the cartographic approach.

## 4. Conclusions

Some of the syntactic parallels between MD and ME examined in this paper might suggest a new arena of Scandinavian influence on Old English in the form of changes in the CP-domain. A radical suggestion found in Emonds & Faarlund's (2014) book *English: The Language of the Vikings* is that Modern English should be recategorized as a North Germanic language based on the results of linguistic contact between Viking settlers and Anglo-Saxon residents in Britain. The areas of greatest Scandinavian settlement and linguistic influence were in the North and the Northeast Midlands.

However, the earliest manuscript of northern prose dates to around 1400 (Kroch, Taylor & Ringe 2000), and we have no direct evidence concerning the syntax of the Scandinavian languages from the contact period (Kroch & Taylor 1997), making a direct comparison of early dialects very difficult. Any Old Norse syntactic properties must have been acquired much earlier, namely at the time of the mixing of the Scandinavian and Anglo-Saxon populations in the late 9th or the 10th century. In addition, analyses of Old Norse (or Old Western Mainland Scandinavian), rather than MD, would of course have to form the basis of a proposal arguing for any direct linguistic influence on the possibility of CP-recursion. These empirical issues aside, there are a number of differences between the syntax of embedded clauses in ME and MD that suggests influence from French rather than Scandinavian, perhaps most notably in terms of *wh*-relatives.

Geoghegan (1975:57) suggests that the reason why ME retained *that* as an optional complementizer was that it "served to help speakers of a language undergoing a set of major transitions involving word order changes, loss of inflections and much more". However, as pointed out by Lightfoot (1979:335), this explanation does not account for the fact the "redundant" *that* found in complementizer stacking has been found with unequivocally subordinating conjunctions such as *before, while* and *if* well into the seventeenth century. In addition, such an account cannot explain why complementizer stacking is so common in MD.

As suggested by the *c*P/CP-account, complementizer stacking in MD may be linked very strongly to the wide range of possibilities for extracting from embedded clauses in Danish. It appears that the embedded CP-domain has the option of undergoing multiple recursion, to accommodate embedded V2, successive-cyclic movement in long-distance extraction and complementizer stacking. Based on experimental work, Christensen, Kizach & Nyvad (2013) argue that *wh*-island violations are grammatical in Danish, and these data are also incompatible with a cartographic account: Two ForcePs would be required to account for the grammaticality of *wh*-islands, and from a minimalist perspective an analysis in terms of a *c*P/CP-division would thus be more attractive (for an elaboration on the restrictions of this proposal, see Nyvad, Christensen & Vikner 2015).

Even though the ME data examined here are compatible with an analysis in terms of the *c*P/CP-distinction, these ME data are admittedly also compatible with other analyses, e.g. a multiple specifier account (Chomsky 1995:286) or a fine-grained left periphery account (Rizzi 1997). The MD data, on the other hand, are much more compatible with a *c*P/CP-account

(Nyvad, Christensen & Vikner 2015) than with a multiple specifier account (cf. e.g. the possibility of multiple complementizer stacking in embedded V2 clauses, e.g. (5a)) and with a fine-grained left periphery account (cf. both (i) the possibility of complementizer doubling preceding topicalization, cf. (11a), and (ii) extraction out of embedded questions, see (11b)).

In other words, unless examples from ME are uncovered which reveal syntactic possibilities parallel to Modern Danish, the alternative approaches (multiple specifiers, Chomsky 1995:286, and a fine-grained left periphery account, Rizzi 1997) fare just as well as the *c*P/CP-account for the ME data. However, it is only the *c*P/CP-analysis that accounts not just for the ME data but also for the MD data without making any further stipulations.

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