Let us have articles betwixt us

*Papers in Historical and Comparative Linguistics
in Honour of Johanna L. Wood*

*Edited by Sten Vikner,
Henrik Jørgensen &
Elly van Gelderen*

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Department of English
School of Communication & Culture
Aarhus University
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Contents

All contributions have undergone peer review.

Preface

A festschrift is an academic tradition where a scholar is honoured and thanked by fellow scholars. This festschrift with its papers on historical and comparative linguistics is dedicated to Johanna L. Wood on the occasion of her 65th birthday, January 31, 2016.

Born in Worcestershire, England, to a Dutch mother and an English father, Johanna's career inside and outside linguistics and English studies has taken her to London, England (1969-1972); to Glasgow, Scotland (1973-1978); to Munich, Germany (1978-1980); to Phoenix, Arizona (1980-2003), and most recently to Aarhus, Denmark (since 2004).

Apart from being a teacher of and a researcher in linguistics and English studies, first at Arizona State University and then at Aarhus University, Johanna has also worked as a chemical laboratory technician for Harris Plating Ltd. in London and later for Strathclyde Regional Council, she has worked for Her Majesty's Inland Revenue in Lanarkshire, and she has also found time to bring up her three sons, Graham, David and Chris, and to contribute to the bringing up of her three grandsons Daniel, Aaron and Alan (also known as AJ).

Johanna holds a PhD (2003), an MA (1997) and a BA (1994) in English, all from Arizona State University, and she also holds a degree in applied chemistry (1971) from what is now London South Bank University.

The title of this festschrift is a quote from *Cymbeline* by William Shakespeare (act 1, scene 4). In the Shakespeare's play, the words *Let us have articles betwixt us* signal the acceptance of a bet, but this fact is not related to the relevance of the quote here. The reasons why we found the title appropriate for this festschrift on historical and comparative linguistics were

- that the book contains 21 articles;
- that both the definite and the indefinite article are among the syntactic phenomena that Johanna herself has focused on in her research,
- which includes work on the unexpected occurrence of certain articles between (betwixt) other elements.

The fact that the author of the words in the title is the most famous (and most often quoted) speaker of any historical variant of English is of course not irrelevant either, given that all of Johanna's work has included some aspect of the history of English.

Johanna's diachronic and theoretical work on the negation phrase (NegP, Wood 1997) is significant in showing the variation that negatives display in occupying parts of the NegP. This investigation also led to her work on the difference between the various dialects of Middle English (Wood 2002b) and on historical pragmatics and the importance of register (Wood 2001, 2004b, 2009).

A substantial part of Johanna's work is on the definite aspects of the determiner phrase (DP), in particular on the universality of the DP and on the doubling of certain quantifiers (Wood 2003, 2004a). In the influential and often cited Wood (2002a), she also showed how important the use of corpora could be in generative analyses of language history. Wood (2004b, 2007a,b) all argue for an articulated architecture of the DP by showing the contribution of possessives and demonstratives and also where they are placed, including arguing for a number phrase above NP but inside DP. Most recently, when her teaching obligations and her administrative work in the English department have allowed it, she has worked on degree adverbs and indefinite articles (Wood and Vikner 2011, 2013), and on measure nouns from a cartographic to a feature to a cycle perspective (Wood 2016).

With this festschrift, we would like to express our gratitude to Johanna for her work in linguistics, for her commitment to her students and colleagues, to English linguistics, and to the English department, and for her generosity with her time, with comments, with references, and with general advice.

We would also like to say thanks to all of the contributors, to Theresa Biberauer and Jonathan White, to the School of Communication and Culture, Faculty of Arts, Aarhus University, and to Kirsten Lyshøj for her invaluable assistance with the typesetting and the lay-out of the book.

Sten Vikner, Henrik Jørgensen & Elly van Gelderen

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Event semantics aligned with Bech's status of the verbum infinitum

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Abstract

The paper aims at extending Bech's survey of complement valence in Standard German with examples from Southern German ('Oberdeutsch'), where gerundial forms replace prepositional infinitives of Standard German as well as bare infinitives governed by non-modals (in the function of the so-called 'absentive'). In a second step, an attempt is made to align the result of this extended inventory with Carlson's distinction between individual and stage level predicates. The idea behind this comparison is that stage level readings as well as individual level readings are dependent on aspectual properties of the complements in a variety of typical cases. This fact by itself appears to warrant such an attempt and decidedly enriches Bech's system for German and partly extends to Dutch.

1. Background and goal

The present discussion extends Gallmann's (2014) reinterpretation of Bech (1983) adding above all gerundial forms in German Southern dialects as well as seeking modes of alignment with semantic verb classification in the sense of Carlson (1977). In this sense, the paper goes far beyond Bech and Gallmann.

Drawing on distinctions of non-finite verbal forms in Classical Latin, the Danish linguist Gunnar Bech developed the following classification of non-finite verbal forms and functions in German (Bech 1983:12-13). The novel idea of this classification rests in the fact that valence is not viewed under the angle of the valence governor, but under the perspective of the complement. Such a view is fruitful only under clear restrictions on the type of complement, in our specific case non-finite verb forms governed

by finite predicates. See Table 1 (where G=German, E=English, D=Dutch.-
Notice that, following German and Dutch orthographic use, full sentences
begin with a capital letter, non-sentential examples, however, with a small
one.).[1]

Status 1: bare infinitive complement					
	Grade 1: non-finite complement of full verb	Phrase status	**Grade 2:** predicative	Phrase status	**Grade 2:** attributive
1 G	Er konnte es nicht länger **lesen.**	bare infinitive. PRES	(ein es) **lesend**(er.M. NOM. SG)	PresP	.M.NOM.SG
E	He could no longer **read** it.		a *it **reading** one	*	-
D	Hij kon ´t niet langer **lezen**.		'n het **lezend(e)**	PresP	.NOM.SG
Status 2: prepositional/P-infinitive complement					
2 G	*Er vermochte es nicht mehr **zu** lesen.*	P-infinitive. PRES	*ein es **zu** lesen(d(er.M. NOM.SG)*	P-PresP	.F.NOM.SG
E	*He was no longer able **to** read it.*		*(*an (*it) **to read** one)*	*	-
D	*Hij was niet in staat het te lezen.*		*´n het **te** lezend(e. NOM.SG)*	P-PresP	.NOM.SG
Status 3: Participle perfect passive/PPP-complement					
3 G	*Diese Zeilen bleiben **verehrt.***	Predicate result/PPP	***verehrt**(e.NOM.PL)*	(result) PPP	.N.NOM.PL
E	*These lines remain **adored.***		***adored***	PPP	PL
D	*Deze lijnen blijven **geliefd.***		***geliefd**(e(NOM. PL))*	PPP	NOM.PL

Table 1: Status-grade classification of non-finite verb forms in German, English,
and Dutch

It is perhaps not quite obvious at first sight that what Bech meant to underline with this classifying strategy is the valence status of verbal complements (for German OV/left-directed government, i.e. CompV: $[V_{[-FIN]} [V_{[+FIN]}]]$). The underlying three status stages (first column in Table 1) comprises bare infinitive - prepositional infinitive - past participle. By contrast, grade 1-2 (first line in Table 1) distinguishes uninflected (and thus predicative) non-finites (infinitive, participles) as opposed to inflected ones (thus only applicable in attributive function).[2]

Bech's status may be compared with nominal case declension, which depends on the function of the nominal. Thus, status determines the morphological type of the verbal complement: i.e. bare infinitive, prepositional infinitive, and participles as complements of V in VP. Grade (German 'Stufe') indicates the syntactic function of the complement form: i.e. predicative verbal/adjective or attributive adjectival, thus either again V in VP or V in AP. The typologically intriguing fact is that German verb infinitives are hybrids between verbals and nominals. As verbs they extend case and prepositional valence, while as nominals (and adjectivals) they are subject to paradigmatic agreement with the DP-head they are attached to as attributes. See Table 1 for this threefold status distinction and twofold (or equally threefold) grade distinction.

Bech's idea was not only to base a great number of grammatical and paradigmatic phenomena on this fundamental classification, but also to derive other more or less related phenomena with a twofold goal: to extend the range of phenomena to be placed under the roof of this basic classification; and to embed all phenomena in an fully axiomatized system. In pursuing this goal, Bech positioned himself as a predecessor to modern systematic linguistics, above all formal approaches such as structuralism and generative lingusitics, both cast in the form of templatic or derivational systems (see also Fabricius-Hansen 1983 in her preface to Bech 1983). Bech's impact on languages other than German is practically zero, although one can transfer some aspects of the classification to other languages (e.g., following Gallmann 2014:6, French *Jeanne désire **entrer*** 'J wants to enter' – *Jeanne se decide à entrer* 'J decides to enter'- *Jeanne rêve **d'entrer*** 'J dreams of entering'; English: *John will **work** - John*

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[2] As maintained by Vikner (2001) as well as others, the link between uninflected and pre-dicative only holds in Germanic SOV-languages like German, Dutch, Afrikaans, Frisian, and Yiddish (and vacuously English), not, however, in Romance or in Scandinavian, where predicatives do show agreement morphology.

*begins **to work** - John begins **working***). The most complete form paradigm is provided by Latin: *Augustus templum **restituere** iussit* (bare infinitive) 'A ordered the temple to be restored' - *Augustus templum **restituendum** curavit* (gerundive) 'A took care to have the temple restored' - *Augustus **ad templi restituendum** curavit* (gerund) 'A took care to have the temple restored'[3] - *Caesar Germanos **venientes** vidit* (Present participle) 'C saw the Germanics arriving' - *Iulia ad cubiculum **dormitum** iit* (Supine I) 'J went to bed to sleep' - *Horribile **dictu*** (Supine II) 'horrible to say'.

The present discussion takes up Bech's classification and tries to integrate forms that were beyond the interest of the Danish author. These forms are part of dialects and regiolects, more oral than written, and they reach back to previous stages of German, Old High German (750-1050) and Middle High German (1050-1350) and presumably even later into Early New High German (1350-1550). This is how we will proceed in this discussion. First, the new data will be introduced and set against the schema in Table 1. It will be seen that no easy reclassification is possible. In another grade, Carlson's classification of events will be taken to accommodate the new data from German. In the conclusion, we will wrap up the brief discussion and say where the advantages of either Bech's or Carlson's approach lies. Throughout it will be interesting to see how the distinctions in German are reflected in modern English and partly also in modern Dutch.

2. Syntactic systematization and the new data

While Bech's classification is based on morphological criteria, Table 2 lists the syntactic distinctions alluded to already in less formal ways in the side columns (columns 3 and 5) in Table 1. [OV-'left projecting' refers to German and Dutch embedded clauses only, while VO-'right projecting' refers to all three languages in matrix clauses].

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[3]   The difference between the last two Latin versions cannot be rendered in English.

Status L-type	**Grade 1:** full verb complement-left projecting	**Grade 2a:** copula complement-left projecting	**Grade 2b:** attributive-right projecting
1 OV	$[_{VP} [_{DO(=CP)}$ *warten*$]$ *konnte*$]$	$^{??}[_{VP} [_{CopP} [_{V'}$*jagend*$]$ *sein*$]]]$	$[_{NP} [_{A/V}$ *liebender*$]$ *Mann*$]$
VO	*could wait*	*be hunting*	*loving man*
OV	*<kon> wachten <kon>*	*jagende zijn*	*'n minnende man*
2 OV	$[_{VP} [_{DO(=CP)}$ *zu warten*$]$ *vermochte*$]$	$[_{VP} [_{CopP} [_{V'}$ *zu lieben*$]$ *sein*$]]]$	$[_{NP} [_{A/V}$ *zu liebender*$]$ *Mann*$]$
VO	*was able to wait*	*to be loved*	*man to be loved*
OV	*te wachten in staat was*	*bemind zijn*	*man om bemind te zijn*
3 OV	$[_{VP} [_{CopP} [_{V'}$ *ausgetauscht*$]$ *bleiben*$]]]$	$[_{VP} [_{CopP} [_{V'}$ *geliebt*$]$ *bleiben*$]]]$	$[_{NP} [_{A/V}$ *geliebter*$]$ *Mann*$]$
VO	*be/remain exchanged*	*to remain loved*	*loved man*
OV	*onverwisseld zijn/ blijven*	*bemind blijven*	*beminde man*

Table 2: Syntactic analyses of Bech's status and grade distinctions

It is easy to see that Bech's classification is incomplete to the extent that status 1/grade 2 is not represented in modern German. The present participle in predicative usage, *jagend sein* 'be hunting', was last used in Middle High German ((near-)adjectival exceptions are discussed in Lübbe 2013). Leaving this slot unfilled for modern German would severely jeopardize Bech's classification. On the other hand, naturally, it would show us in which respect the diachronic development of verbal complementation of German changed. However, what is completely unaccounted for are forms like *zum Kotzen sein* 'to.DAT.N vomit be'(more often replaced by *um zu kotzen* 'for to vomit', Dutch *om te kotsen',* at least in Standard German). However, this gerundial variant is the rule in oral Southern German in that it supplants entirely the prepositional infinitive of Standard (written) German. In the following examples, mStG=modern Standard German, SG=Southern German ('Upper German').

(1) a mStG   Das ist gut zu sehen.
                   this is good to see/to be seen
     b SG   i   Das ist gut zum Sehen. [4]
                   this is good to.DAT see
              ii   Es ist gut (dies) zu sehen.
                   It is nice for someone to see (this)
             iii   Das ist gut zu sehen.
                   This is nice to see
              iv   Das ist gut zu sehen.
                   This can clearly be seen
     c Dutch vi Dit is goed (om) te zien.
                   this is good (for) to see
             vii   Dit is goed te zien.
                   this is good to see

Variants such as SG (1bi), a clear substantivized use of the infinitive (called henceforth 'gerund' in line with the traditional grammatical terminology; cf. Abraham 2015c), is unknown in the other Germanic languages. The reason is, to all appearances, that the type of cliticized case inflection as in *zum*.NOUN. NEUTER.DATIVE.SINGULAR has no way of representation in other languages. What we then have to do is to extend Bech's classification with respect to the gerund and insert another status subclass under grade 1 as a complement not only of a limited class of full verbs (comprising *versuchen* 'attempt' and *beabsichtigen* 'intend') and above all the copula (*Da ist nichts zum Sehen* 'there is nothing to be seen') and a limited class of other full verbs. What we are interested in is thus (a) which slots have become empty in the diachronic course of German and (b) which forms existed earlier (as, presumably, retained in dialects of SG), but are difficult to account for in Bech's systematics.

Let us list then non-finite forms in complementation of the copula as in Table 3 (with the attributive slot left out as redundant here).

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[4]   As there is no P-infinitive in SG, this form is ambiguous between (1a,b).

Status	1st grade: bare infinitives complemented-left projecting	2nd grade: gerund complements-left projecting
1 G	$[_{VP}[_{DO(=CP)}$ *warten sein*]] $[_{VP}[_{DO(=CP)}$ *jagen sein*]	$[_{VP}[_{CopP}[_{V'}$ *jagend(e)*] *sein*]]] $[_{VP}[_{CopP}[_{PP}$ *am/beim* $[_{V/N}$ *Jagen*]]*sein*]]
E	*to be waiting/hunting*	*to be hunting*
D	*wachten/jagen zijn*	*wachtend(e)/jagend(e) zijn*
2	$[_{VP}[_{DO(=CP)}$ *zu* *warten/sehen*] *sein*]	$[_{VP}[_{CopP}[_{V'}$ *zu* *schlafend`*/liebend*] *sein*]]]
E	*to be *wait/*see*	*to be sleeping/loving*
D	*te *wachten/zien zijn*	*to be waiting/seeing*
3	$[_{VP}[_{CopP}[_{V'}$ *verehrt*] *sein*]]]	(ein-) $[_{VP}[_{CopP}[_{V'}$ *verehrte-*] *sein*]]]
E	*to be adored*	*to be *(an) adored (one)*
D	*vereerd zijn*	*(`n) vereerd- zijn*

Table 3: Distinct copula complements extending cross-classifying Bech's status and grade system

Obviously, status 1/grade 1 is ungrammatical for specific predicate lexemes (**warten sein*) as opposed to others (*jagen sein*). Note that copula+bare infinitive carries a specific reading, i.e. an absentive one. According to Abraham (2006), this needs to be accounted for by a covert predicate denoting absence (such as *(weg) sein jagen* 'to be off hunting'). Notice that the very same account does not work for other verbs, i.e. *(weg) *warten sein* 'be off waiting' although *jagen* 'hunt; chase' and *warten* 'wait' are identical under the criterion of mono-valence. Note also that the same functional status is missing under grade 2, i.e. complemental present participle.

What carries even more weight is the fact that there are profound differences under status 2 in that only transitive verbs are eligible, thus eliminating intransitives. Yet, see German (2a,b) as opposed to German (2c), which replaces the subject *dies* 'this' by the expletive *es* 'it'.

(2) a. Das ist gut zu sehen.
         This is good to see/to be seen
     b. *Das ist gut zu warten/laufen.
         This is good to wait/run
     c. Es ist hier gut zu warten/laufen.
         It is good to wait/run here.

German *sehen* 'see' in (2a) is transitive, while *warten* 'wait' and *laufen* 'run' in (2b) are intransitives. The subject in (2a) has object status with respect to *sehen* 'see', whereas no such valence status can be addressed for the subject function in (2b). We draw the obvious conclusion that the P-infinitival construal passivizes only where the required demotion can be carried out with transitives. With intransitives, there is no external argument to be demoted yielding ungrammatical (2b). Yet, passivization of intransitives, a special asset of German, is possible. Not even Dutch is on a par. See Dutch (3a-c) as distinct from German (2c) and (3d,e).

(3)   a   Het/er is om de hoek beter *(om) te wachten.
          It/Expl is around the corner better (for) to wait
      b   Het/er is op deze bosbodem goed *(om) te lopen.
          It/Expl is on this forest ground good (for) to run
      c   Deze bosbodem loopt beter.
          This forest ground runs comfortably
      d   Es läuft sich gut auf diesem Waldboden.
          it-runs-REFL-well-on-this-forest ground
      e   *Dieser Boden läuft (sich) angenehm.
          this ground-runs(-REFL)-comfortably

Dutch (3c) is a middle construction with the original place adverb raising to subject of a valence promoted verb *lopen* 'run'. Nothing reflects this valence change on the verb in the languages under discussion except in German, which uses the reflexive to signal valence demotion (Abraham 1994). Neither English nor Dutch signal such up- or downgrading of lexical valence, while German possesses only very few verbs ambiguous between both valences, i.e. transitive/causative as well as intransitive/ anticausative represented by one lexical form only (Abraham 2000, 2008). German allows no underspecification of morphological valence, while the other Germanic languages do freely.

There is one other type of phenomenon to be reclassified in Bech's system. See the following illustrations common in Southern German dialects to even outranging the prepositional infinitive in Standard German as a verbal complement. While (4a,b) are common Austrian-Bavarian, (5a-d) are modern High Alemannic (Montafon, Vorarlberg in Western Austria). Notice the gerundial forms where StG would use P-infinitives as in (1a,b). [iV=intransitive verb, tV=transitive verb; MStG unless indicated]

(4)   Gerund object (Bavarian-Austrian regiolectal)
  a   Er versucht noch **zum Warten**_{iv}.
      he tries still to.DAT wait.INF.N
  b   Er beginnt das Auto **zum Warten**_{tv}.
      he begins the car to.DAT service.INF.N

(5)   (High Alemannic, Tschagguns/Montafon)
  a   Se senn (aweg) ötschas **ga regla**_{tv}.
      StG gloss: *sie sind etwas <u>gen</u> regeln*
      StG translation: *Sie sind (**weg)** etwas **zu** regeln*
      they are (off) something to take care of

      (High Alemannic, Bludenz/Vorarlberg)
  b   (Er isch net doo. -) Er **isch (aweg) gi iikoofa**_{iv}.
      StG translation: *Er ist nicht da -) Er ist (weg) **zum** Einkaufen.*
      (he is not here.-) he is (off) shopping

      (High Alemannic, Tschagguns/Montafon)
  c   Eer is (aweg) ötschas **ga iikoofa**_{tv}.
      StG gloss: *er ist (weg) etwas gen einkaufen*
      StG translation: *Er ist (weg) etwas einkaufen*
      he is (off) something to shop

      (High Alemannic, Tschagguns/Montafon)
  d   Eer goot ötschas g**a öbrkoo**_{tv}.
      StG gloss: *Er geht etwas gen (überkommen/)bekommen.*
      StG translation: *Er wird etwas bekommen*
      he goes/is off getting something

The Alemannic examples use the preposition *ga/gi,* deriving from MHG *gen/gegen* 'toward' (which assigns accusative, which, however, does not show on the infinitives). The equally gerundial usage is much clearer in Austrian-Bavarian *zum* in (4) with the clitical neuter dative singular morphology *–m* (German infinitives decline as neuters: *das*_{NOM} *Warten/ Laufen / zu (de-)m*_{DAT} *Warten/Laufen*).

      The two types of gerundial forms in (4)-(5) have a couple of prepositional parallels. See the copula dependent infinitival complements (6) with prepositions instead of *ga* and *zum*.

(6) a Er ist noch **am** Warten.
       he is still on wait
    b **beim** Frisieren sein
       with hair styling be
    c **mit** dem Kochen noch warten
       with the cooking still wait
    d Er ist den Hahn **am** Schlachten.
       he ist he cock on slaughter

German grammars classify (6a, b, d) as Rhenian progressives with their status rated as verbal forms. Abraham (2015c) argues on the basis of distributional distinctions that they are to be seen as gerunds, i.e. nominalized infinitives. All grammars of Old and Middle High German agree that infinitives as complements of prepositions declined the preposition+clitic article for case (cf. Abraham 2015c).

One immediate way to reclassify the pertinent gerunds in Bech's system would be to extend status 2/grade 1 to these phenomena. Needless to say that the implications are profound, related to the definite article in cliticized form and nominal gender, number, and (dative) case. Bech's system foresees no classificatory labels and, consequently, there are no system slots for this. Table 3 sketches this situation including the new data material under list numbers 14-21. Table 4 also focuses those slots that are not valid in modern standard German (starred examples). The gerundial forms need to be seen as competitors with Bech's representations in status 2 of the Verbum infinitum of standard German. In Table 5 the finite predicate is the copula *sein* 'be'.

Table 4 surveys possibilities of alignment of verbal and nominal infinitival complements licensed by full verbs and the copula in Bech's system.[5]

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[5] Notice that there are (cells filled by) starred examples and cells with minuses in them. Minuses mean that the grammaticality decisions are the same as in the same column higher up, albeit with different lexicals, and the respective forms are not repeated.

Status 1, Grade 1 - predicative	Word class	Grade 2a - copula-predicative	Word class	Grade 2b - adj. attribute	DP-agree-ment
1 *Er durfte sie nicht* **lieben**$_{tV}$. he was allowed her not love	Pres. infinitive	***liebend**$_{tV}$	Pres. parti-ciple	*ein* **lieben-der**	Pres. parti-ciple
2 *Er konnte nicht länger* **warten**$_{iV}$. he could not longer wait		***wartend**$_{tV}$		*ein* **warten-der**	
3 *Er mag das Auto* **warten**$_{tV}$. he likes the car service		***wartend**$_{tV}$		*ein* **warten-der/-*es**	
4 *Holz kann heftig* **brennen**$_{iV}$. wood may vehemently burn		***brennend**$_{iV}$		*ein* **bren-nendes**	
5 *Er kann alles* **verbrennen**$_{tV}$. he may all burn up		***ver-brennend**$_{tV}$		*ein* **verbren-nender/*-es**	
6 *Der Holzstoß muss* **verbrennen**$_{eV}$. the wood pile must burn up		***ver-brennend**$_{eV}$		*ein* **verbren-nendes/-*er**	

Status 2a, Grade 1 (predicative)		Grade 2a		Grade 2b	
7 *Er begann sie zu lieben*_{tV}. he began her to love	Pres.P-infinitive	***zu liebend***_{tV}	Pres.P-GER	*ein zu liebender*_{tV}	Pres. GERV
8 *Er versuchte noch zu warten*_{iV}. he tried yet to wait		***zu wartend***_{iV}		** ein*_{SUBJ} *zu wartender*_{iV}	
9 *Er versprach das Auto zu warten*_{tV}. he promised the car to tune up		***zu wartend***_{tV}		*ein*_{DO} *zu wartendes*_{tV}	
10 *Holz begann heftig zu brennen*_{iV}. the wood began vehemently to burn		***zu brennend***_{iV}		**ein zu brennendes*_{iV}	
11 *Er begann alles zu verbrennen*_{tV}. he began everything to burn up		***zu ver-brennend***_{tV}		*ein zu ver-brennendes*_{tV}	
Status 2b, Grade 1 (predicative)		Grade 2a		Grade 2b	
12 *Er versucht noch zum Warten* . he tried still to.dat wait.NOUN	PresP-GER/ P-object	–	–	–	–
13 *Er beginnt das Auto zum Warten*. he starts the car to.dat maintain.NOUN		–		–	

Status 2c, Grade 1 (predicative)		Grade 2a		Grade 2b	
14 *Se senn ötschas **ga regla**.* they are something to take care of	Pres. P-gerd / copula P-com-plmt.	–	–	–	–
15a *(Er isch net doo. -) Er isch **gi iikoofa**.* he is not here – he is to shop		–		–	
15b *Eer goot ötschas **ga öbrkoo**.* he goes something to get		–		–	
Status 2d, Grade 1 (predicative)		Grade 2a		Grade 2b	
16 *Er ist noch **am Warten**.* he is yet on waiting	Pres. P-GER / Cop+P Compl	–	–	–	–
17 ***beim Frisieren** sein* on hairstyling be		–		–	
18 ***mit dem Kochen** noch warten* with the.DAT cook still wait		–		–	P-adverb
19 *Er ist **den Hahn am Schlachten**.* he is the cock on slaughter	DO-excor-porating GER	–	–	–	hybrid between V and adverb

Status 3, Grade 1 (predicative)		Grade 2a		Grade 2b	
20 *Diese Seiten bleiben* **ausgetauscht** these pages remain undistributed	Past parti- ciple	**ausgetauscht** *(sein) distributed be*	Past Parti- ciple	*diese*$_{DO}$ **ausge- tauschten** *these dis- tributed ones*	Attribute
21 *Er hat fleißig* **gearbeitet** he has diligently worked		**gearbeitet** *(haben)* worked have		**ein*$_{SUBJ}$ **gearbeitet- (seiend/** $^?$**habend)er**	

Table 4: Verbal and nominal infinitival complements licensed by full verbs and the copula in Bech's system

In contrast to Table 4, the following Table 5 varies the finite verb, replacing full verbs by the copula, which results in new predicate clusters with different syntactic behaviour and valence licenses.

Status 1/Grade 1 (predicative): copulae: *sein* 'be', *bleiben* 'stay'	morph category	Status 1/ Grade 2a predicative	Morph category	Status 1/ Grade 2b (Adj-Attrib)	DP-agr.
22 *Er ist gerade **unterrichten*** he is just now teach	Pres. Inf.	*??***unter-richtend** teaching	Pres. Part.	*ein **unter-richtender*** a teaching (person)	Pres. Part.
23*??Er bleibt noch* **unterrichten** he keeps still teach					
24 *#Es bleibt noch* **unterrichten** it.EXPL keeps still teach					
25 *Er/Es ist **zu** unterrichten* he/it.EXPL is to teach	Pres. P-inf.	***zu** unter-richtend* to teaching	Pres. P-GER	*ein **zu** unterrich-ender* a to teach-ing.M.SG.NOM	Pres. GERV
26 **Er/Es ist noch* länger **zu warten** he/it.EXPL is still longer to wait		***zu** wartend* to wait			
27*??Es bleibt noch* länger **zu warten** it.EXPL keeps still longer zu wait		***zu** wartend* to wait			

Status 2a Grade 1		Status 2a Grade 2a		Status 2a Grade 2b	
28 *Er/Es ist **zum Unterrichten*** he/ it.EXPL is still **to**.DAT.SG.N teach	Pres. GER	–	–	–	–
29 *Es ist noch **zum Warten*** it.EXPL is still **to**.DAT.SG.N wait		****zum wartend*** to.DAT. SG.N wait		**ein **zum Wartendes*** a to.DAT. SG.N wait. SG.N.NOM	
30 *#Es bleibt noch **zum Warten*** it.EXPL keeps to.DAT.SG.N wait					
31 *beginnt das Auto **zum Warten*** begins the car to tune up					
Status 2b Grade 1		**Status 2b Grade 2a**		**Status 2b Grade 2b**	
32 *Er ist/bleibt **am Unterrichten*** he is/keeps on.DAT. SG.N teach	Pres. PP-GER	–	–	–	–
33 *Er ist/*bleibt noch am **Warten*** he is/keeps on.DAT.SG.N wait					
34 *Er ist **den Hahn am Schlachten*** he is th cock on.DAT. SG.N slaughter	DO-ex-corpor-ating GER	–	–	–	–
35 *Sie ist **auf ihn am Warten*** she is for him on.DAT.SG.N wait					

Status 3 Grade 1		Status 3 Grade 2a		Status 3 Grade 2b	
36 *Diese Seiten sind **ausgetauscht*** these pages are unexchanged	PPP state-proper-ty	***ausge-tauscht*** ex-changed	PPP state-property	*ein **ausge-tauschter*** an exchanged one	Attribute
37 *Diese Seiten bleiben **ausgetauscht*** these pages keep exchanged		***getauscht bleibend*** ex-changed remaining			
38 *Kinder sind/ **bleiben geliebt*** kids are/keep loved		***geliebt bleibend*** loved keeping		*ein **geliebt bleibender*** a loved keeping. SG.N. NOM .	

3. Carlson's event type system applied to Bech's system

This section tries to align Bech's formal valence system with Carlson's event type verb system. The distinction between stage level predicates (SLP) and individual level predicates (ILP) goes back to Carlson (1977). Let us see how (7a-d) link with space and time adverbials. (7a-d) represent the SLP-type as in *stören(d sein)* '(be) disturb/annoy(ing)' or *küssen(d sein)* '(be) kiss(ing)', as opposed to (8a-d) that are ILP as in *gescheit sein* and *lieben* 'be clever' and 'love', respectively.

(7) a Hans war im Büro störend.
     Hans was disturbing/annoying in the office
   b Hans küsste Maria im Büro.
     Hans kissed Maria in the office
   c. Hans war am Abend störend.
     Hans was disturbing/annoying in the evening.
   d. Hans küsste Maria am Abend.
     Hans kissed Maria on the evening.

(8) a ##Hans war im Büro gescheit.
           Hans was smart in the office.
      b ##Hans war am Abend gescheit.
           Hans was smart in the evening.
      c ??Hans liebte Maria am Abend.
           In the evening, Hans loved Maria.

When configured adverbially with space and time coordinates, individual level predicates turn into stage level predicates. Referring to the property *(be) smart* this can only mean that *gescheit sein* (adj+*sein$_{ser}$*) will reread as *sich gescheit verhalten* 'behave smart' or *zeitweise gescheit sein* , be temporarily smart' (adj+ *sein$_{estar}$*). Space and time adverbials constrain the quasi-analytic predication *Hans is smart* to synthetic *Hans is clever (only) in the evening* as do focus particles in DP constructs (*only in the evening*). More generally, the phenomenon that *sein$_{estar}$*, unlike *sein$_{ser}$*, is contingent on space and time appears to be shared only by a few non-verbal categories. There are a few adjectives that, like resultative participles, imply space-time-coordinates such as *reif* 'ripe', *müde* 'tired' in line with the verbal participles *gereift* 'ripened', *ermüdet* 'fatigued', 'unaccusative adjectives' (in Abraham's (1995/2013) terminology). Compare the adequate adverbial modification in *am 8.1.1954 reif sein* 'be ripe on 8-1-1954' as opposed to ??*am 8.1.54 gescheit sein* 'be smart on 8-1-1954'. Note that this empirical fact weakens Diesing's (1992) und Kratzer's (1995) criterion of argument expansion to keep apart ILP (argument simplex) and SLP (argument expanded).

      As seen above, space and time adverbials may block or imply expansion on individual predicates/ ILP (cf. Maienborn 2003:151ff.). According to Chierchia (1995:178) and Manninen (2001:6), an interpretation of (8a) must be something like 'Hans has a double personality which involves switching his mental capacities on and off in an abnormal manner' presupposing something like 'John's being smart as his *smart behaviour*'. As to (8c), it may be the case that John is undecided between affection and aversion to Maria, or what exactly his relationship with Maria is (see also Manninen 2001:6):

(9)   a   *Hans was smart*/ILP
          = Hans was (always and without exception) smart
          = Hans behaved stupidly yesterday, but today he was quite smart
      b   *Hans loved Maria*/SLP
          = Hans loved (always and without exception) Maria
          = Hans really loved Maria yesterday: he brought her flowers and
          chocolates and even took her to the opera

Basically the reinterpretation from ILP to SLP was proposed already by
Kim (1969, 1976) and confirmed by Rothmayr (2009). It amounts to a
distinction between two stative predicate classes (see also Engelberg 2000,
2005): situational stative predicates, which are similar to action predicates,
such as *sit, stand, lie, sleep, wait, glow,* on the one hand, and Kimian
statives (named after Kim 1969, 1972) such as *be wise, be tired, weigh,
know, resemble,* which are similar to properties. This classification covers
the distinction introduced by Diesing, Kratzer, and Manninen (among
others) in terms of Carlson's stage and individual distinction. Accordingly,
place, time, and mood adverbials apply in terms of distributive degrees of
identification.
        I follow Moltmann (2011:9) in defining a Kimian state. See (10a,b).

(10) a   for a property P of object o, the state s(P, o) obtains at a time t iff
          P holds of o at t.
       b for properties P and P ', objects o and o', and times t and t',
          s(P,o,t) s(P,o',t') iff P =
          = P', o = o', and t= t'.

        The following two tables, Table 6 and Table 7, summarize Carlson's
system. In Table 6, Carlson's four classes are aligned with event aspectual
characteristics and the respective adverbial modification.

Reading as:	Event feature	Space/time-ADV in Spec/ vP $^{\cap}v$ P	Habitual ADV in Spec/AspP
Individual level predicate/ILP: *be clever, love,. ...*	[- habitual]	No	No
Kimian State predicate/ KSP: *be clever/behave smart, be tired, (be) similar*	[- habitual]	Yes	Yes
Habitual event : *disturb, satiate, kiss, smoke, drink*	[+ individual event], [+ habit], [+ iterative]	Yes	Yes
Stage level predicate/ SLP : *annoying, satiating, kiss, smoke*	[+ individual event], [-habitual]	Yes	No
Stage level predicate/ SLP derived from ILP: *gescheit tun/sich gescheit verhalten, lieben - sich liebend geben*	[+individual event] [- habitual]	Yes	No

Table 6: Feature combinations and the licensing of adverbials of space and time

Table 6 clearly shows a far-reaching overlap of Kimian state features with those of the stage events derived from ILP. Are they convergent?

To achieve a finer set of distinctions, let us introduce in Table 7 the criterion of speech act reference (Origo relation). Let a proposition P apply to speaker x at speech act time t or let it also apply at the time of t * where t ≤ t * or more specifically: ¬$e(t(e)=t*(e)).[6] This shows whether the concurrency operator should, or should not, be a relevance operator. In Table 7 it is revealed even more clearly under examination of the speaker origo that KSs and SL polarizations are the same.

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[6] See (10a,b) above for Moltmann's (2011:9) definition of Kimian states.

Reading as:	Event feature	Setting space/ time-ADV	Origo relation: ¬$ e(t(e)=t*(e))
Property-Individual level/ ILP: *gescheit sein, lieben, gleichen/be clever, love, resemble*	[- habitual]	No	No (since e is independent from t)
Kimian Staten predicate stage = SLP derived from IL: *gescheit sein(=gescheit tun- sich gescheit verhalten), ähneln (=ähnlich sein) // be smart/behave cleverly– resemble*	[+individual event]. [- habitual]	Yes	Yes
Habitual event: *störend – sättigend sein, küssen, rauchen // be annoying-satiating, kiss, smoke*	[+individual event], [+ habitual]	Yes (periodic iterativity)	Yes
Stage event/SLP: *störend/sättigend sein, küssen, rauchen - disturbing/satiating, kiss, smoke*	[+individual event], [-habitual]	Yes	Yes
Stage event/SLP derived from ILP: *gescheit tun-sich gescheit verhalten, ähneln; stören, sättigen // behave cleverly, resemble, disturb, satiate*	[+individual event]. [- habitual]	Yes	Yes

Table 7: Event feature combinations referring to Buhler's utterance origo

Table 8, finally, aligns syntactic-type predicates with Carlson's event classes and the two grades, bare infinitival complement and present participle complement under the copula head.

Status 1, Grade 1		Status 1, Grade 2	
39 [$_{VP}$[$_{DO(=CP)}$*jagen$_{iV}$*] *sein*] hunt be	SLP-A	[$_{VP}$[$_{CopP}$ [$_{V'}$$^{(*)}$*jagend*] *sein*]]] hunting be	$^{(*)}$SLP
40 [$_{VP}$[$_{DO(=CP)}$ **warten*$_{iV}$*] *sein*] wait be	*SLP	$_{VP}$[$_{DO(=CP)}$ $^{#}$*warten$_{iV}$*] *seiend*] *to wait/tune up being	SLP
41 **gescheit tun sein* smart do be	*KSP	**gescheit tun seiend* smart do being	*KSP
42 **sich gescheit verhalten* *sein* REFL smart behave be	*KSP	**sich gescheit verhalten* *seiend* smart behave being	*KSP
43 **ähneln sein* be similar be	*KSP	**ähneln seiend* be similar being	*KSP
44 **stören sein* disturb be	*HAB	**stören seiend* disturb being	*HAB
45 *rauchen sein* smoke be	HAB-A	*rauchen seiend* smoke being	HAB-A
46 **lieben/lieb haben sein* love/lovely be	*ILP	**lieben/lieb haben seiend* love being	*ILP
47 **verachten sein* despise be	*ILP	**verachten seiend* despise being	*ILP

Status 2, Grade 1		Status 2, Grade 2	
48 [$_{VP}$[$_{DO(=CP)}$ *zu jagen$_{iV}$*] *sein*] to hunt be	SLP	[$_{VP}$[$_{CopP}$ [$_{V'}$ *zu lieben*] $^{\#\#}$*seiend*]]] to love being	##SLP
49a [$_{VP}$ [$_{DO(=CP)}$ $^{\#}$*zu warten$_{iV}$*] *sein*] to wait be	#SLP	[$_{VP}$ [$_{DO(=CP)}$ $^{\#}$*zu warten$_{iV}$*] *seiend*] *to wait/tune up being	#SLP
49b [$_{VP}$ [$_{DO(=CP)}$ $^{\#}$*zu schlafen$_{iV}$*] *sein*] to sleep be	*KSP	[$_{VP}$ [$_{CopP}$ [$_{V'}$ *zu* $^{\#}$*schlafen*] $^{\#\#}$*seiend*]]]] to sleep being	*KSP
50 **gescheit zu tun sein* smart to behave be	KSP	**gescheit zu tun seiend*	KSP
51 **sich gescheit zu verhalten sein* REFL smart to behave be	KSP	**sich gescheit zu verhalten seiend*	KSP
52 **zu ähneln sein* to liken be	HAB	**zu ähneln seiend*	HAB
53 *zu stören sein* to disturb be	HAB	*zu stören seiend*	HAB
54 $^{\#}$*zu rauchen sein* to smoke be	ILP	**zu rauchen seiend*	ILP
55 *zu lieben/lieb zu haben sein* to love/loving to have be	ILP	*zu lieben/lieb zu haben seiend* [$_{VP}$ [$_{CopP}$ [$_{V'}$ *geliebt*] *sein*]]]	ILP
56 *zu verachten sein* to despise be		*zu verachten seiend*	

Status 3, Grade 1		Status 3, Grade 2	
57 [VP[CopP [V' *ausgetauscht*] *sein*]]] exchanged be	SLP	[VP[CopP [V' *ausgetauscht*] *seiend/bleibend*]]]	*/OKSLP

58 [VP[DO(=CP) *gejagt*iV] *sein/ bleiben*]
      chased be
	SLP	[VP[DO(=CP) *gejagt*iV]*seiend/ bleibend*]
		      chased being/remaining
			*/OKSLP

59 [VP[DO(=CP) **gewartet*iV*] *sein*]
      waited be
	*SLP	[VP[DO(=CP) **gewartet*iV*] *seiend*]
		      waited being
			*SLP

60 **gescheit getan sein*
      smart done be
	*KSP	**gescheit getan seiend*
		      smart done being
			*KSP

61 **sich gescheit verhalten sein*
      REFL smart behave be
	*KSP	**sich gescheit verhalten seiend*
		      REFL smart behave being
			*KSP

62 **geähnelt sein*
      likened be
	*KSP	**geähnelt seiend*
		      likened being
			*KSP

63 *gestört sein*
      disturbed be
	RESULT	*gestört seiend/bleibend*
		      disturbed being
			RESULT

64 **geraucht sein*
      smoked be
	RESULT	**geraucht seiend*
		      smoked being
			RESULT

65 *geliebt/?lieb gehabt sein*
      loved/likened had been be
	OK/?ILP	*geliebt/*lieb gehabt seiend/bleibend*
		      loved/likened had been being
			OK/*ILP

66 *verachtet sein/bleiben*
      despised be/remain
	ILP	*verachtet *seiend/ bleibend*
		      despised being/ remaining
			OK/*ILP

Table 8: Syntactic-functional motivation of Bech's status und grades of verbal classes SLP-KSP-HAB-ILP governed by the copula

Legend to Table 8:
(i)   # on *#zu warten* (status 2/grade 1) indicates 'only for impersonal subject/expletive' as in *Es ist jetzt zu schlafen* – there-is-now-to-sleep 'Everybody has to sleep now'.
(ii)   (*) on (*)*jagend*] *sein*/(*)SLP indicates stylistic inacceptability rather than grammatical inaccepatbilty (acceptable in MHG as well in modern Dutch).
(iii) ## on *zu lieben* ##*seiend* indicates that the predicative construal underlying attributive *zu liebend-* is inacceptable in mStG.
(iv) SLP-A as for *jagen sein* indicates the absentive reading (restricted to predicates of the SL-type since space configurationality in the sense of [+hic-et-nunc] underlying absentive semantics is unactivated in space-unconfigured IL-predicates).

4. Discussion of the findings in Tables 1 to 8

Our systematic extension of Bech's morphological forms into syntax and semantics clearly brings out new aspects of the three Bechian formal valence forms (his three status levels). It has further been shown that once we include forms of oral-only vernaculars of German, new classes have to be opened extending Bech's system quantitatively and qualitatively. This by no means diminishes Bech's merit and pre-Generativist achievements in German infinitival grammar. However, adding semantic selection criteria provides Bech's analysis with an axiomatically more solid basis.

4.1. Gaps and subclasses in Bech's system of morphological categories

There are clear gaps in that the predicative active participles were deactivated centuries ago and narrowed down to an attributive function. Illustrations are listed in Table 4 (column 4), where the copulas with present participles as complements are ranged out as no longer acceptable in MStG), while the attributive versions are very productive in written modern German. On the other hand, gerundial forms are still alive, and not just in oral vernaculars, but even replace the prepositional infinitive entirely. We argued that this may be due to the advantages of semantically und functionally underspecified forms. The gerundial forms appear at quite some variance as under status 2c-2f, exemplified by 14-21 in Table 4. Past participles change between passive and active participles depending on the auxiliary that is licensed by the temporal auxiliary: either *sein* 'be' or *haben* 'have' – a lexically determined split that is shared by Dutch (and some of the Scan-

dinavian and Romance languages), but not by English or any of the Slavic languages. See status 2b in Table 4. It should not be necessary to point out that the agreement inflection on the attributive use of the different forms and grades are missing in English (and that the predicative forms also have agreement morphology in some Scandinavian and Romance languages). See Table 3 for illustrations.

4.2. Advantages and drawbacks in Carlson's event type system: Carlson's classification, originally of English lexical predicates, is not based on form, but purely on semantic interpretation, with semantics even narrowed down to event characteristics. In this respect, and even focusing on Kimian state-phase transfers, the classification appears to be applicable cross-linguistically. The claim in the present context is that our inclusion of clusters of copula dependence brings out the language differences more clearly. See the examples in (1) (repeated below under (11)) as well as the first columns in table 7 with the four event classes in the first column. What the profound consequences deriving from the four event classes with respect to thetical as opposed to categorical discourse types including position and grammaticality of weak subjects (Abraham 2015c) are not focused in this context it needed highlighting that it is the link between Bech's morphological (copula-non-finite verb form) and Carlson's semantic classifications that allow such conclusions on discourse (thematic vs. rhematic) structure.

4.3. Overall language comparison
Haider (2012) has shown that OV has clear structure-preserving and structure–extending advantages over VO. This shows also in our comparison irrespective of the lack of morphological distinctions both in Dutch and English.[7]

(11) a   mStG   Das ist gut zu sehen.
                    this is good to see/to be seen

---

[7]   To draw conclusions concerning the OV-VO difference when focusing only on English as the only VO-language is quite obviously too sweeping, but I will have to leave it at that for the time being.

b SG i Das ist gut zum Sehen. [8]
          this is good to.DAT see
      ii Es ist gut (dies) zu sehen.
          It is nice for someone to see (this)
      iii Das ist gut zu sehen.
          This is nice to see
      iv Das ist gut zu sehen.
          This can clearly be seen
      v *Das ist gut um gesehen zu werden.
          This is good for people to see

c Dutch vi Dit is goed (om) te zien.
              this is good (for) to see
        vii Het is prettig om dit te zien.
              It is nice for to see
        viii Dit is goed te zien.
              this is good to see
        ix #Dit is goed om gezien te worden.
              This is good for people to see.

d English x This is good to see.
          xi *This is good (for X) to be seen.

The two main differences are that (i) neither English nor Dutch have the gerund – for the obvious reason that there is no declensional morphology to the definite article cliticized onto the preposition; and (ii) that English, but neither German nor Dutch, gives explicit expression to the passive reading as in (11dx). Generally, one may say that German underspecifies heavily by the gerund, a form that is missing in its variety of functions in MStG. A solid part of the German gerund is taken over by the Dutch purposive infinitive – cf. (11cvi, viii).

English, finally, fuses formally what were different forms in its history, i.e. the gerund ending in –*yng(e)* and the present participle (cf. Los 2005). See Table 3.

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[8] As there is no P-infinitive in SG, this form is ambiguous between (1a,b).

4.4. Language internal comparison of morphological categories
German has more disambiguating morphology than Dutch, and Dutch, in turn, has more than English. However, the situation concerning the present participle is very different, to the effect that English uses the form predicatively, as does Dutch, but not German. Notice that, given the gerundial forms licensed also by prepositions, the bare infinitive as complement to the copula (but not the homonymous auxiliary as well as a selection of full verbs) need to be taken as a gerund (and consequently and, against all odds of the orthographic norms, be capitalized: *Er ist (am/beim/ zum) Laufen* 'he is running'. See Table 5 items 28-35. Compare also where German and Dutch passivize also intransitives, although without demoting an external argument, i.e. in ways that are very uncommon to semantically and syntactically rooted passivization (items 25-27). Throughout, second grade predicative is out in German, whereas it is acceptable and productive both in Dutch and in English. Since, on top of the latter, gerunds on second grade predicatives and attributives are out too (specifically, items 28-30, and, more generally, 32-38), the conclusion is confirmed that gerunds are not verbals, but substantivized nominals, since, if they were verbals, 30-**zum wartend* should be possible. Items 34-35 (and the exclusion of **Er ist **am den Hahn Schlachten*** as well as *Sie ist **am auf ihn Warten***) show beyond doubt that the P-gerund is nominal (as it is the complement of a preposition) as well as verbal (as it assigns case to the object). The determining issue for this hybrid is that the object accusative is outside the direct licensing force of the verb (*schlachten*+DO, *warten*+PP). Dutch behaves exactly the same way (cf. *Ze is het kleintje aan het verschonen* 'she-is-[[$_{DO}$ the little one]$_i$-[$_{PP}$ on-[$_{DP}$ the [$_{V'}$ e$_i$ washing]]]]', where the direct object, *het kleintje,* is outside the direct licensing force of the verb *verschonen*). Nothing of this sort is possible in English.

4.5. Aligning Bech and Carlson
Table 7 shows that Carlson's event type classification and Kim's extension transfer without any restriction to German. Dutch could no doubt easily be added. However, given the event type base of the relations, nothing else was to be expected.

It seems only consistent to align the two systematic descriptions by Bech and Carlson. The main reason is that Carlson's systematics allows us to classify those morphological categories that we found no categorial slot

for in Bech's system. This alignment may be considered as a combination of Bech's non-finite verb morphology and Carlson's lexical predicate semantics. See Tables 7 and 8 for such an attempt.

This is what Table 8 yields. As items 39-40 (shaded) show, Bech's status 1 falls apart with respect to stage *jagen* 'hunt/chase' and stage *warten* 'wait' on the distinguishing absentive feature (examples *Er ist jagen* 'He is hunting' vs. **Er ist warten* 'he-is-wait'). This is explained against an extended concept of Bühler's origo theory. Descriptively spoken, the activity of hunting as such can be imagined to take place outside the control of the speaker (telephone speaker to caller explaining the subject referent's absence), while there is no such activity as waiting allowing the same inference. One may escape by adding *for X to waiting* (*Er ist auf X warten* 'He is waiting for X') implying that this happens outside of the speaker's control, thus in the referent's absence from the deictic origo situation). Notice that, as soon as we use *warten* 'wait/service' in the sense of *das Auto warten* 'servicing the car' (cf. items 48-49), the presupposed absence conditions are met. I leave open for the time being whether a DO is implied also with *jagen* ('deer/sow hunting').

With respect to items 58-59 in grade 2, notice that the copula *sein* has a more restricted use than the semi-copula *bleiben.*

Comparison of items 63 and 64 point to the difference between clear telic verbs (*gestört sein* 'be disturbed') and atelic ones (**geraucht sein* 'be smoked'). This is rooted in the Aktionsart distinction resulting in state PPPs for telics, but not for atelics. Only telic states require *sein*, while atelics do not.

Items 65 and 66, on the one hand, confirm the difference between *sein-seiend* and *bleiben-bleibend* as predicative present participles. *seiend,* although fully transparent, is just out stylistically, whereas *bleibend* is fully acceptable. Periphrastic *lieb haben/gehabt,* on the other hand, perfectly projecting the same meaning as *lieben,* makes a too clumsy *lieb haben/ gehabt *seiend/[??]bleibend* – to all appearances just a parsing problem.

The general conclusion to the preceding discussion is that verb complementation under the copula *sein* and its semi-relative *bleiben* brings to light more phenomena than under full verbs in that Bech's grade 2 types can be exhausted more deeply and in that the absence phenomenon on status 1/grade 1 receive an even deeper explanation if integrated into Carlson's distinctions. Needless to say once again that the specific

differences between the three languages under inspection are due to this specific comparative and axiomatic attempt linking semantic eventuality with Bech's morphosyntactic six-way distinctions.

5. Conclusion

The paper discussed Bech's inventory of complement valence in Standard German and extended it with examples from regiolectal and dialectal Southern German ('Oberdeutsch'), where gerundial (verb-derived nominal) forms regularly replace prepositional infinitives of Standard German as well as bare infinitives governed by non-modals (in the function of the so-called 'absentive'). In a second step, Bech's extended inventory was aligned with Carlson's distinction of individual and stage level predicates. The main reason is that Carlson's systematics allows us to classify those morphological categories that we found no categorial slot for in Bech's system. This alignment may be considered as a combination of Bech's non-finite verb morphology and Carlson's lexical predicate semantics. The idea behind this comparison was that stage as well as individual level readings are dependent on aspectual properties of the complements in a variety of typical cases. This criterion by itself warrants such a comparison and decidedly enriches Bech's system for German and partly extends it to Dutch.

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The definite determiner in Early Middle English: What happened with *þe*?

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Abstract

This paper offers new data bearing on the question of when English developed a definite article, distinct from the distal demonstrative. It focuses primarily on one criterion that has been used in dating this development, namely the inability of *þe* (Modern English *the,* the reflex of the demonstrative *se*) to be used as a pronoun. I argue that this criterion is not a satisfactory one and propose a treatment of *þe* as a form which could occupy either the head D of DP or the specifier of DP. This is an approach consistent with Crisma's (2011) position that a definite article emerged within the Old English (OE) period. I offer a new piece of evidence supporting Crisma's demonstration of a difference between OE poetry and the prose of the ninth century and later.

1. Introduction: dating the definite article

A long-standing problem in historical English syntax is dating the emergence of the definite article. A major difficulty here, noted by Johanna Wood (2003) and others, is defining exactly what we mean by an 'article.' Millar (2000:304, note 11) comments that we might say that Modern English does not have a 'true' article, but only a 'weakly demonstrative definite determiner' on Himmelmann's (1997) proposed path of development for definite articles. However, no one can doubt that English has moved along this path from a demonstrative determiner to something that has become more purely grammatical, with loss of deictic properties. For generative diachronic syntacticians, following Giusti (1997), the relevant syntactic change is commonly taken to be a shift of what we can call the 'proto-

article' from being the specifier of DP (a demonstrative) to being the D head (an article). This is the general approach argued for by Wood (2003) and the one I will adopt here, without addressing more theory-dependent details of analysis.

Among those who assume this general sort of development, there are different views on when the shift from specifier to head took place. Philippi's (1997) placement of this development in the Late Middle English period is generally rejected by later researchers, who assume that it happened sometime in the Early Middle English (EME) period. The accounts that have been offered are vague on the exact date, and not without reason, given the paucity of English writings in the late eleventh and the twelfth centuries. There can be no doubt that substantial changes took place within the determiner system in EME. Besides the near-total loss of inflection of the demonstratives, we have the 'paradigm split' investigated in Millar (2000). This was the split of what was a single paradigm into a new distal demonstrative *that*, developed from the neuter singular nominative and accusative form *þæt* in Old English (OE), versus the definite article *the*, originating in the masculine nominative singular form *se.* It is reasonable to try to tie these changes together in some way.

In this paper, I will add new data bearing on the question of when English can be assumed to have a determiner as the D head and discuss some implications of these facts. The evidence supports the position that before *þe* became a 'dedicated' article (i.e. only an article), there was a long period when the same forms could be used either as articles, occupying the D head, or as demonstratives, in the specifier position. In section 2, I briefly sketch some well-known facts about the differences in the determiner system between OE and later English. Section 3 is the main part of the paper, in which I will take a closer look at a diagnostic that has been proposed for dating the emergence of the definite article. This proposed diagnostic turns out to be problematic, and in section 4 I add some results of my research into determiners with externally possessed body parts to the evidence provided by Crisma (2011) that the article had already emerged in the late OE period. Section 5 summarizes the main conclusions and points to some future avenues of research.

2. The Determiner in Old English

To avoid making a judgement on the correct analysis when no specific analysis is being discussed, I will use the term 'determiner' as a cover term for articles and demonstratives. I will also sometimes use the term 'article-

like' for forms which are followed by a noun rather than used pronominally and which do not have clear deictic force.

The two most important non-syntactic changes that affected the determiner SE[1] can be outlined briefly. This determiner covered a functional range from a clearly deictic and distal meaning to being essentially indistinguishable from a mere marker of definiteness. The masculine and feminine singular nominative forms, *se* and *seo*, respectively, differed from all other members of the paradigm in beginning with *s-* rather than *þ-*. They succumbed to paradigmatic pressure by becoming *þe* and *þeo* respectively.[2] After a period of variation, the reflex of the masculine nominative singular form eventually replaced all the other forms and thus became indeclinable. The other major change is the shedding of the non-deictic attributes of the neuter singular nominative and accusative form *þæt*, Modern English *that.* This form was already unlike the other forms early in OE in that it was used in some functions in which it did not refer to a neuter noun, e.g. *þæt wæs god cyning* 'that was a good king' at *Beowulf* line 11. I agree with Millar's (2000:320) conclusion that the initial impetus that led to the 'fissure' of this paradigm was not the developments that led to *the,* but instead those developments which fostered the emergence of THAT as a purely deictic element with its own new plural inflection *those.* I will not discuss this development further. Instead, I will focus on the relationship between the syncretism of forms and the loss of inflectional categories of the old determiner and the uses of its reflexes in EME.

Of particular importance to the discussion is the fact that *se* and the other members of the paradigm could be used without a following noun, that is, pronominally, in positions where we would use the personal pronouns *he, she,* or *they* in Modern English. Some examples of this use in EME will be given in the next section. Wood (2003:67) pointed out that when the determiner became unavailable to be used pronominally, it was no longer a demonstrative, but an article. However, pronominal use only shows that a given form is not an article in a particular instance; it does not tell us whether this form is an article in other uses. Watanabe (2009:367) adopts

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[1] I use small capitals for a lexeme when it might cause confusion to use a particular inflected form such as *se,* which might be interpreted as referring specifically to the masculine singular nominative form rather than including feminine *þa,* etc.

[2] In my own text, I will use *þ* without distinguishing the spellings <þ> and <ð>, which represented the same interdental fricative. However, I will preserve the spellings in all examples presented. The difference in spelling is very important in such matters as identifying scribal hands, etc. but it is not relevant to the matter in hand.

the loss of the pronominal use of the determiner as the best diagnostic for determining when the definite article developed, although he does not put a time on the loss of pronominal functions. Since this putative diagnostic is one which has been advocated recently, it is important to establish how well it works.

There are problems with this proposed diagnostic even before we look at the question of whether *þe* ever was used as a pronoun. Crisma (2011:176) notes that if we treat a form as a definite article only if it is not used in any demonstrative functions or as a pronoun, that is, only when it is a 'dedicated' article, we would have to exclude German from the languages that have an article. I have argued in Allen (2006, 2007b) that *se* and other forms of this determiner could be either the specifier of DP or the D head in OE, which is consistent with Crisma's findings discussed in section 4. Wood (2007a, b) also suggests that in some circumstances the distal demonstrative already occupied the D head in OE. I will assume that when this element is in the D head, it can be called an article.

The preceding discussion indicates why the loss of the ability to serve as a pronoun cannot be a diagnostic for determining when the article came into existence (as opposed to a diagnostic for when *se* or its reflex *þe* ceased to be a demonstrative). However, information about the behavior of *þe* and its variation with other forms in EME is certainly important to our understanding of the development of the determiner system. In the following section, I will present some fresh information bearing on the question of how *þe* replaced the inflected forms of the determiner. I will also show that *þe* was in fact used pronominally in EME. The empirical detail provided in this section also adds more generally to our understanding of how the contraction of the old determiner to non-anaphoric functions proceeded.

3. The Disappearance of Pronominal SE(O) Reflexes

We cannot confine our investigation of pronominal uses of the determiner to only the *þe* form, but must also consider the pronominal use of other forms in the same paradigm, since inflected forms varied with indeclinable *þe* for some time. A complication arises here from the development of *þæt* as a pure demonstrative. I will use 'reflexes of SE(O)[3]' to cover both *þe* (whether used for the masculine singular nominative or in some newer function) and inflected forms, e.g. the masculine singular accusative

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[3]   I will occasionally use SE when referring to the OE paradigm when it is useful to make it clear that I am not excluding neuter forms.

þone. Since we are only concerned with the pronouns that can be used instead of the personal pronouns corresponding to modern *he, she,* and *they*, when these refer to humans, we can ignore neuter forms, which are used for humans only in texts maintaining the OE gender system. The facts presented below are the result of a combination of searches in two parsed corpora, *The Penn-Helsinki Parsed Corpus of Old English* (Taylor, Warner, Pintzuk & Beths 2003, henceforth YCOE) and *The Penn-Helsinki Parsed Corpus of Middle English 2* (PPCME2, Kroch & Taylor 2000), Laing's ongoing (2013-) *A Linguistic Atlas of Early Middle English* (LAEME), and my own inspection of texts, including some not included in any of these invaluable resources.

The following discussion of the use of SE(O) in EME will focus on four main issues:

- demonstrative pronouns with clear deictic force
- demonstrative pronouns used as relative pronouns
- demonstrative pronouns used as personal pronouns
- *þe* as a pronoun

Some clarification of the third and fourth dot points is in order. The distal demonstrative can of course still alternate with personal pronouns in Modern English, e.g. *The people who stood by me in my time of trouble, **those/they** are my friends.* Here the pronoun has stress and refers to a class of people, rather than specific individuals and so there is no co-reference. However, the demonstratives can no longer be used in the most basic anaphoric use of a (third person) personal pronoun, which is to express co-reference with an antecedent introduced in the preceding discourse, as in *John and Jane have some news. **They/*those** are getting married.* When people speak of the loss of the ability of the distal demonstrative to be used 'independently,' it is this particular type of pronominal use that they mean, and this is what I will mean by 'used as a personal pronoun.' This development is relevant to the reflexes of SE(O) generally. When it comes to the specific form *þe*, however, the use as a 'stand-alone' pronoun in any function is what is at issue.

Tracing the loss of the independent use of SE(O) and its reflexes turns out not to be a simple task for more than one reason. First, *se* > *þe* was a change that happened at different times in different dialects. As Watanabe (2009:367, note 7) observes, we must distinguish the replacement of the form *se* with *þe* as the form for the nominative singular masculine determiner from the spread of *þe* as the form used for other combinations

of case, number and gender. This means that tracking the loss of the ability of *þe* to be used as a pronoun cannot be done without studying the different morphological systems of individual texts of the twelfth and early thirteenth centuries. Before looking at those texts, however, it is necessary to say something about the situation in OE, where we will focus on the use of the form *þe* in article-like functions as well as making some comments on the pronominal uses.

3.1 *þe* in Old English

The spread of *þe* is generally assumed to have begun in the north, as this form (along with *þ-* forms of the feminine determiner) is very frequently found in the Northumbrian *Lindisfarne Gospels* of the late tenth century; see Ross (1937) and Allen (1997). The *þ-* forms are also found in the Mercian part of the tenth century *Rushworth Gospels*: see Campbell (1959:§§11, 708). In both these sources, the *þ-* forms are in variation with the *s-* forms. Millar (2000:329) illustrates early pronominal use with ðe translating Latin *qui* 'he who, whoever' in the *Lindisfarne Gospels.*[4]

Before moving on to EME, it can be noted that we find a very few examples of *þe* substituting for other determiner forms already in 'classical' OE texts. This subject is addressed by Wood (2003:68-71). Since Wood has a smaller corpus available to her than the YCOE, the following comments update her discussion.

The most convincing substitution of *þe* for *se* that I have found is in the text of *Orosius*:

(1) ymb seofon hund   wintra & ymb lytelne first   þæs
     after seven hundred winters and after little   time   DET:GEN.SG

     þe hie   ærest Diþa **þe** wifmon   getimbrede,
     that it:FEM.ACC.SG first Dido SE woman(M)NOM.SG built
     'seven hundred years and a bit more after the woman Dido first
     founded it [Carthage]'
     (coorosiu,Or_6:1.133.7.2811)

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[4] In Allen (1997) I argue that although *ðe* (and the rarer *se*) had already spread into accusative contexts, the distinctive masculine accusative singular form *ðone* had not spread into nominative contexts. That is, the situation was one of structured variation rather than simple confusion of the forms, showing that the case categories were maintained despite the syncretism of some forms.

This example is noted in Bately's introduction as the sole example of the replacement of *se* by *þe* in this text (Bately 1980: xlix). It is a surprisingly early example because it comes from the 'Lauderdale' manuscript, one of the four manuscripts designated by both Campbell (1959:§16) and Bately (1980:xxix) as the basis of our understanding of Early West Saxon. However, Bately also discusses the fact that although *Orosius* is considered to be Early West Saxon, some Mercian features can be identified in it and comments that 'How far the scribe of L is responsible for this state of affairs and how far his usage reflects that of his exemplar it is impossible to determine with any certainty' (1980:xxxix). Since we know that this form is found in some parts of Mercia in the tenth century, it is possible that this instance of *þe* is a case of scribe letting some of his own Mercian usage slip through in a text which he intended to be written in West Saxon. It is also possible that the occasional use of *þ-* forms in a manuscript written for the most part in West Saxon reflect a phenomenon that was already occurring in the speech of the southwest in the OE period; we can only speculate here.

Example (1) is the only convincing instance I have found of a substitution of *þe* for *se* in an early text.[5] The use of *þe* for the instrumental case is more common.[6] This spelling might reflect a reduced vowel in the old instrumental form *þy.* It is some interest to note that the examples of prenominal *þe* as an instrumental also come from texts of Mercian origin, although written mostly in West Saxon.

I am aware of a second convincing example of *þe* where we would expect *se* in article-like function in a text near the end of the OE period, presented by Wood (2003:69) as her example (5).

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[5] Wood (2007a) presents several more examples from the *Peterborough Chronicle.* These show that *þe* was used in article-like function in the Peterborough area in the first half of the twelfth century, but since they were all written by a scribe around 1131, they cannot be considered examples of this use in OE. Most of these examples are from annals added by this scribe, and the two examples that are not Interpolations are best treated as instances of the scribe letting his own grammar slip into his copying of earlier material. See Allen (2007a) for some discussion of the determiner inflections in the *Peterborough Chronicle.*

[6] We must include here Wood's (2003:69) example (4), from *Bede's Ecclesiastical History of the English People*, where *þe uplican dome* 'following the divine judgement,' must be glossed as instrumental, not nominative. Campbell (1959:§709) comments on the interchange of *þy*, *þon*, and *þe* in phrases like *þon ma* 'the more'*,* but does not cover all instances of instrumental *þy*. The vowel is assumed to be long in *þy* and *þe*, but this length is not usually marked in manuscripts and is not indicated here.

Although this example, from *Apollonius of Tyre*, is a convincing example of *þe* substituting for *se*, it is important to note that it is contained in a manuscript from the middle of the eleventh century. Furthermore, the editor of this text judges that some of the spellings are probably the work of a scribe from Essex (Goolden 1958:xxxi). By the middle of the eleventh century *þe* may be coming into use in areas such as Essex, although the scribe mostly writes in 'classical' West Saxon.

To sum up the article-like use of *þe* in OE, it seems to be fairly clear that this form was used in some instances for the instrumental case. The use of this form elsewhere is too infrequent for solid generalizations. However, it can be noted that the two convincing non-instrumental examples both involve a straightforward substitution of *þe* for the masculine singular nominative *se.* They also come from texts involving at least some Mercian influence.

Turning to *þe* used as a personal pronoun, Wood (2003:69) states that she found no examples in her corpus. In the larger corpus that has become available since then, namely the YCOE, I have found one genuine-looking example, in a Late West Saxon text. This is in manuscript (Cotton Julius E. vii), from the early eleventh century, close to the time when the text was written by Ælfric:[7]

(2) þa   awende **þe** hit to gode
     then turned   he it   to good
     'then he turned it to good'
     (coaelive,ÆLS_[Exalt_of_Cross]:165.5654)

The editor of this text (Skeat 1881-1900:vol. 2) translates *þe* as 'he' without comment. Nothing can really be made of a single example, which might be some sort of error. I found no examples of *þeo,* either in article-like or pronominal uses.

Summing up the situation in 'classical' OE, we can note that at this early stage, when *þ-* forms are only sporadic in the texts, we have no evidence of a loss of inflectional categories of the determiner.

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[7] There are a few more examples in this YCOE file (coaelive.o3), but they are all from the Life of St Vincent, which was added from a twelfth century manuscript to this edition for completeness.

3.2 Early Middle English: General remarks

No northern texts are available for the EME period to enable study of how long pronominal *þe* was used in that part of England, and so it is texts from the midlands and the south that will be discussed here.

When we get past the early part of the eleventh century, it becomes difficult to find data that can be used straightforwardly. For one thing, by the end of the tenth century and into at least the middle of the eleventh century and later in some places, scribes in different parts of England mostly used what is now usually called 'Standard Old English' (Scragg 2013).[8] This means that scribes may have been using forms that did not reflect their native dialects and that obscured changes that were taking place in the spoken language. A second very important fact is that most of the writings in English that have survived from the century after the Norman Conquest were copies of OE material. Swan & Treharne (2000) and Treharne (2012), among others, have emphasized that these are by no means all simply slavish copies of earlier texts; even in copied material there is a good deal of adaptation to suit the current social situation. There is also sometimes addition of material that does not appear in the extant OE versions of copied texts. These adaptations and updates can yield information about changes that were happening in very early Middle English.

English writings from EME generally, but particularly from the twelfth century, must be carefully sorted into texts that are copies of OE material and the small number that are believed to have been first written in English in that period.[9] This is made the more difficult by the fact that in some cases, we are not certain whether the original composition was pre-or-post-Conquest, and scholarly opinion frequently differs. Furthermore, a

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[8] Also sometimes called the 'West Saxon *Schriftsprache*' because it is essentially that of the Winchester School, spread by the Benedictine Revival of the 970s.

[9] I use the phrase 'written in English' to include translations made into English in the EME period, since the important point here is that they are likely to reflect the English of a given period better than a copy from an earlier period (although the possibility of translation effects must be kept in mind). Copies can give us valuable clues to morphosyntactic developments, but they must be used with caution and with sufficient attention to a number of philological matters. Copies are generally most useful when we have looked at writings that more certainly reflect the language of their composer first, and that is what I have tried to do here.

given EME manuscript is likely to contain diverse materials.[10] This is the case, for example, with the British Library manuscript Cotton Vespasian D.xiv, a southeastern manuscript (considered by some scholars to be Kentish) that Laing (1993:83) dates as c12a2-b1, i.e. the second part of the first half of the twelfth century to the first part of the second half of that century, or mid-twelfth century. Most of the English in this manuscript is copied material, but there are some texts which were first written in English in this period. The largest of these texts, which are twelfth century translations from Latin, are included in the PPCME2 as cmkentho.m1.

3.3 *Þe* in 'case-rich' texts

The existence of texts like the 'Kentish Homilies' is a boon to the study of the loss of SE(O) reflexes as pronouns referring to human beings because these southeastern texts are 'case-rich' EME texts. That is, in these texts the inflection that concerns us is well maintained. The SE(O) reflexes still convey the old category distinctions, and although we find late OE/EME changes in form such as *þam* > *þan*, there is no substitution of *þ-* in the *s-* forms or use of a nominative determiner form in other than its historical functions.[11] This means that these texts can provide information relating to the relationship between the spread of *þe* and the disappearance of demonstrative pronouns used as personal pronouns.

Looking at these texts, we can quickly rule out the possibility that the pronominal use of SE(O) might have disappeared even when this determiner maintained full inflection. We find 'stand-alone' SE(O) in one of these texts in all the functions it had in OE. In example (3) we have the use of the demonstrative pronouns with a clear deictic force:

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[10] Sources such as Laing (1993) and especially Laing's ongoing (2013-) *A Linguistic Atlas of Early Middle English* (LAEME) are of great use in sorting these matters out. I have used information from LAEME when possible, but this wonderful resource is under construction and does not yet include information on all the EME manuscripts mentioned here.

[11] Another change worth noting is a strong tendency in these texts to use a doubled pronoun, e.g. *þæt þæt* for *þæt þe* and *þa þa* for *þa þe,* and the relative particle *þe* is sometimes written *þa*, presumably reflecting some orthographic confusion caused by vowel reduction.

(3) **Seo**   studdede emb þa uterlice þing, **þeos**
   SE:FEM.NOM.SG cared. about the outer   things ÞES:*FEM.NOM.SG*

   oðer þa   inweardlice þing
   other SE:NEUT.ACC.PL   inner   things:(NEUT)ACC.PL

   gemyndelice besceawode
   thoughtfully   contemplated
   'The former was concerned about the outer things, while this latter
    one thoughtfully contemplated the inner things'
   (CMKENTHO,136.71)

In this example, the feminine distal demonstrative *seo* is contrasted with
the proximal *þeos*, and its use has the function noted by Mitchell (1985)
for OE of clearing up the ambiguity that would be caused by the use of a
personal pronoun: an introductory *heo* 'she' would be ambiguous because
both Martha and Mary are mentioned in the preceding discourse. Mary,
being the person last mentioned, would be the most natural antecedent for
heo, but the use of the demonstratives indicates that Martha, mentioned
earlier in the discourse, is the referent of *seo,* and *þeos oðer* refers to Mary.
The demonstratives have a deictic function in the discourse. However, as
Mitchell comments for OE (§321), in some sentences it is hard to distinguish
the independent demonstrative pronoun from a personal pronoun; in other
words, the deictic force is not as clear. This is still true in this twelfth
century text. Consider example (4):

(4) **Seo**   hæfde ane suster *þe*   wæs genæmd Maria.
   SE:FEM.NOM.SG had   a   sister that was   named   Mary

   Seo wæs   sittende æt ures Drihtenes foten
   SE:FEM.NOM.SG sitting   at our Lord's   feet
   'She had a sister that was named Mary. She was sitting at our Lord's
   feet'
   (CMKENTHO,134.6-7)

Here, the *seo* in the first clause is used like a personal pronoun, that is, it
is co-referential with the antecedent Martha, introduced in the preceding
sentence as the owner of the house Jesus visited. This is the most basic
anaphoric use of a third person personal pronoun. *Heo* would not have been
ambiguous, Martha being the only woman introduced so far. It is not clear
why the demonstrative pronoun was used instead of the personal pronoun.

However, the use of *seo* to refer to Mary in the second clause falls under the 'subject changing' function of demonstrative pronouns discussed in Mitchell (1980:§320). The first *seo* is possibly used for parallelism. Since we could just as easily have 'explained' the use of *heo* for both of these, however, it is best at this point simply to note that in this text we have a clear indication of the continuation into the twelfth century of the OE use of the determiner in pronominal functions that were later lost.

Turning to the use of the demonstrative as a relative pronoun, we find nearly the same possibilities as in OE. The demonstrative pronoun is found as a relative pronoun after a nominal head, as in (5):[12]

(5) And his agene dohter Mariæn he geaf Alpheon, of
     and his own daughter Mary he gave Alphaeus:DAT of

     þære   wæs geboren Jacob se   læsse.
     SE:FEM.DAT.SG   was born   James SE:MASC.NOM.SG less
     'And his own daughter he gave (in marriage) to Alpheus, of whom
     was born James the lesser'
     (CMKENTHO,139.148)

However, this use of the demonstrative is uncommon in this text, where the relative particle *þe* is by far more usual.

One type of relative clause used in OE but not found in this text is a nominally headed relative clause in which a demonstrative used as a relative pronoun is followed by the relative particle *þe* (the SE ÞE relative). Although there are no examples in this text, we do find occasional examples in other texts of this period and a bit later that still have some inflection for case of demonstrative pronouns. I will not discuss nominally headed relative clauses further here, but will only note that the use of a demonstrative as a relative pronoun seems to have been on the wane in these relatives even in case-rich dialects like this one. In EME a relative particle on its own, the old *þe* or its replacement *þat,* is the dominant relative marker in this period.

Another continuation of an OE type of relative clause is illustrated in (6):

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[12] When there is no relative particle following the demonstrative, as in (5), it is often dif-
ficult to be certain of whether we are dealing with a relative pronoun or simply a de-
monstrative pronoun. This difficulty is exacerbated by editorial practices adding modern
punctuation and capitalization, especially in older editions. Similarly, we might want to
analyze the second *seo* of (4) as a relative pronoun. However, the examples that I have
identified in this text as relative pronouns are also so identified by the PPCME2.

(6) &   fostrode þone   þe is God &   mann,
     and fostered SE:MASC.ACC.SG *that is God and   man*
     'and fostered him who is God and man'
     (CMKENTHO,137.81)

I will refer to the construction illustrated in (6) as the 'demonstrative headed' relative.[13] Another type of relative clause lacking a nominal head will be discussed below.

To summarize, in the case-rich texts just discussed, we find orthographical evidence of vowel reduction and other phonological changes that resulted in syncretism of forms. The possible uses of the demonstrative pronoun remain the same as in OE, although the use of the demonstrative as a relative pronoun has become much less frequent.

3.4 Texts with reduced inflection

EME texts that have indeclinable *þe* in variation with the old inflected forms are particularly important in investigating the connection between the reduction of morphology and the article-like behavior of *þe*. These texts make it clear that things were more complicated than a simple loss of the ability of *þe* to stand on its own when *se* was replaced by *þe*.

The British Library manuscript Cotton Vespasian A.xxii, written in one hand, is also essentially southeastern in language but of the later C12b2-C13a1 period (Laing 1993: 82).[14] Along with identifiable copies of OE homilies, this manuscript contains two homilies not found elsewhere (Clemoes 1997:48). These were published in Morris (1867-8:231-243) as *An bispell* and *Induite uos armatura dei,* but are not included in the PPCME2 or (yet) in LAEME. Strikingly different from the copied homilies of this manuscript in their more advanced deflexion, these two pieces are likely to be of EME origin. In them, we find a situation in which *þe* co-occurs with inflected forms. The determiner *þe* has made serious inroads into article-like positions in prepositional phrases; of the singular objects of prepositions, the determiner is *þe* in 18 instances, while an inflected form is used only eight times. Plural nouns in any function are also frequently preceded by *þe*. In contrast, singular subjects and objects overwhelmingly

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[13] Taylor (2014:473-477) argues that in Old English, the head of such a relative might be internal or external. I will not take a position on the analysis of these relatives here.

[14] Laing (1993:82) notes that there is some mixture of dialect features, and that it has been suggested that the manuscript derives from a West-Saxon original. For our purposes, the important fact is that these pieces have features that were not found in OE.

use an inflected form.[15] This is usually the expected reflex of the OE form
(*se* for masculine nominative singular, *si* for feminine nominative singular,
etc.) although there is some apparent confusion in the use of *seo* with *king*.
Not much can be made of this, since there is only a single occurrence of
seo king in these two pieces. It is possible that this historically incorrect
form is the result of the scribe's attempt to use forms which were not a
part of his own linguistic competence, but it is clear enough that a system
which preserves agreement between the determiner and the noun lies
behind the language of these texts. The use of the indeclinable *þe* with the
objects of prepositions has been introduced into this language as an option,
probably because the function of such noun phrases was clear enough
without inflection. It is likely that the use of *þe* with plurals reflects the
phonological collapse of the old *þa(m)* with *þe*.

It is noteworthy that in these texts, the use of pronominal SE(O)
reflexes seems to have become quite restricted. Although *se* remains a
distinctive form for the masculine nominative singular demonstrative in
these texts, it is not used like a personal pronoun. SE(O) reflexes continue to
be used in demonstrative-headed relatives:

(7) **Se**   þe   of þese brad ett ne sterfeð he nefer
    SE:MASC.NOM.SG that of this bread eats not dies   he never
    'He who eats of this bread, he will never die'
    Morris 1867-8 241.8

There is one example with what looks like a SE(O) reflex used as a relative
pronoun following a nominal head:

(8) Þu   ahst to habben ehte wepnecin. **þa**   beod seold…
    Thou ought to have   eight weapons which are shield
    'You ought to have eight weapons, which are shield…'
    Morris 1867-8 (243.22)

There is another possible analysis of (8), however, which results from the
orthographical variations found in this period: *þa* might be representing the
relative particle *þe* here, since in an unstressed position, these would have

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[15] The single possible counterexample I have found in these texts is *þe wlcne to gað* at
Morris 239.24, translated by Morris as 'when the welkin shall vanish.' It is possible that
wlcne is to be taken as a plural here, especially given that the expected singular form *geð*
is used in the three unambiguously singular examples in these two texts.

been pronounced identically.[16] Even if (8) is to be regarded as a genuine example of *þa* in a relative, it is clear enough that the usual relative marker is the relative particle *þe*, and SE(O) reflexes are at best an infrequently used option – these two texts amount to only 221 lines, but they contain 25 examples of nominally-headed relative clauses using the indeclinable particle.

To sum up, in article-like use, indeclinable *þe* varies with inflected reflexes of SE(O) in these homilies, but this variation seems to be constrained by the grammatical role of the nominal phrase. It is rather surprising to find that *þe* apparently did not enter the determiner paradigm first as a replacement of *se* in this language, but this makes sense if contact with dialects that used *þe* more widely caused speakers to adopt this form, but to use it only where the old inflected forms were no longer very useful. The pronominal use of the determiner seems to have become more limited than in OE, although the brevity of these texts precludes any strong conclusions based on what does not appear in them. The demonstrative pronoun continues to be used in demonstrative-headed relatives, where it does not have a simple anaphoric function, but refers to a hypothetical entity introduced by the relative clause.

Despite the caveat above concerning drawing conclusions from the non-appearance of particular features in the texts discussed in this subsection, it is probably significant that this restricted pronominal use of demonstratives in Vespasian A.xxii is similar to what we find in other texts of the twelfth century with more advanced syncretism of forms, which will be discussed in the next subsection.

3.5 Case-impoverished texts

We turn now to the evidence for what happened to the pronominal use of *þe* in dialects in which *þe* had become the clearly dominant form. The late preservation of inflectional categories is restricted to southeastern texts. In other parts of the country, we find advanced syncretism of determiner forms in the twelfth and early thirteenth centuries. Two well-known case-impoverished texts of the second half of the twelfth century that will only be briefly mentioned here are the *Ormulum* from c. 1180 and the Final Continuation of *Peterborough Chronicle,* which covers 1132-1154. The approximate date of the manuscript is assumed to be that of the final entry. In

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[16] The fact that (8) is a non-restrictive relative is no bar to this analysis, since *þe* could be used in such relatives.

these two texts indeclinable *þe* has completely replaced the inflected forms of SE(O) and we find none of the old pronominal uses under investigation here. However, we find some pronominal uses in manuscripts written around the same time as the *Ormulum* or somewhat later but preserving more case inflection. It is interesting to see that the pronominal uses of SE(O) reflexes are greatly restricted in these texts. The following discussion will focus on the form *þe,* since one of the questions of particular interest is in establishing whether this form was ever used in pronominal functions. However, I will make some comments on the retention of clearly inflected forms of the SE(O) paradigm.

Two manuscripts of particular interest and needing more detailed comment are Lambeth 487, dated C13a1 (c.1200) by LAEME, and Trinity College, Trinity B.14.52 (335), dated a bit earlier, C12b. These two manuscripts contain overlapping material, as discussed in Laing and McIntosh (1995), who provide helpful tables showing the correspondences between the texts in the manuscripts. Using the material in these manuscripts is tricky. First, all of it is likely to be copied material, as is the case with most EME writings that have come down to us. A thorough investigation of any differences in the forms and use of the determiner in the homilies known to have been composed in the OE period and those that might have originated closer to the time when they were copied into the Lambeth and Trinity manuscripts might yield some interesting results. In this paper, however, I will confine the discussion to one item that is shared by the two manuscripts but (being verse) is not included in the PPCME2, namely the *Poema Morale*.[17]

There is general agreement that the date of composition of the *Poema Morale* was circa 1170-1190. This means that the versions found in the Lambeth and Trinity manuscripts are fairly near the supposed time of composition (but see below). According to LAEME, the language of the Trinity version can be localized to west Essex, while that of the Lambeth version points to northwestern Worcester. By comparing the language of these two versions with each other as well as with the language of the writings discussed above, we can arrive at a better picture of the connection between the loss of inflection of the determiner and the disappearance of the pronominal use of *þe*.

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[17] This popular piece of verse is also found in five other manuscripts, of which Trinity, followed by Lambeth, seem to be the oldest (Laing 1992:570). As Laing discusses, multiple copies of a text can be very useful in establishing dialect characteristics.

In both the Lambeth and Trinity versions of the *Poema Morale,* uninflected *þe* predominates in article-like uses, but there is some retention of inflected forms. I will make no attempt at a detailed discussion of these forms here, but it is interesting to note that *se* is found six times in the Trinity version, all in the historically correct masculine nominative singular function, while Lambeth only has *þ-* forms. The Trinity version also has slightly more case-inflected forms than the Lambeth version. Both versions have frequent use of *þa* or *þo* for a plural, both in article-like functions or as a demonstrative pronoun, sometimes heading relative clauses.[18] For us, the important thing is that these versions from two different areas and different times in the twelfth century are essentially the same in the syntax of the reflexes of SE(O). That is, we find these reflexes in pronominal use, but not expressing co-reference with an antecedent. Looking specifically at *þe,* we find it frequently used in both the Lambeth and Trinity versions of this poem in relative clauses without a nominal head. For example, consider line 88 in the two versions, presented in (9):

(9) a. **þe** þe deð godes wille uwer   he mei him finden.
                                          (Lambeth)
   ÞE *that does God's will everywhere he may   him find*

   b.   **þe** godes wille doð aihware   he maiȝ him finde. (Trinity)
     ÞE *God's will does everywhere he may   him find*
     '(He) who does God's will, he can find Him everywhere'
     Poema Morale l.88, Morris (1867-8)

The Lambeth version (9a) begins with a left-dislocated demonstrative-headed relative, followed up by the resumptive personal pronoun *he.* Trinity (9b), however, has what can be called a 'fused' relative construction, in which the functions of a head and a relative clause marker are combined.[19] There is a tradition of using the term 'free relative' for any relative clause lacking a nominal head, for example recently by Taylor (2012:475). This use of this term is not universally accepted, but it is a convenient cover

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[18] It is not always clear whether this indicates the retention of a different vowel in the plural or is just a spelling convention that has been retained after unstressed vowels had fallen together. It seems plausible that this spelling variation is due to homophony between the (unstressed) reflexes of *se* and the plural *þa* before the latter was replaced by *those*.

[19] This terminology follows Huddleston & Pullum's (2002:63) treatment of modern English *I've already spent what you gave me*.

term here for two types of relative clause.[20] The demonstrative-headed and 'fused' types behave similarly in using *þe* pronominally. This makes them different from relative clauses following a nominal head, which no longer seem to have used demonstrative pronouns as relative pronouns in texts of any dialect after about the middle of the twelfth century. There seems to be no consistent difference in the two versions in the use of one type of free relative or the other; Lambeth has the 'fused' type in other lines, and Trinity also has *þe þe* free relatives, as well as free relatives using *se þe*.[21]

Both the Lambeth and Trinity versions of the *Poema Morale* are believed to be copies of earlier versions, although the copies could not have been made terribly long after the time of composition. Laing (1992:571) says that it is generally accepted that the two belong to different textual stemmas, with each being at no fewer than two removes from the original. Given this, we need to say something about the possibility that the use of *þe þe* and fused relatives might be a copying effect, with a scribe substituting *þe* for *se*, as happens in some EME texts. We first note that the scribes of both the Lambeth and Trinity versions were 'literatim' copyists (see LAEME for Lambeth and Laing & McIntosh 1995 for Trinity). A literatim scribe was one whose practice was to reproduce the spellings of his exemplar more or less exactly, as opposed to a 'translator,' who updated the language of his exemplar to be more consistent with his own language.[22] This means that the *þe þe* relatives of these particular versions were presumably found in the scribes' exemplars. It is possible that the originals had *se* and some translator scribes prior to the Lambeth and Trinity versions substituted *þe* because they were familiar with *se* and knew that they used *þe* in the functions of *se.* It is more economical to assume that *þe* was already widespread when the poem was composed in the late twelfth century and that the original had some *þe þe* relatives, perhaps in combination with *se þe* relatives. Intervening scribes may have extended the use of *þe þe*

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[20] As Andrews (2007:214) notes, the 'fused head' relatives (the only type that he calls 'free' relatives) seem to be semantically similar to relatives with a demonstrative or pronoun in the head position. For EME, it seems best to analyze 'fused' *þe* as being in the complementizer position, but carrying some pronominal feature.

[21] The plural forms *þo þe* and *þa þe* are also found, as well as the occasional free relative using a form inflected for case. There is also one use of *þe* with plural reference in the Lambeth version, and I have found sporadic use of *þe* for a plural in other texts of the period also.

[22] For detailed discussions of scribal practice in the EME period, see Benskin & Laing (1981) and the introductory material to LAEME.

(or even replaced some existing instances with the more conservative *se þe*), but it seems most likely that once *þe* had become a commonly used form of the demonstrative, its use in free relatives was a real grammatical possibility in more than one dialect in the twelfth century. Also, if *þe þe* seemed unnatural to a scribe, he could always have substituted *he þe* without affecting the meter or rhyme.

In the thirteenth century, pronominal *þe* becomes quite unusual. However, a number of convincing examples appear in the various versions of the *Ancrene Riwle.* My investigation of this anchorite's guide is based primarily on the version used by the PPCME2, from Cotton Cleopatra C.vi, but for examples of interest, I have made some comparisons with the version found in Corpus Christi College 404 (known as the *Ancrene Wisse*). The relationship between the different versions of this rule is complicated, and there is disagreement about the date of both the composition of the original and the date of some of the manuscripts. For a discussion, see Millett (2005:vol.2, xiii), where it is concluded that the date of composition could not have been earlier than the mid-1230s. There is no dispute that both the Cleopatra and Corpus texts were written in the West Midlands, although there has been a good deal of discussion about the exact location. LAEME gives a location of South Shropshire for the Corpus manuscript, and North Herefordshire (i.e. a bit further south) for Cleopatra.

In both manuscripts, we find a clear difference between the article and the distal demonstrative, whether used prenominally or as a stand-alone pronoun. In its article-like use, *þe* had become an indeclinable form, that is, it was used for both numbers and in all grammatical relations. However, the article is sometimes inflected for case. In Cleopatra at least, there is also occasional use of *þeo* for a plural or feminine singular article. The demonstrative was not inflected for case (except in fixed expressions) but continued to make a distinction between specifically masculine singular *þe* and general plural or feminine singular *þeo*.[23]

As in the earlier texts discussed, we have *þe* in the 'fused' relative construction:

(10) and þonke **þe**   hit sende   þe.
    and thank   who it   sent   you
    'and thank the one who sent it to you'
    (CMANCRIW-1,II.102.1236)

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[23] Of course, the masculine includes the feminine in the headless relatives, where *þe* 'the one' refers to a hypothetical individual.

The Corpus version has *þe þe* here:

(11) ant þonki **þe** þe hit sent te
    And thank who that it sent you
    'and thank the one who sent it to you'
    (Millett chapter 3.118, p. 56, fol. 34v)

Both types of relatives are found in both versions, the fused type with only *þe* being the more common, particularly in the Cleopatra version. It is rather surprising to find examples of *þe þe* free relatives in a text where they cannot possibly be due to substituting *þe* for *se* in an exemplar. It is even more surprising to find this clear example of *þe* used as a pronoun co-referential to an antecendent:[24]

(12) þt ich þurch þe lare of þe hali gast mote halde
    that I through the teaching of the holy ghost may hold

    foreward **.þe** hit $ȝetti $me[25] þurch ouwer bonen
    forward ÞE it grant me through your prayers
    'That I, through the teaching of the Holy Ghost may keep my promise, may he grant it to me through your prayers.'
    (CMANCRIW-1,II.135.1794)

Corpus has a personal pronoun here; *Þet Ich þurh þe lare of þe Hali Gast mote halden foreward,* **he** *hit ȝetti me þurh ower bonen* (Millett chapter 3.791, p. 67, fol. 47v). With only one such example, it is not possible to say that this use of *þe* was a genuine option in the language. However, Richard Dance's glossary to the Corpus version yields a clear example of *þe* where *he* would be used today:

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[24] My search in the PPCME2 yielded another example parsed as D dominating only *þe*, at (CMANCRIW-1,I.42.12), but this seems to be an error in the keying in of the text, since instead of *þe* Dobson's edition has a crossed *þ* here, which is an abbreviation for *þet*. So the example contains an ordinary relative clause, not a demonstrative used pronominally.

[25] The $ indicates a change that the PPCME2 has made to the printed edition; here the edition has *ȝettime*.

(13) ant he tahte   him to his þridde breðer, þe wes dead biburiet.
and he directed him to his third   brother, that was dead buried

He answered   surprised
Þe ondswarede   wundrinde
'…and he$_i$ directed him$_j$ to his$_i$ third brother, who was dead and
buried.. He$_j$ answered, surprised'
Millett Chapter 8, line 176 f. 114v.

This sentence is in an addition in the Corpus version and does not have
a parallel in Cleopatra. It makes it harder to dismiss (12) as an isolated
example. In both examples, *þe* is co-referential with an antecedent, but
in both, more is going on than the most basic anaphora. In (12), *þe* is
presumably stressed and emphatic, and in (13) the use of *þe* appears to have
the 'subject changing' function of the demonstrative pronoun mentioned
above. Three brothers are mentioned in this example, and the use of the
demonstrative indicates that the brother referred to is not the one who is the
subject of the preceding sentence.

Whatever we make of the preceding two examples, there is no
denying the existence of a pronominal use of *þe(o)* that we have not
encountered earlier, exemplified in (14):

(14) Þenchest þu $he $seið[26] hu **þe** spec   oðer **þeo** of
thinkest   thou   he says   how ÞE *spoke or*   ÞEO *of*

flesches   galnesse.
flesh:GEN lasciviousness
'Do you remember, he says, how he spoke (or she) of the lascivious
desires of the flesh?'
(CMANCRIW-1,II.200.2852)

This example is the only one of its kind that I found in my PPCME2
search, so I compared it with Millett's edition of the Corpus version. This
has essentially the same thing at chapter 4.1365, p. 104, fol. 74v. Further
investigation of Richard Dance's glossary and notes in volume two of this
edition of the Corpus text makes it very clear that the use of *þe* and *þeo*

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[26] The edition has *heseið*.

in the meaning of 'such and such a person' is a real feature of this text.[27] Several examples occur in the Corpus version, in passages not included in Cleopatra:

(16) seoððen Ich wes nest ishriuen, ant þet wes þenne ant of
    since   I   was last shriven and that was then   and by

þe and nempnin
ÞE *and name*
'…since I was last shriven, and that was at such-and such a time
and by such and such a person, and name him'
Millet 2005 p. 28, 2.321, f. 16 v

(17) ant bisech   him   aleast greten **þe** ant **te**,[28] ant þet ha
    and beseech   him   lastly greet ÞE and ÞE   and that they

bidden for þe
pray for thee
'and ask him finally to greet such-and-such and such-and-such and
that they pray for you'
Millet 2005 p. 28, 2. 326, fol. 17v

In both examples, the nun is being instructed what to say when a priest comes to visit, and is supposed to substitute the name of an actual person for *þe*. Dobson made this note to sentence (16) in his uncompleted edition, incorporated into Millett's edition:

> **2.321** of *þe*: here *þe* is OE *sē* (as modified in early ME) used not as def. art. but as a masc. demonstrative, just as *þeo* (OE < *sēo*) is used as a fem. demonstrative, 'that (woman)'.
> (Millett 2006, vol. 2:67)

Dance's glossary translates the *þe ant ~* found in (17) as 'this person and that.' This pronominal use must be considered a real feature of the language in at least some area of the West Midlands at this time.[29] It has a similarity

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[27] In addition, Dance lists some 'independent' uses of *þeo* that do not have a clearly deictic function. As the focus here is on documenting the specific form *þe* as a pronoun, these will not be discussed in this paper.

[28] The fricative assimilated to the preceding dental stop, hence *te.*

[29] D'Ardenne (1961:§90) provides further examples of pronominal *þe* in other manuscripts written in the same 'AB' language as the *Ancrene Wisse.*

with free relatives in that there is no co-referential antecedent for *þe*. It is not clear how widespread this pronominal use was or how long a history it had. The nature of most OE and EME texts is such that they would not be likely to record this use even in areas and times when it was possible, unlike this nun's rule, in which the reader is given specific instructions about what to say.

To sum up the details just presented, *þe* could still be used as a 'stand-alone' demonstrative pronoun in this dialect in which there can be little doubt that there was a definite article, distinct from the demonstrative.

3.6 Late pronominal usage
As is well known, the relevant inflection remained longest in Kent, where we find some retention of the old case system into the fourteenth century. In the *Kentish Sermons* in the Bodleian Library manuscript Laud Misc. 471, (dated C13b2 by LAEME), we find frequent use of *þe* in article-like position in all grammatical relations, alongside historically 'correct' reflexes of the inflected forms. The forms *se* and its variant *si* occurs 27 times in these sermons preceding nominative singular nouns, according to LAEME. The situation regarding gender is murky in this period, but it can be noted that both *se* and *si* are found with historically feminine nouns as well as masculine ones, possibly due to the phonological merger of the old masculine *se* and feminine *seo/sio*; at any rate these *s-* forms are almost completely limited to nominative functions. This suggests a retention of old case categories despite the availability of the invariant *þe,* found seven times in article-like function in these sermons (all genders combined).[30] We find three examples of *se þe* free relatives in this text, along with some examples of *þo þe* 'those that,' but no *þe þe* relatives. We find no examples of the reflexes of SE(O) serving as personal pronouns.

Millar (2000:329) notes this use of *se þe* (free) relatives in the southeast into the fourteenth century. Besides the three examples in the *Kentish Sermons, se þe* relatives are found even in a text in which *þe* (spelled *ðe*), rather than *se* is the dominant form in the article-like use. In *Vices and Virtues,* a text dating from an earlier period (around 1200) but

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[30] 'Almost completely' because there is one unetymological use of *se* preceding a direct object. It is always difficult to know what to make of a single example, which could be a scribal error, possibly brought on in this example by the use of *se* in its historical function with the same noun as the subject of the next sentence. Whatever the explanation for this example, the use of the inflected forms is systematic enough to suggest that the scribe clearly had a good grasp of the old inflectional system, but the ambiguity of forms had increased, and the scribe was also comfortable using indeclinable *þe*.

more advanced in deflexion because it is from Essex rather than Kent, *se*
is found only 8 times modifying a noun, where *ðe* is the normal form (a
fact noted by Millar and confirmed by my own investigation). In contrast,
as Millar observes, free relatives of the form *se ðe* are frequent in this text.
Again, *ðe* is not used pronominally in free relatives or any other pronominal
use. This use of *se þe* and the lack of *þe þe* is the same situation just noted
for the *Kentish Sermons.* Millar suggested that *se* was specializing as a
demonstrative pronoun in the southeast. It would not be surprising if in a
time when *se* and *þe* were in variation, speakers would create a functional
difference between the forms, favoring *se* in the contexts where it had
always been particularly frequent in the language and was furthermore
presumably stressed (i.e. free relatives), and mostly using the indeclinable
form in an unstressed position.

     The data presented above from texts not included in Millar's
investigation (*Poema Morale, Ancrene Riwle,* and *Ancrene Wisse*) add
to Millar's findings and necessitate a revision of his conclusion (p.329)
that '…the new *þe* form was not used in these pronominal contexts [free
relatives/CLA] except a very early stage in the developments…'

3.7 Summary and conclusions on pronominal SE(O)

A summary table such as table 1 on the following page must involve
substantial simplification. For example, the judgement that *þe* is a 'majority'
form glosses over the fact that *þe* may be dominant in one grammatical
function, such as with the objects of prepositions, while forms showing
the old inflections may be favored in another grammatical role.[31] The table
also does not convey the complicated interaction between case, number,
and gender; for example I have listed the *Ancrene Riwle* and the *Ancrene
Wisse* as having some inflection without distinguishing article inflection
from demonstrative inflection. Nevertheless it helps to give overview of
complicated details. Note that 'used like a personal pronoun' means that
the pronoun conveys only co-reference with an antecedent, lacking any
deictic force. 'Stand-alone' pronoun groups together all uses of the specific
form *þe* used as a pronoun not associated with a relative clause, and does
not distinguish simple anaphora from other uses.

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[31] The distinction I have made between 'minority' and 'limited' inflection in Table 2 re-
flects my judgement concerning whether the amount of inflection (particularly for case)
is still substantial (minority) or infrequent (limited). This distinction does not cover in-
flection for number.

Table 1 summarizes the findings of the preceding sections.

Text	Date and dialect of MS	Inflection of SE(O)?	Indeclin-able article *þe*?	SE(O) used like a personal pronoun?	SE(O) rel. pro. w/ nominal head?	*Þe (þe)* free relati-ves?	'Stand-alone' *þe*?
Peterborough Chronicle Final Continuation	Peterborough, c. 1154	No	Yes	No	No	No	No
'Kentish' Homilies	C12a-2-b1, southeastern	Full	No	Yes	limited	---	---
Bispel, Induite	C12b-2-C13a1, mixed southern	Minority	Majority	No	No	Yes	No
Poema Morale (T)	C12b, W Essex	Limited	Majority	No	No	Yes	No
Poema Morale (L)	C13a, NW Worcester	Limited	Majority	No	No	Yes	No
Ancrene Riwle	C13a2, W Mid (Herefordshire)	Limited	Majority	No	No	Yes	Yes
Ancrene Wisse	C13b?, W Mid (N Shropshire)	Limited	Majority	No	No	Yes	Yes
Vices and Virtues	C13a1, SW Essex	Limited	Majority	No	No	No	No
Kentish Sermons	C13b2, Central Kent	Frequent	Frequent	No	No	No	No

Table 1: Summary of characteristics of EME SE(O) reflexes

Looking at this table, we have these overall results:

1. A full range of pronominal uses of SE(O) is still found after the first quarter of the twelfth century in a dialect in which the old inflections of the demonstrative were essentially maintained intact. However, the use of the demonstrative as a relative pronoun other than in free relatives seems to have been on the wane even in this dialect.

2. It is necessary to differentiate 'pronominal' uses into different types, since uses that can be treated as pronominal do not appear to have disappeared all at the same time.

3. By the second half of the twelfth century, *þe* had made serious inroads into the inflectional systems of all dialects for which we have evidence. In all dialects, the pronominal use of *þe* is restricted in function

compared with OE, if found at all. Essentially, it is not used to express simple co-reference with a definite antecedent.

What can we make of all this? There is clearly a connection between deflexion of the determiner and the shrinking of its range as a pronoun, but it is not a simple one. In all texts exhibiting advanced deflexion, the pronominal uses are limited if not missing entirely. However, the use of demonstrative pronouns like personal pronouns appears to have disappeared by the thirteenth century even in Kent, where there was still substantial inflection. We must remember here that the texts do not give us a complete picture of the pronominal possibilities. So for example, in the homily on Mary in Cotton Vespasian D.xiv, it is easy to find pronominal examples like (3) through (5). But if we only had the 'Honorius' pieces from this same manuscript, we might conclude that the pronominal use of SE(O) was restricted to free relatives, just as *þe* was in texts where deflexion was further advanced. The lack of the other pronominal uses of SE(O) in these short pieces, however, is almost certainly due to text type; while the Marian homily tracks characters in a narrative, Honorius' *Elucidarium* texts discuss principles of Christian theology and make generalizations about the nature and fate of particular types of people. It is hardly surprising that the demonstrative pronoun was not used in its discourse tracking function when there are no participants to keep track of. Conversely, in the Final Continuation of the *Peterborough Chronicle,* which records events, we would not necessarily expect to find *þe þe* relatives even if they were a possibility in the language of the scribe who wrote these annals, so we cannot conclude much from their absence.

When we get to the later twelfth century, all the texts show considerable deflexion*,* although to different degrees. However, there seems to be a real pattern of pronominal *þe* being maintained in free relatives in more than one dialect, and we also have the use of *þe* as a demonstrative pronoun meaning 'such and such a person' in the *Ancrene Riwle* and *Ancrene Wisse.* This use is surprising, but it seems probable that the fact that the pronoun can still be regarded as inflected for gender and number made this pronominal use possible. We can treat the form *þe* in this dialect as sometimes having some pronominal features, in opposition with *þeo*, and sometimes devoid of pronominal features. All pronominal uses seem to have disappeared with the complete disappearance of inflected forms of the determiner.

3.8 Deflexion and the definite article

Linguists have naturally been attracted to the idea of linking deflexion with other changes in the determiner system. To be successful, however, any such account must deal somehow with the fact that some of these other syntactic changes apparently took place around the same time in the case-rich and case-poor dialects. The loss of inflection does not correlate with the development of the definite article. The biggest problem for any formal account linking the appearance of the definite article by the non-use of pronominal *þe* is probably the fact that this approach implies that the case-rich dialects of the twelfth century did not have a definite article, since they apparently retained all the old pronominal uses. Reading the Marian piece in Vespasian D.xiv, I cannot find any places where we would need *the* in Modern English in which no article is used (although indefinite articles are certainly still lacking).[32]

Watanabe's (2009) suggestion that the advent of the definite determiner was one of a cluster of changes triggered by the loss of agreement can be used as an illustration of the problems faced in trying to integrate deflexion with other changes to the determiner system. It is problematic for this analysis that some of the constructions which are supposed to have come into existence because of the lack of agreement are found in texts with very different amounts of agreeing forms. I will not discuss all the constructions which Watanabe attempts to link to a single change, but will focus on one. Watanabe makes the standard assumption that the definite article appeared in English when the demonstrative, phrasal and therefore a specifier, was reanalyzed as a head. Watanabe suggests that this reanalysis was necessitated by the loss of the agreement features of the head D. The fundamental idea is that while D had agreement features, the demonstrative raised from its initial position to the specifier of DP, but after the loss of agreement features, this determiner had to be merged directly as the D head (p. 368). Watanabe suggests that the same loss of agreement features in D

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[32] The only sentence where there is a lack of definite articles is one which uses the external possessor construction, which is no longer possible in Modern English except in fixed expressions, at (CMKENTHO,138.106): *Ðeos sæt wel þan Hælende æt foten and æt heafde* 'This one (Mary) truly sat at the Saviour's feet and at his head.' As discussed below, the lack of a determiner was permitted in prepositional phrases but not with subjects and direct object possessa. In this text, however, definite determiners do not appear to be optional in prepositional phrases generally. The lack of a definite article in these two prepositional phrases may be connected to the fact that definiteness is already marked by the dative possessor, but it may be due to the conjunction; see section 4.

is responsible for the introduction of the sort of 'wh-based free relative' found in (18):

(18) Wa se seið þet   he bo hal
     Who so says that he is whole
     'Whoever says that he is whole'
     Lambeth *Poema Morale,* l. 114 (Morris 1867-8*:*167)

This is an innovation because in OE, the wh-based free relatives always had an initial *swa*:

(19) Swa hwa swa oncnæwð þa blindnysse his modes
     *So   who so   perceives the blindness   his mind:*GEN
     'whoever perceives the blindness of his mind'
     (cocathom1,ÆCHom_I,_10:260.65.1868)

In EME, the second *swa* weakened to *se,* and the first one disappeared. Watanabe proposes that it was the loss of the possibility of agreement that triggered this innovation: the first *swa* agreed with the indefinite *wh-*pronoun in OE. With the loss of agreement features, the first *swa* was no longer possible and dropped off, the scenario depicted in (20):

(20) [$_{DP}$ [$_{D}$ swa WH …]]   ⇨   impossible

Watanabe (2009:368, example 20.a')

The difficulty here is that since this type of relative lacks the first *swa* in the *Poema Morale* and other texts of this period, this should mean that D has lost its agreement features, making demonstratives inflected for agreement no longer possible, since they should not be able to raise to the specifier of DP anymore. But as we have seen, such agreeing determiners are found in this period in variation with *þe*. In a Minimalist framework, it is possible to propose an analysis in which agreement is essentially optional by allowing more than one possibility for the features that an element carries. However, with this optionality, we would expect some instances of demonstrative pronouns in all the old pronominal uses, but we do not find this, even when agreeing forms are available.

It seems, then, that it is not possible to date the reanalysis of the phrasal demonstrative as the D head by the disappearance of pronominal SE(O) reflexes. I propose that the easiest way to deal with the variation found in the various dialects is to assume that the SE(O) reflexes could be in either the specifier of DP or be the D head. The form *þe* was normally the D head rather than a DP because it was no longer particularly useful as a pronoun, but it still could carry features that made it suitable as a pronoun in free relatives. In the next section, I will support the view that this dual analysis of SE goes back into the OE period.

4. The Definite Article: A Development of the Old English period

The tools that have become available to linguists within the last few decades have made it much easier to add statistical arguments to the impressionistic view of Christophersen (1939) that OE had a definite article. Crisma (2011) provides compelling evidence from a corpus study that SE had already developed into a definite article by the late ninth century. Crisma documented a crucial difference between the early poetry and the prose of the late ninth century. Her essential finding was that in the poetry, which presumably enshrines earlier syntax in this respect, a definite interpretation is possible with a determinerless noun, but overwhelmingly in the prose, definite nouns appear with an overt determiner. In both the poetry and the prose, indefiniteness did not have to be marked.[33]

Crisma's paper marks an advance in the study of determiners in OE not only because of the finely-grained analysis of types of nominal expressions, but also because of her focus on nouns in the subject and object roles. Crisma notes that the use of the definite article in adverbials and the objects of prepositions tends to be idiosyncratic even in languages in which a definite article is well established. The examples that scholars provide to support the position that the marking of definiteness was not obligatory in OE usually involve the sorts that Crisma excluded, including objects of prepositional phrases and non-arguments and examples from poetry. While such examples illustrate that the marking of definiteness was not the same in OE generally and Modern English, they do not show that definiteness marking was simply optional. Crisma's careful study shows that certain types of nouns in argument positions only had a definite interpretation by

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[33] As in Modern English, mass nouns and plurals which lack a determiner are always in-terpreted as indefinite, e.g. *wombats* is interpreted as a generic expression, a type of indefinite, in *wombats dig holes*.

the late ninth century when they were either inherently definite, such as proper nouns, or were overtly marked as definite. This represents a change from the poetry, and so I consider it to be well established that the definite article emerged within the OE period.

In a large sample, Crisma found only a small number of potential counterexamples to this generalization about the obligatoriness of definiteness marking in the prose of the ninth to twelfth centuries. For the most part, these fell into types also found in other languages which are normally regarded as having a definite article. In what follows, I would like to supplement Crisma's findings with some of my own findings from research which I have carried out into the syntax of the possession of body parts in OE.

As is well known, OE had an external possession construction for inalienable possession in which the possessor was in the dative case and not part of the phrase that contained the possessum. I'll refer to this as the Dative External Possessor (DEP) construction. Crisma made brief reference to this construction because four of the potential counterexamples to obligatory definiteness marking involved DEPs:

(21) to þære   stowe læded wæs, þær   him   mon
     to SE:FEM.DAT.SG place led   was   where him:DAT one

     sceolde   heafud ofslean
     must   head   offcut
     'and was led to the place where he was to be beheaded'
     (Bede_5:17.456.5.4579) (Crisma 2013 ex. 17; my glossing)

Following Vergnaud & Zubizaretta (1992), Crisma assumes that the determiner of (21) was expletive, since the identification of the body part did not depend on the presence of the determiner. She proposes that in OE, an expletive determiner could be omitted in OE in some circumstances, including with externally possessed body parts.

Crisma is not alone in suggesting that there might be something special about the determiner in the DEP construction. Taylor (2014:448) remarks that definiteness was usually marked, but notes Traugott's (1992:172) comment that the definite determiner was frequently omitted with body parts belonging to the subject. However, the generalization that emerges from my study is that it is the grammatical relation of the possessum, not of the possessor, that is crucial. In both examples that Traugott uses to illustrate

her point, the determinerless phrase is *mid heafde*. The use of determiners in prepositional phrases was not completely obligatory in any period of OE. The majority of DEPs in OE do in fact have a possessum which is the object of a preposition, and the non-obligatoriness of the determiner in these DEPs follows from the optionality of determiners in prepositional phrases generally – although calling the determiner simply 'optional' is probably an overstatement. A determiner is usually used in these DEPs too in the prose, and the use seems to depend on the combination of verb, preposition and noun that is used. That is, the presence or not of a definite determiner in a prepositional phrase seems to be at least partly lexically determined in ways that are beyond the scope of this paper. I am not aware of any systematic study showing that determiners are more likely to be omitted in DEPs when the possessor is a subject, but my own study has found that the definite article is nearly always found when the possessed body part is the subject or the direct object (as defined by being marked with nominative or accusative case, respectively).

In my study, I collected prose examples of DEPs by searching selected files in the YCOE, using large list of body parts in subject and direct object roles. From the results of these searches, extracted the examples in which the possessor of the body part was a DEP which must be considered definite. For the poetry, I used *The York-Helsinki Parsed Corpus of Old English Poetry* (Pintzuk & Plug 2001), which I supplemented with my own examination of *Judith* (Griffith 1997 edition), *Andreas* (Krapp 1932:3-51) and *Genesis* (Krapp 1931:1-87). It should be mentioned that my selection of texts did not include all the texts searched by Crisma; specifically, I did not include very late texts or ones which I knew to involve manuscripts from different periods. The latter exclusion means that I did not capture example (21); I excluded the OE translation of Bede's *History* because it is a composite edition, and using texts from different periods can muddy our findings for a particular period. However, (21) can be considered legitimate.

In addition to DEPs of the type that has been illustrated so far, the search also turned up a small number of examples of what Ahlgren (1946) referred to as the 'blended' construction in which the possessor is indicated both by an external dative and an internal possessive or genitive form:

(22) Her   Romane Leone þæm   papan   his tungon forcurfon
     Here Romans Leo:DAT the:DAT pope:DAT his tongue carved
     'In this year, the Romans cut out Pope Leo's tongue'
     (cochronA-1,ChronA_[Plummer]:797.1.596)

Since possessives are definite, these examples can be considered to mark
the body part as definite.

My findings are summarized in Table 2, which is divided into two
parts, for body parts which play the grammatical relation of subject or
object.

		Subject Possessum	Object Possessum	Total
Poetry	No Det	8	6	14
	'Blended'	0	0	0
	Det	3	2	5
	Total	**11**	**8**	**19**
Prose	No Det	2	3	5
	'Blended'	7	2	9
	Det	42	38	80
	Total	**51**	**43**	**94**

Table 2: Definite determiners in definite body part subjects and objects with
external dative possessors

Looking at Table 2, we see a difference between poetry and prose
similar to Crisma's findings for definite nouns in general in OE. While
determinerless body parts are in the majority with DEPs in poetry, they are
very unusual in prose. With definite body part object objects, even when
we add (21) to the figures in my table, we still have only four examples
lacking a determiner. This is without adding any of the examples with a
determiner that appeared in Crisma's texts not covered in my study. One of
the three examples I collected is similar to (21) in being a verb + particle
combination semantically equivalent to *beheafdian* 'behead':

(23) ah me þynceþ unscyldiglicre þæt him man heafod of aceorfe
     but me seems less.guilty   that him one head off cut

     buton   oðrum witum.
     without other   punishments
     'but it seems more excusable to me that his head should be cut off
     without other punishments'
     (coblick,LS_32_[PeterandPaul[BlHom_15]]:189.335.2461)

A plausible explanation for (21) and (23) is that they involve object
incorporation, since the object is directly before the verb in both examples.
However, more investigation into object incorporation in OE would be
necessary to make this more than a suggestion. It should also be noted that
of the six examples describing a decapitation in the texts I investigated,
(23) is the only one lacking a determiner. The use of a determiner, as in
(24), is more common:

(24) þa heton   þa consulas Hasterbale   þæt heafod of aceorfan
     then ordered the consuls Hasterbal:DAT the head   off cut
     'then the consuls ordered that Hasterbal's head be cut off'
     (coorosiu,Or_4:10.105.34.2190)

        My remaining two exceptions are two repetitions of the same
sentence in Wulfstan's works:

(25) & him   ægðer þurhdraf isenum   næglum ge   fet ge
     and him:DAT both   pierced iron:DAT nails:DAT and feet and
     handa
     hands
     'and pierced both his hands and feet with nails'
     (cowulf,WHom_7:55.422 and 13.36.1238)

Fet and handa is a very common combination in the texts. Crisma notes
(p. 187) that a number of her apparent counterexamples to the obligatory
marking of definiteness involved coordination of two noun phrases without
determiners. She notes also that a definite interpretation is often possible
in both English and other languages when coordination is involved, so this
sentence should probably not be considered a true counterexample.

Turning to body part subjects, the two determinerless examples of Table 2 are presented in (26) and (27):

(26) Gif men   sie maga   asurod
if man:DAT be stomach soured
'If a man's stomach is soured'
(colaece,Lch_II_[3]:69.1.1.4104)

(27) Gif men   sie innelfe ute
If man:DAT be bowel out
'if a man's bowel be out' (*Leechbook* editor's translation)
(colaece,Lch_II_[3]:73.1.1.4146)

With only two examples, more than one explanation is always possible and we have insufficient evidence to see a pattern. Scribal error cannot be ruled out in (26), where it would not be surprising if the scribe left out *se* because he had just written *sie*.[34] This particular explanation is not available for (27), since *innelfe* is a neuter noun and the determiner would be *þæt*. It is possible that this should be taken as a mass noun, since it is possible to think of 'some bowel' being out. There are too few examples of this noun in the texts to be certain of its properties.

Regardless of whether the small number of potential counterexamples can be convincingly explained, it is clear that the marking of definiteness in the external dative possessor construction is too much the rule to be considered optional in the prose. Although the number of examples from poetry is not huge, it is large enough that the difference between prose and poetry cannot be due to chance.[35] These findings both lend support to Crisma's conclusion about the development of the definite article by the late ninth century, based on a different sample, and add to our knowledge

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[34] Editorial error can be ruled out, however; a look at Wright's (1955) facsimile of *Bald's Leechbook* shows that the editor has faithfully transcribed the manuscript, except that he has silently expanded the abbreviation m with a line over it as *men*.

[35] The number of poetic examples would be much larger if we extended the search to words referring to 'mind' and the other semantic categories covered in Havers' (1911) seminal work. External possession is used with such words in the poetry much more frequently than in the prose. As mentioned above, external possession is also much more frequent when the body part is the object of a preposition.

about the use of definite determiners at this time in a specific construction.[36] Crisma's suggestion that it is the expletive nature of the determiner with inalienable possessa that explains examples like (21) is intriguing, but given the near-obligatory use of definite articles with inalienable definite nouns, other possibilities, such as an explanation in terms of object incorporation, deserve consideration. Further research into the evidence for expletive determiners in the history of English is also needed. As Crisma noted, if OE had an expletive determiner, it got lost somewhere on the way to Modern English.

5. Conclusion

In this paper, I have followed up on Wood's (2003) suggestion linking the restriction of the reflexes of SE(O) to prenominal position and the emergence of the definite article in English. It is appealing to hypothesize that with the deterioration of inflection, the indeclinable determiner was of little use as a pronoun and became restricted to the position before a noun, leading to its reanalysis as an article. However, the facts presented in section 3 lead to the conclusion that the disappearance of pronominal *þe* present a more complicated picture. Put simply, *þe* retained some of its uses as a pronoun well into the period when it no longer had any deictic force when used prenominally. I have argued in section 4 that in looking for diagnostics for the birth of the definite article, we must look earlier. In Allen (2006, 2007b) I proposed that SE(O) could occur in two positions in OE; it could be either in D, an article, or it could be a demonstrative, a DP that could be the specifier of the larger DP or could serve as a pronoun. In two papers of 2007, Johanna Wood argued that SE(O) was already in D sometimes in OE. Crisma's (2011) study found clear evidence of a shift in the status of SE(O) within the OE period, with the marking of definiteness obligatory in some situations by the late ninth century. Crisma's finding that SE(O) could be a D head at this time implies a dual analysis for this determiner, since it was clearly a demonstrative as well. I have added some findings of my own investigation into the syntax of external possession in OE to show that the same distinction between prose and poetry that Crisma found

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[36] The attentive reader may have noticed that Crisma mentioned four determinerless examples with body parts, but I have only discussed two. Paola Crisma has kindly supplied me with all the apparent counterexamples in personal communication, and has noted that the other two can be excluded as counterexamples on independent grounds (they are conjoined nouns).

generally is apparent in that construction also. Taylor (2014:449) also cautiously suggests that there is some evidence to suggest that SE could occupy either the demonstrative or the article position in OE. There seems to be a growing consensus for this position.

The EME facts seem to be most easily accommodated by an approach in which the SE(O) reflexes were progressively restricted to the D position as *þæt* took on its specialized function as a demonstrative. Under such an approach, it is easy to deal with facts such as the preference for *se* in free relatives and for *þe* in article-like uses in the *Vices and Virtues* and the use of *þe* as an article with plural nouns in the *Ancrene Wisse,* where pronominal *þe* never has plural reference. This approach also makes sense of the fact that the state of case marking in a given dialect appears not to have mattered in the obligatory marking of definiteness.

There is much scope for future research here. This paper has only touched on some of the issues regarding the syncretism of the forms and morphological categories of the determiner. There appears to be no relationship between the state of inflection of the determiner in EME texts and its appearance in article-like positions. On the other hand, the texts looked at in my investigation seem to show a clear link between full inflection of the determiner and its use in the most basic function of a personal pronoun. The link between reduced inflection and the decline in the use of the demonstrative as a relative pronoun is not so clear. The amount of inflection does not seem to correlate in any straightforward way with the pronominal use of *þe* in free relatives, except that that these relatives do not seem to be found in texts where indeclinable *þe* is now the only form. Detailed studies of both the morphology and the syntax of the determiner in a larger number of individual texts is necessary before that preliminary conclusion can be made more solid (or refuted). If it is accepted that OE already had a definite article, there is still need for research on how the syntax of that article developed to become the way it is in Modern English. Accepting this conclusion about the early genesis of the definite article also of course means that we should stop trying to link other developments in the determiner system in EME with the presence of an article in D, and we can start looking for links between the new article and other phenomena that distinguish poetry from prose within the OE period.

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Subject placement in Estonian Swedish

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Abstract
This paper presents an overview of subject placement in sentences with a negation in Estonian Swedish (ESW) with a focus on the relative order between subject and negation in the so-called middle field (cf. Diderichsen [1946] 1957; Teleman et al. 1999, vol. 4:7–11). In one of the four dialect areas in ESW, the Rågö/Vippal/Korkis area, the designated position for the subject in the middle field is found to be the one following the negation. The other dialect areas seem to have a subject position that corresponds more to Standard Swedish (SSW), where the relative order of subject and sentence adverbial in this area of the clause is decided by factors as information structure and semantic scope (cf. Andréasson 2007).[1]

1. Introduction

Estonian Swedish is an umbrella term for the Trans-Baltic Swedish dialects that were spoken mainly in the north west of Estonia. Figure 1 shows the area where ESW was spoken from Nargö in the north to Runö in the very south. There is evidence that there were Swedish settlements in this area in the 14th century, and Swedish presence is mentioned in the town of Hapsal already a century before that (Tiberg 1964;17f; Lagman 1979:3ff; Rendahl 2001). During the second world war the main part of the Swedish population in Estonia was evacuated to Sweden, and today there are just a handful of Estonian Swedes left in Estonia. However, in Sweden there is still a group of speakers of the dialects, mainly men and women that were evacuated as young children during the war.

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FIGURE 1:Estonian Swedish dialect areas in Estonia: Nargö; Stora Rågö, Lilla Rågö, Vippal, Korkis; Ormsö, Nuckö, Rickul; Runö.

The ESW dialects have distinct characteristics that separate them both from Swedish dialects and from the Finland Swedish (FSW) dialects. To the present day, there has not been much work done on the dialect syntax of ESW. In previous work, it is instead mostly the sound system and the lexicon/morphology that has been investigated in traditional dialectological studies (cf. Tiberg 1964; Lagman 1979a,b; Rendahl 2001). The investigation in this paper has been performed within the ESST project (Estlandssvenskans språkstruktur, University of Gothenburg).[2]

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[2] https://sites.google.com/site/esstprojektet/

The corpus used is a text collection where ESW texts appear with a SSW translation (Lagman 1979b). The texts consist of written narratives from all ESW dialect areas.[3] From this corpus 312 instances of negations corresponding to the SSW *inte* 'not' were identified. With this as a starting point sentences with both a subject and a negation were excerpted. I have excluded clauses without subjects, since they are not relevant for this investigation: sentence fragments, see (1a), relative clauses that lack subjects, see (1b), and sentences with coordinated subjects or subjects that are left out in topic drop as in (1c), or by incorporation in the finite verb as in (1d).[4]

(1)   a.   *Ete*   håre   uare.   [RUNÖ]
           not   *every*   *the-year*
           'Not every year.'

       b.   Tärbakit   gick   losäri såm itt   dansa. [STORA RÅGÖ]
           there-behind   *walked*   *losäri*   *who*   *not*   *danced*
           'At the end, the *losäri* came, who didn't dance.'

       c.   Har   itt   herd   kå   langan   tid   gick   bårt   åt
           have   *not*   *heard*   *how*   *long*   *time*   *went*   *away*   *to*

           stackars   männe [...] [VIPPAL]
           poor   *the-men*
           '(I) have not heard how long it took for the poor men…'

       d.   Han   tien   fikst   änt   så   mång   juLskänk […] [ORMSÖ]
           him   *the-time*   *got-REFL*   *not*   *so*   *many*   *Christmas-gift*
           'In those days, you did not get so many Christmas gifts.'

Out of the remaining 273 sentences that contain both subject and sentential negation, 71.5% are declarative V2-clauses (195), 23.5% are subordinate clauses where subject and negation precede the finite verb (64). *Wh*-questions, V1-questions and V1 subordinate clauses constitute 5% (14) of the sentences investigated in this study. In the following, these 273 sentences

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[3]   In this investigation I have chosen leave out the ESW texts from Gammalsvenskby, Ukraine, that are included in Lagman (1979b), and only include the dialects in Estonia.

[4]   The incorporation of something that appears to be a reflexive subject into the verb is an interesting issue that needs to be subject of further research.

are called *the sample*. I have also listened to recordings of the sample sentences to determine stress patterns that would suggest contrastive readings.

In this article I also refer briefly to questionnaire data from the ESST project. In this project evaluation tests have been performed with speakers of ESW. The test sentences in the questionnaire used are a subset of those used in the ScanDiaSyn project (see Lindstad, Nøklestad, Johannessen & Vangsnes 2009), combined with a few sentences designed for the ESW dialect area. I will refer to this investigation as *the questionnaire*.

The term *middle field* used in this paper refers to the area of a Mainland Scandinavian V1 or V2 clause directly following the finite verb and preceding the position of a non-finite verb. In subordinate clauses with non-V2 word order it refers to the area following the subordinating conjunction and preceding the position of the the finite verb.

The default position for subjects in the Swedish middle field has been considered to precede the position for the negation, SUBJ > NEG. Originally this goes back to Diderichsen's sentence schema for Danish, which reflected generalisations on Danish word order (Diderichsen 1957 [1946]). The sentence schema in the Swedish Academy grammar (Teleman et al 1999) follows Diderichsen in this respect, even though Swedish has a more free word order in this area of the clause than Danish (cf. Andréasson 2005, 2007). The Norwegian reference grammar (Faarlund et al 1997) has adverbial positions preceding and following the subject position, thus reflecting word order variation between subjects and adverbials in the middle field in Norwegian (cf. also Østbø Munch 2013 and Bentzen 2014).

2. Subject positions in Estonian Swedish

Generally, subjects seem to appear in the middle field in declarative sentences to a greater extent in ESW than in SSW. In the 195 declarative sentences in the sample, 50% (97) of the subjects are inverted, i.e. they appear in the middle field, and 50% (98) appear in the initial position. This contrasts with data from SSW. In Andréasson (2007:135) where as much as about 74% of the subjects appear in the initial position in declarative sentences with negations and other sentence adverbials.[5] The difference is quite striking, but we have to bear in mind that the corpora are different; it may be that the written non-fiction and fiction investigated in Andréasson (2007) is not completely comparable with written dialect narratives.

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[5]　Investigations of Swedish sentences irrespective of the presence of a sentence adverbial show that between 64% (non-fiction, Westman 1974:155) and 67,5% (fiction, Teleman & Wieselgren 1970:119) of the subjects appear in the initial position in declarative sentences.

Another component that could affect the larger amount of subjects in the middle field in ESW is that the ESW dialects seem to be more inclined to allow sentential negations in a initial position in declaratives than SSW. Westman (1974) shows that clause initial negation in negated sentences in SSW is as low as 0.5%. In the ESW sample, however, there are 20 negations in initial position, i.e. approximately 10% of the declarative sentences. In this respect ESW seems to correspond more to Swedish in Late Old Swedish period, when 8% of the negations appeared in the initial position (Brandtler & Håkansson 2014). Furthermore, in ESW initial negations do not seem to have the pragmatic implications that they have in SSW (cf. Teleman et al. 1999; Brandtler & Håkansson 2014; Rosenkvist forthcoming). Nevertheless, even if we exclude the 20 sentences where the negation blocks the subject from appearing in the first position, 44% of the subjects appear in the middle field, which still constitutes a major difference from the findings for SSW in Andréasson (2007).

When we take a closer look at the relative order between subjects and negations in the middle field an interesting pattern emerges, see Table 1 below.

DIALECT AREA	SUBJ > NEG	NEG > SUBJ	TOTAL
Nargö	85% (23)	15% (4)	27
Rågö/Vippal/Korkis	7% (3)	93% (38)	41
Ormsö/Nuckö/Rickul	90% (69)	10% (8)	77
Runö	(78% (7))	(22% (2))	9
TOTAL	102	52	154

Table 1: Relative order, subject and negation, all clause types, ESW dialect areas

In the Rågö/Vippal/Korkis area, the predominant position for subjects in the middle field is following the negation in all clause types, whereas the other dialect areas pattern with SSW where subjects precede negations in the middle field in 87,6% of the investigated sentences (Andréasson 2007:134). Table 2, below, shows that this pattern is just as predominant for pronominal subjects as it is for full NP subjects in the Rågö/Vippal/Korkis area.

DIALECT AREA	SUBJ$_{pro}$ > NEG	NEG > SUBJ$_{pro}$	SUBJ$_{fullNP}$ > NEG	NEG > SUBJ$_{fullNP}$	TOTAL
Nargö	21	2	2	2	27
Rågö/Vippal/ Korkis	2	27	1	11	41
Ormsö/Nuckö/ Rickul	56	0	13	8	77
Runö	7	0	0	2	9
TOTAL	86	29	16	23	154

Table 2: Relative order, subject and negation, all clause types, the ESW dialect areas: Pronouns (incl. expletives) vs. full NP:s

Table 1 and 2 and the comparison with Andréasson (2007) suggest that the ESW dialect areas follow two distinct patterns when it comes to subject placement in the middle field. Nargö, Runö and the Ormsö/Nuckö/Rickul dialect area pattern with SSW, with 78–90% of the subjects preceding the negation. The Rågö/Vippal/Korkis area does not. In this area subjects generally follow negation.

In the following, I will for the purposes of this article treat Nargö, Ormsö, Nuckö, Rickul, and Runö as one dialect group, called *NONR*, and Stora and Lilla Rågö, Vippal, and Korkis as another, *RVK*.

3. Subjects, information structure and semantic scope in the middle field

Andréasson (2007) shows that there are several factors that decide the position of a subject in relation to a sentence adverbial in SSW. Information dynamics, or information structure, including contrast, is a main factor and semantic scope is another. In this section, I present data on the degree to which information structure and semantic scope affect subject placement in ESW.

3.1 Pronominal subjects and negation

In the sample from the NONR area, almost all pronominal subjects in the middle field in the sample (84) appear preceding the negation. This corresponds very well with SSW, where pronominal subjects appear preceding sentence adverbials in the middle field in as much as 98% (Andréasson 2007:135). Only on two occations, both from Nargö, pronominal subjects

follow the negation. Let us take a closer look at these two Nargö examples, see (5) and (6).

(5)   [...]   ferva   tåordist   inga ja, när tem andra   påikana
    [...]   *why*   *was-allowed*   *not*   *I*   *when* *the*   *other*   *boys*

    fikk   [...]   [NARGÖ]
    got   *[...]*
    ' [...] why I wasn't allowed, when the other boys were.'

In Nargö the equivalent of SSW *inte* 'not' is *inga*. In example (5), this negation precedes the subject *ja* 'I'. In SSW pronominal subjects in this position generally carry some kind of contrast interpretation (cf. Andréasson 2007:173 f.), and this is also the case in (5). The speaker has asked his mother whether he might take his dinghy and earn some money shipping visiting Swedes over the bay, and when the answer is "no", he wonders why it is that he can not do this when all the other boys are allowed by their mothers. The contrast set *tem andra påikana* 'the other boys' is expressed in the following subordinate clause.

In example (6) it is not contrast, but the quality of the pronoun that triggers the word order. The subject is in this case not a personal pronoun, but the adjectival pronoun *andert* (SSW *annat* 'else; other').

(6)   […]   sen   bläi   inga   andert iver som gå tilbaka ti
    […]   *then*   *became*   *not*   *other*   *over* *than* *go* *back*   *to*

    Meedo.   [NARGÖ]
    Meedo
    ' […] then, there was nothing else to do but to return to Meedo.'

The pronominal subject *andert* 'else' in combination with the negation expresses the meaning of 'nothing but', and the SUBJ>NEG word order would be ungrammatical in SSW, and most likely also in ESW in general. I have found no counterexamples to this in the corpus.

Of course it is not possible to draw any wider conclusions as to what triggers the word order NEG>SUBJ$_{pro}$ in the NONR group only from example (5) and (6). Nevertheless data from the questionnaire supports the generalisation that pronominal subjects following negation should not be unstressed. In the ESST project, 17 speakers of ESW in Sweden have been interviewed; 16 of these were from the NONR dialect areas. Two

test sentences were presented where a non-contrasted pronominal subject followed a negation, and 15 of the speakers rejected this word order. The one informant that accepted the word order seems to have been influenced by his RVK interview partner not only in the evaluation of these two sentences, but in many other answers too.

The one RVK informant did not only put high scores on the NEG>SUBJ$_{pro}$ test sentences in the questionnaire, but he spontaneously and apparently unconsciously shifted places on subjects and negations in the middle field to obtain a NEG>SUBJ word order, when translating other test sentences to his dialect. In consistency with this, the RVK sentences in the sample seems to indicate that the authors of the RVK texts in Lagman (1979b) have no problem whatsoever with non-contrasted pronominal subjects in the position following the negation, see (7) and (8) below. In fact, not one of the RVK pronominal subjects in the sample may be interpreted as having contrast. Consequently, none of the these 27 pronominal subjects in the middle field would have been felicitous in following the negation, neither in SSW nor – as it seems – in the NONR dialects.

Two RVK examples of non-contrasted pronominal subjects following negation are given in (7).

(7) a. [...] känn från hå var minns   et ja. [LILLA RÅGÖ]
         […] where from she was remember not I
         '[...] I don't remember where she was from.'

     b. Tåm   visst allt, enn itt a   var gifta. [STORA RÅGÖ]
         they knew   all   that not she was married
         'All of them knew that she wasn't married.'

The examples in (7) do not evoke a contrast interpretation on the subject referent. A SSW translation would have the SUBJ>NEG word order, and in the SSW translations of (7a) and (7b) presented in Lagman (1979b) the subjects do precede the negation.

Pronouns with contrast interpretation are normally marked with contrastive stress in Swedish, and cannot be unstressed, and the lack of stress on the subjects in the recordings also indicate that the subject pronouns following negation in RVK are not contrasted. Furthermore, the pronoun for 'her' in (7b) has a reduced, unstressed form, *a*.[6] It is also well known

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[6] There is a stressed word form for 'she/her' in Stora Rågö: *hån*. According to a RVK informant in May 2015, this full form is used only when there is some kind of word stress, for instance when there is contrast, otherwise the reduced, non-stressed form (g)a is the unmarked choice.

that expletives do not carry stress, and the fact that both the expletive pronoun *det* 'it' (8a), below, the expletive adverb *där* (8b) and the impersonal pronoun *man* 'one' (8c) appear following the negation in RVK strengthens the impression that it is not contrast that licenses pronominal subjects in the position following negation in the middle field.

(8) a.   Ve äibå   kund alltider her   än   ett e var
           we islanders could always hear that not it was

           äibåföLk   från   birjande. [LILLA RÅGÖ]
           island people from   beginning
           'We who came from the (Rågö) islands could always hear who
           was not from here.'

     b.   […] å   så var itt   där   inga dans   mäira. [STORA RÅGÖ]
           […] and so was not   there no   dance more
           '[When they got together the next night, it was already Advent,]
           and there was no more dancing.'

     c.   Häim iti gådn   tarva itt man våra rädder itt. [STORA RÅGÖ]
           home in the-farm need not one be   afraid not
           'You didn't need to be afraid at home at the farm.'

There are, however two examples from the RVK area where a pronominal subject *precedes* a negation, see (10) and (11) below. Interestingly, in both these examples there is a contrast interpretation, but not on the subject or the negation. Instead another element in the clause is contrasted.

(10) Så dans dåm itt   friden   å   itt läuden   åm
     so danced they not the-Friday and not the-Saturday   on

     kveldn. [STORA RÅGÖ]
     the-evening
     'So they did not dance on the Friday and on the Saturday in the
     evening.'

Example (10) is written in a context where dancing on different days in a certain week is discussed. The main subject is which days people did get to dance, and which days they did not. In this case there is a clear contrast interpretation on the word *friden* 'the Friday' (and also on the following *läuden* 'the Saturday').

(11) Tå   gick dåm itt   mäira iti rad   itt. Tåm gick iti äin
      then went they not   more   in   row   not   they went in   a

      skock. [STORA RÅGÖ]
      flock
      'Then, they did not walk in a row. They went as a flock.'

Also in example (11) there is a clear contrast interpretation on another
element in the clause than the subject. Here the context tells us that the
subject referents are walking out of a building in a certain very strict order.
In the example, the contrasted element is *rad* 'row', they did not walk in an
orderly fashion when they left the gates. This is confirmed in the following
sentence, where it is stated that they now moved about as a flock.

        It appears from these two examples that contrast on another element
in the clause than the subject may put the default NEG>SUBJ word order out
of play. This corresponds with generalisations on object shift for Swedish
(and to some extent Danish), where contrast on another element in the
clause seems to license a shifted word order for pronominal objects that
normally appear following a negation (Andréasson 2010). There is need
for a more thorough investigation to establish that this is indeed the trigger
for pronominal subjects to shift over a negation in RVK, but it is remark-
able that the only two examples where pronominal subjects precede nega-
tion include contrast on another element in the clause.

3.2 Full NP subjects and negation

When it comes to full NP subjects there is considerably more variation in
subject positions in the middle field in the NONR group than in the RVK
group. Table 3 shows us the relative distribution of subjects and negations
in the sample.

DIALECT AREA	V2 declaratives SUBJ>NEG	V2 declaratives NEG>SUBJ	non-V2 subordinate SUBJ>NEG	non-V2 subordinate NEG>SUBJ	TOTAL
Nargö/Ormsö/ Nuckö/Runö	3	6	12	6	27
Stora Rågö/ Lilla Rågö/ Vippal/ Korkis	1	8	0	3	12
TOTAL	4	14	12	9	39

Table 3: Relative order, SUBJ$_{FullNP}$ and negation in the ESW dialect areas

The numbers for full NP subjects in the sample is so low that a comparison with Andréasson (2007) is not motivated. It is, however, interesting to note that SSW patterns with ESW in that there is a greater variation in word order for full NP subjects and sentence adverbials, than for pronominal subjects. In declarative sentences as much as 42%, and in subordinate clauses 11%, of the full NP subjects appear following a sentence adverbial (2007:135). Table 3 shows that the NONR area has a tendency for a similar distribution, but in RVK the SUBJ>NEG word order seems to be dispreferred also for full NP subjects; there is only one out of 12 full NP subjects that appear preceding a negation in the middle field. We will return to RVK below and now turn to what might be the cause the variation of positions for full NP subjects in NONR.

For pronominal subjects, we suggested that in the NONR dialect areas, it may be information structure and, more specifically, contrast that allows subjects following a negation. In SSW both information structure and semantic scope affect the relative positions of full NP subjects in the middle field. Full NP subjects that are included in the rhematic portion of the sentence, i.e. the information that is intended to increase the listener's knowledge (Andréasson 2007), and subjects that are contrasted appear following sentence adverbials in SSW. Scope sensitive subjects appear in a position that reflect their semantic scope in relation to scope sensitive adverbials, such as a negations (Börjars et al. 2003; Engdahl et al. 2004; Andréasson 2007:61ff, 68). If a negation takes scope over a scope sensitive subject, the subject appears following the negation in the middle field.

There are 12 NONR examples where a full NP subject follows a negation. Five of these do so unambiguously because of the information structure of the clause; all these subjects are part of the rhematic portion of the clause. Example (12) shows a rhematic subject following a negation.

(12) Allt sko ha vari gått åm inga bispåikana sko
all should have been good if not the-village-boys should

ha bärja ti råop min jollan ti Jostini. [NARGÖ]
have begun to cry my the-dinghy to Jostini
'All would have been well, if the boys from the village hadn't started to call my dinghy Jostini.'

Here we revisit the Nargö boy that was not allowed to row Swedes in his dinghy. In the context previous to the sentence in (12), the narrator tells us

about how the young boy disobeyed his mother, and transported – among others – a lady named Jostini over the bay, with the unfortunate consequence that she fell into the water. The narrator ends with the comment in (12). There is not any reference to *bispåikana* 'the boys from the village' in the immediate context, and the subject is part of the rheme of the sentence.

In two examples the subjects seem to be scope sensitive. In one a scope sensitive full NP subject follows the negation, see (13).

(13) a. [...] så   ät   ti   slut jälft   inga   någo   andert som ti
          [...] so that to   end   helped   not   something   else   that to

          gå   ti Meedo [NARGÖ]
          go   to Meedo
          '...so in the end nothing else helped, but going to Meedo…'

      b. [...] så   ete   engan luft fick   kuma utter.
          [...] so-that not   no   air   got-to   come out
          '[...] so that no air got out.'

In example (13a), from Nargö, the subject is *någo andert* 'anything else'. In this sentence the negation takes scope over the subject and a SUBJ>NEG word order would be infelicitous with this interpretation. Example (13b) is from Runö, where double negation is common. In this sentence the double negation, the negated subject NP *engan luft* corresponds to SSW *någon luft* 'any air', a scope sensitive item. There are no examples in the sample where the sentence negation follows a negated NP in the Runö part of the sample.

There are also five NONR examples of full NP subjects following a negation where there is no clear information structural or scope properties of the subject that licence them in this position. In four of these, the NEG>SUBJ word order seems OK in SSW but there is need for a more thorough investigation into what licenses these subjects in this position. Interestingly all four examples are from the same story, a narrative on preparing leather on Ormsö. The fifth one can be dismissed on other grounds, since it originates in poetry, see (14).

(14) Hå   fagror   var   änt   skoen […] [NUCKÖ]
      how beautiful was   not   the-forest
      'How beautiful the forest was […]'

In example (14), the subject *skoen* 'the wood' is at the end of the first strophe, and the metrics of the verse constrains it to appear in this position, to rhyme with *roen* 'the rye' later in the poem.[7]

There are also 15 NONR examples from the sample where the subject precedes the negation. In all these, the subjects are non-rhematic, without any contrast interpretation and none of them are scope sensitive.

Let us now turn to full NP subjects in the RVK part of the sample. Table 3 shows that in the full NP examples from RVK the subjects appear following the negation in all but one case. Of the 11 subjects that follow the negation, some subjects are rhematic, but there are also – as in (15) below – non-rhematic subject referents. Hence, information structure seems not to be influencing the position of subjects in the middle field in the same way as in the NONR dialects.

(15)   CONTEXT: Äista ändrast mike unde republiktin. [LILLA RÅGÖ]
       'The Estonian language changed a lot during the republic.'
       Fire   1918 (äittusand nihundra ageta)   var et
       before 1918 one-thousand nine-hundred eighteen was not

       äista   ingat riksspråk, […]
       Estonian no   national-language
       'Before 1918, Estonian was not a national language.'

In the immediate context of example (15) the narrator mentions the Estonian language, *äista*, and the question of its change during the republic. Hence in the example sentence the subject referent is already up for discussion; it is non-rhematic. In SSW and – as we have seen above – in the NONR area a SUBJ>NEG word order would be more felicitous in (15). In the RVK dialects, however, this information structure of a sentence does not trigger a SUBJ>NEG word order in the middle field.

The only sentence from RVK in the sample where a full NP subject precedes the negation in the middle field, example (16) below, patterns with example (10) and (11) in that there is a contrast interpretation on another element in the clause.

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[7] Furthermore, the expressive meaning of the sentence, which indicates that the forest was indeed beautiful and not the other way around, makes the NEG>SUBJ word order felicitous in most Scandinavian varieties.

(16) Äist   tidningar   bruka föLke   et   läsa, nåran selda
      Estonian newspapers used   the-people not read   some   seldom

      milat. [LILLA RÅGÖ]
      in-between
      'Newspapers in Estonian the people never used to read, only seldom
      they read some.'

The context of example (16) is a lengthy discussion about newspapers in
Swedish and Estonian Swedish, and who read them. In (16) the fronted
object *Äist tidingar* 'newspapers in Estonian language' is contrasted with
the set of newspapers in Swedish referred to in the context. The three ex-
amples in (10), (11) and (16) are too few to make the analysis conclusive.
Nevertheless, it is – as mentioned earlier – interesting to note that all coun-
terexamples of the NEG>SUBJ word order in the RVK portion of the sample
include contrast on another element than the subject.

4. Conclusion

In this paper, I have shown that subjects seem to appear in the middle field
to a greater extent in Estonian Swedish than in standard Swedish. The in-
vestigation of subject placement in sentences with a negation in Estonian
Swedish shows that there are two distinct patterns when it comes to the
relative order between subject and negation in the middle field.

In the Rågö/Vippal/Korkis area, the designated position for the sub-
ject in the middle field is following the negation. Tentative results indicate
that contrast on another element in the clause than the subject seems to
allow a violation of the default NEG>SUBJ word order in the middle field in
this dialect area. The Nargö, Ormsö/Nuckö/Rickul and Runö dialect areas
on the other hand have strategies for subject placement that correspond
more to standard Swedish, where the relative order of subject and sentence
adverbial in this area of the clause has been shown to be decided by factors
as information structure and semantic scope. Pronominal subjects appear
preceding negation, if not contrasted, and full NP subjects seem to follow
negation when contrasted or rhematic. Scope sensitivity also seems to play
a role in these areas.

This is only a small investigation, and a more thorough informa-
tion structural analysis must be performed to validate the findings. How-

ever, the statistics do show that the default word order in Estonian Swedish middle field is different in the Rågö/Vippal/Korkis area than in the rest of the dialects. If it is the default position of the subject or that of the negation that differ in these varieties, may be a question to which different grammatical frameworks do not have the same answer, and this is a question that remains to be discussed in another forum.

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Gender and number peculiarities of uncountable nouns in Jutlandic (Western Danish)

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Abstract

The aim of the paper is to present and investigate some grammatical features in which the Jutlandic dialects differ from Standard Danish with respect to the gender and number categories. Firstly, the most important differences between the gender systems of the main dialects (3 / 2 / 1 gender(s)) as opposed to Standard Danish (2 genders) are introduced, and attention is given to mass nouns / uncountable nouns: As the accompanying pronouns and articles show, these nouns are treated as *neuters* even when the dialect only has common gender nouns (West Jutland), or as an alternative to the normally used common gender (East Jutland). Secondly is demonstrated that in East Jutlandic, this is even seen in the declination of some nouns, definite forms having the suffixed neuter article. Thirdly, a seemingly opposing feature is discussed, mass nouns treated as *plurals* as shown by the accompanying pronouns and certain adjectives. Lastly, a really specialized use of certain plural forms of nouns is found together with special uses of certain adjectives and a pronoun as markers for collective nouns. These investigations taken together gives a description of some fascinating interconnections between number and gender features in Jutlandic dialects.

1. Introduction

Standard Danish nouns have two genders, common gender and neuter, e.g. *en mand* 'a man', *et barn* 'a child' respectively[1], the indefinite article being

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[1] The Danish examples in this paper are glossed word for word rather than translated into idiomatic English, as the latter would sometimes blur the grammatical distinctions found in the data.

en for the common gender, and *et* for the neuter. In contrast, the Danish dialects as spoken up to the middle of the 20th century show a very different picture. The islands (Sealand, Funen, etc.) and parts of East Jutland have three genders, as in earlier stages of Danish: masculine, feminine and neuter, e.g. *i mand* 'a man', *en kvinde* 'a woman', and *et barn* 'a child', respectively*, i* being the indefinite article of the masculine. Most of East Jutland together with South Jutland (North Schleswig) have two genders as in Standard Danish because the masculine and the feminine have merged into the common gender. Further, in West Jutland only the common gender is found; this means that the indefinite article *en* of the common gender is used also in e.g. *en barn* 'a child' (as opposed to *et barn* above)[2]. The distribution of 3 / 2 / 1 gender(s) in the Danish dialects is shown in fig. 1.

The borderline between West Jutland and East Jutland here first runs from the northwest coastal point Lild to Horsens on the south east coast of Mid Jutland, then towards the southwest to the coast south of Ribe. In addition to the common gender, West Jutland also has a neuter gender, which is found in uncountable nouns (e.g. mass nouns, collective nouns for matter liquids and other things). This is shown by the use of the neuter pronoun *det* in noun phrases as *det mælk* 'this (or the) milk', as opposed to Standard Danish *den mælk* 'this (or the) milk', with *den* as the common gender pronoun.[3] It is also shown by the use of neuter in attributive adjectives, e.g. *godt mælk* 'good milk', the common gender form being *god* 'good' (Skautrup 1944:270). The phenomenon is often called *stof-genus* 'matter gender' in Danish grammar (Skautrup 1968:88).[4] In the Dictionary of Jutlandic Dialects, *Jysk Ordbog*, a more precise term is used, *stof-neutrum* 'matter neuter'; both these terms will be used below.

This feature can not be observed in the use of the definite article in West Jutland because there the dialects have only one definite article, *æ* 'the', as in e.g. *æ barn* 'the child', *æ mælk* 'the milk'. But a tendency towards using the neuter in uncountable nouns is also found in East Jutland, and here it can be seen in the choice of definite article. In East Jutland as well as in Standard Danish and the insular dialects, the definite article has the form of a suffix, *-en* for common gender and *-et* for neuter, e.g. *manden*

[2] Dialectal pronunciations are not rendered here, but hinted at in a few cases below, e.g. the forms *brænt, brönt* 'aquavit-the' in section 2 below.

[3] This is also mentioned in Haugen (1976:288), to my knowledge one of the few English descriptions of grammatical aspects of Danish and other Scandinavian languages.

[4] According to Skautrup (1968:325), the term comes from Diderichsen (1946:91ff.), but it is not directly employed there (§ 42 Genus, pp. 91-97).

Fig 1. Gender: Bennike & Kristensen (1898-1912), Map no. 81, *Navneordenes køn* 'Genders of the nouns'. Legends: *Kun 1 køn findes* 'Only 1 gender is found' (pale red); *2 køn findes* '2 genders are found' (blue); *3 køn findes* '3 genders are found' (yellow). The slantingly hatched legend represents a mixture of the pale read area and the blue area: *Foransat findes 1 køn* i.e. in nouns with preposed definite article 1 gender is found, *Efterhængt findes 2 køn* i.e. in nouns with suffixed definite article 2 genders are found. (The placing of the definite article is explained below). Unfortunately, the hatching is placed a little too far to the right (too far eastwards) in the northwest district at the map: the area there ought to be only blue (2 genders), cf. the accompanying text, Bennike & Kristensen (1898-1912:158). Instead, the hatching should have covered the area *Lild* referred to in the following text and shown in fig. 2. – Cf. the map K 7.1 of Jysk Ordbog (with further comments)

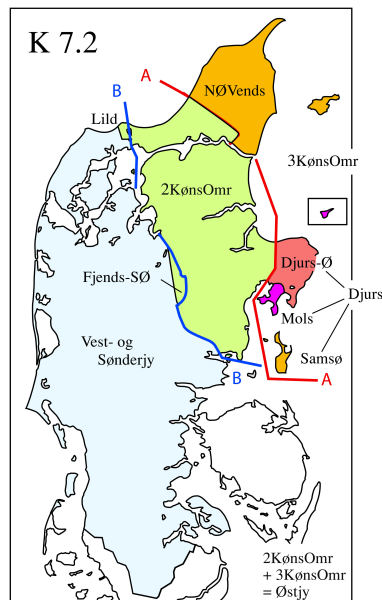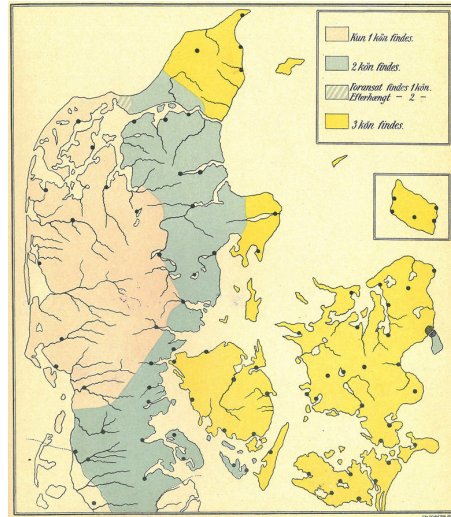Fig. 2. The definite article: *Jysk Ordbog* (2000ff.), map K 7.2. The blue line B-B is the border between West (and South) Jutland with the prepositioned article *æ* and East Jutland with the suffixed articles *–en/-et* (and also *-i* north and east of the line A-A). *2KønsOmr, 3KønsOmr* = area with 2 resp. 3 genders. – The map represents an upgrading of map 80 in Bennike & Kristensen (1898-1912).

'man-the', *barnet* 'child-the'. The borderline between the preposed arti-
cle *æ* and the suffixed, enclitic articles *–en/-et* roughly follows the border
between one and two genders in fig. 1, except that South Jutland has the
preposed article *æ* just like West Jutland, cf. fig. 2. Besides the normal
common gender definite form *mælken* 'milk-the', East Jutland also have
examples of the definite neuter form, *mælket* 'milk-the'.

2. Uncountable nouns as neuter

In Bennike & Kristensen (1898-1912), the philologist Marius Kristensen
lists about 20 nouns of common gender which in varying parts of Jutland
are treated as being of neuter gender. The reason for this use is (accord-
ing to Kristensen) that Jutlanders seem to have an urge to ... *lade stof-
navnene være intetkøn* 'let the "matter nouns" (mass nouns) be neuter' (p.
158). An example is *det jord* 'this (or the) earth' (about a portion of the
material), and also nouns as *kaffe, honning, mjød, tran* 'coffee', 'honey',
'mead', 'train-oil' can have *det* as a neuter determiner. Further, two nouns
are mentioned with the definite neuter article *-et*, *lynget, iset* 'heather-the',
'ice-the', as opposed to the normal definite common gender forms *lyngen,
isen*; the neuter forms are found in Kvolsgaard (1886:3,12) which renders
the dialect of the Lild parish, the northwest coastal point of the border
line between West and East Jutland in fig. 2 (and fig. 1). Also Diderichsen
(1946:95) cites these two neuter forms, placing them as just East Jutlandic,
and seeing the whole group of neuter 'matter nouns' as having semantical-
ly motivated gender (p. 92).

In order to get an overview of the use of especially such neuter forms,
but also the *stof-genus* 'matter neuter' as a whole in the East Jutland dia-
lects, I conducted a more thorough investigation of the nouns mentioned
above and many others for which there were indications of 'matter neuter'
(Arboe 2009). Among the results were maps of ten nouns with a substantial
number of instances of 'matter neuter': *mælk* 'milk', *mad* 'food', *honning*
'honey', *kaffe* 'coffee', *brændevin* 'aquavit', *dyppelse* 'sauce', *byg* 'bar-
ley', *is* 'ice', *sne* 'snow', and *to* (an old word for) 'wool', i.e. several of the
nouns mentioned above. As we have touched upon *mælk* 'milk' a couple
of times, we shall take this noun as an example, see fig. 3 (Arboe 2009:21,
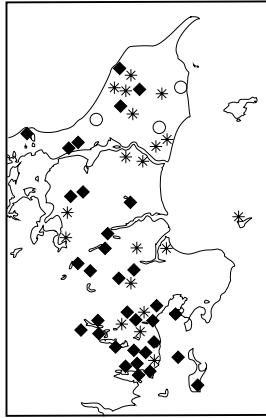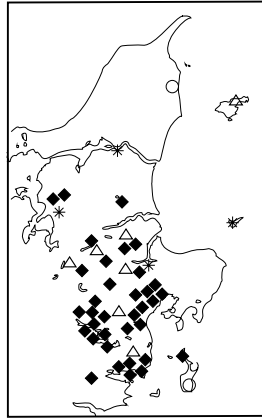map 1).

Fig. 3. *Mælk* 'milk', as a mass neuter form.

Fig. 4. *Kaffe* 'coffee', as a mass neuter form.
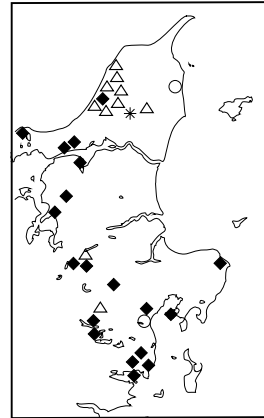
Fig. 5. *Is* 'ice', as a mass neuter form.

Legends for the 3 maps:

◆ Forms with the neuter definite suffix *-et*.[5]

✳ Use of the neuter pronoun *det* 'this (or the)', or *noget* 'something (of)', in front of the noun; more seldomly the adjective *meget* 'much', or an adjective with the neuter suffix *-t* in the dialectal pronunciation.

○ The text source maintains that the noun has the neuter gender, but does not show it by any of the means just mentioned.

△ Forms with the neuter definite suffix *-t*.

The borderline of East Jutland of fig. 1-2 from Lild in the northwest to Horsens in the southeast is easily recognized in fig. 3, and it will be noted that most of the instances show the definite neuter form *mælket* 'milk-the', but also use of the pronouns *det* 'this (or the)', and *noget* 'something', are rather frequent. The oldest form is *milcket* 'milk-the', from about 1550 (Skautrup 1947:196). Another distribution is seen by the noun *kaffe* 'coffee', cf. fig. 4 (Arboe 2009:23, map 4). Here the neuter forms are centered in Mid East Jutland, from Horsens to Silkeborg and Randers, but a substantial number of them are also found to the north and west of Randers, and a few in Himmerland even further north. The most common definite form is *kafferet* 'coffee-the', which rather unexpectedly shows an epenthetic *-r-*, which can be retained in the form *kaffert* besides the more regular form *kaffet* in Mid East Jutland. Some of the maps in Arboe (2009) show an alternative definite suffix, just *-t* as opposed to *-et* above, e.g. the noun *is* 'ice', cf.

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[5] Pronounced *-e, -ed, -et* in certain areas, cf. *Jysk Ordbog*, map K 7.3.

fig. 5 (Arboe 2009:25, map 8). The instances in the north (Vendsyssel) are seen to have just *-t* as the definite suffix, manifested in forms as *ijst* 'ice-the', whereas a broad strip from the northwest to the southeast of the rest of East Jutland features the *-et* suffix, *iset* 'ice-the'. Similarly, *brændevin* 'aquavit' most often has the *-t* suffix in the north, in the dialectal forms *bræwnt, bröwnt*, which can be rendered in an ortographic form like *brændevint* 'aquavit-the', but the suffix *-t* is further used as an alternative to *-et* in the rest of East Jutland. It may be added that the simplex *vin* wine also can take the neuter suffix in this area, cf. *vinet* 'wine-the', registered back to Høysgaard (1747).

Finally, it may be noted that the tendency to conceive mass nouns as neuters is not just Jutlandic as Marius Kristensen suggested, but also found in Standard Danish, cf. Diderichsen (1946:92) as to *det mælk* 'this (or the) milk'. Further examples are *det regn, der ligger over Nordsøen* 'the rain that is placed over the North Sea' (weather forecast on TV), and *det musik, vi nu skal høre* 'the music we shall hear now' (speaker at the national radio) where the common gender of the nouns prescribes the forms *den regn* and *den musik* (Ringgaard 1992:26). As a recent example may be mentioned, *20% på alt chokolade* '20% (discount) on all chocolate' (advertisement in the Copenhagen based newspaper *Politiken*, April 4, 2015) where just *al chokolade* is required because of the common gender of the noun. A final example comes from an online recipe: *tag det kartoffel du gravede ud ...* 'take that.NEUT potato you dug out ...', where the neuter demonstrative makes it clear that the reference is to an amount of potato, because *a/the potato* would be commen gender.

3. Uncountable nouns as collectives or plurals

In Bennike & Kristensen (1898-1912:159), it is briefly mentioned that some kinds of food and liquids are treated as plural forms in Jutland, i.e. *fløde* 'cream', *sirup* 'syrup', *grød* 'porridge', *vælling* 'gruel', *kål* 'cabbage', *suppe* 'soup', and further *olie* 'oil', *tjære* 'tar'. It also appears from the entries in the Jutlandic dialect dictionary of the same time, Feilberg (1886-1914), that these words are treated as plurals at least in some of the dialects. Thus, by *fløde* 'cream', the feature *flt.* (i.e. *flertal* 'plural') is added to each of the more than 10 pronunciation forms (Feilberg 1886-1914, I: 324), followed by examples as *mange fløde* 'many cream', *de fløde* 'these (or the) cream', and with an anaforic pronoun, *fløden ... de er sure* 'cream-the ... they are sour.PL'; here also the adjective *sure* 'sour' is a plural form, the singular being *sur* 'sour', and *-e* the plural suffix. This feature is recog-

nized by Diderichsen (1946:100) where it is described as peculiar merging of the collective and the plural category, examplified by *mange kål* 'many cabbage', used in stead of *meget kål* 'much cabbage', both concerning a dish. And in Nielsen (1959:47) it is mentioned that denominations for wholly or partly liquid matters normally are collectives in Jutlandic, for instance *mange* (or *flere*) *suppe* 'many' (or 'more', with plural meaning) 'soup', *fløde* 'cream', *vælling* 'gruel', *kål* 'cabbage', again some of the nouns from Bennike & Kristensen (1898-1912) above.

As will be seen, the grammatical surveys just mention the feature as Jutlandic, but do not indicate whether it is a general feature or confined to certain dialects; this may be sought in the entries of Feilberg (1886-1914) or elsewhere. In order to get a more precise picture of the distribution of the feature, I investigated all the nouns mentioned above in the dictionary files at *Jysk Ordbog*, supplemented with other nouns found during this re-search. The results were presented in Arboe (2001, 2003). In Arboe (2001), maps 1-4 show the areas in which the nouns *grød, suppe, sirup, tjære* 'por-ridge, soup, syrup, tar' are conceived of as plurals or collectives, designat-ed *stof-pluralis* 'matter plural' (as a parallel to *stof-netrum* 'matter neuter' in section 1). Only *grød* 'porridge' has this feature for almost the whole area (Arboe 2001:7), whereas *sirup* 'syrup' has it in areas to the north, northwest and southeast, and *tjære* 'tar' has it in the northwest, mideast and south of Jutland (Arboe 2001:10f.). Different from this, *suppe* 'soup' shows a more coherent area to the west, cf. fig. 6 (Arboe 2001:9, map 2).
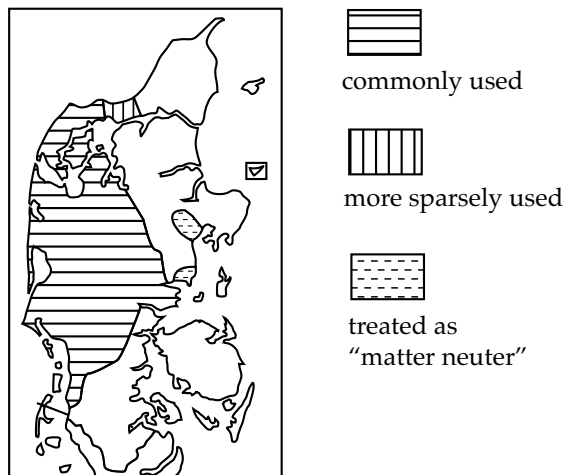

commonly used

more sparsely used

treated as "matter neuter"

Fig. 6. *Suppe* 'soup' as 'matter plural', respectively as 'matter neuter'.

As this shows, *suppe* 'soup' is conceived of as a 'matter plural' noun in West Jutland almost as sketched in fig. 2, as a common gender noun in most of East and South Jutland, and as a 'matter neuter' noun in small parts of Mid East Jutland. Arboe (2001) also lists a number of other collective nouns, e.g. *aske* 'ash(es)', *gær* 'yeast', *klid* 'bran', found in sources from north to south in Jutland (Arboe 2001:12f.). The conclusion is that the generations born up until the mid-1930es have had these nouns as possible collectives, and after that the tradition died out, partly because school teachers did not allow the collective forms in written work (Arboe 2001:14, cf. Noesgaard 1951:66).

In Arboe (2003), these and more nouns designating comminuted solid substances are investigated, e.g. *hakkelse* 'chaff', *avne* 'husks', *blår* 'tow', together with nouns for liquids, e.g. *eddike* 'vinegar', *kærnemælk* 'buttermilk', and nouns concerning health, e.g. *hoste* 'cough', *hikke* 'hiccup'. One result is that *aske* 'ashes' is commonly treated as a collective or 'matter plural' noun (Arboe 2003:239, map 5), as seen in e.g. West Jutlandic, *æ å·sk æ kåld·* 'the ash(es) is (are) cold' which in Standard Danish would give *askene er kolde* provided *aske* could be treated as a plural noun (instead of the correct form, *asken er kold*). Also *hakkelse* 'chaff' is rather commonly treated as a 'matter plural' (Arboe 2003:240, map 6), presumably because it designates straw cut into (very) small pieces. The sentence, *hvem ska så betå·l di uli*, in Standard Danish ortography *hvem skal så betale de olie* 'who then is to pay these oil', illustrates the use of one of the nouns as to liquids (Arboe 2003:237). As to nouns concerning health perhaps the heading 'matter plural' is not the most adequate, but systematically the nouns mentioned fit in here, e.g. *hoste* 'cough' (Arboe 2003:243, map 8), cf. *nogle slemme hoste* 'some bad cough'; here both *nogle* and *slemme* are plural forms, but *hoste* is not a plural form of *host* 'a single cough' (as the plural form of the count noun *host* is identical to the singular form). Finally, the category *stof-pluralis* 'matter plural' is not found in the older stages of Danish, the first instances (concerning *kål* 'cabbage', *grød* 'porridge') appearing in Høysgaard (1747:156); the 'matter plural' thus most probable an innovation, presumably a supplement to the more common category *stof-neutrum* 'matter neuter' (Arboe 2003:247).

4. Plural treated as singular neuter

By working through the dictionary material to edit the entry *klæder* 'clothes' for the *Jysk Ordbog* earlier this year, I discovered that, rather surprisingly, this plural noun is commonly treated as a singular neuter in many Jutlandic dialects, seemingly in a parallel way to the singular noun *tøj* 'clothes' in Standard Danish. Many examples are found of *meget klæder* 'much clothes' (instead of *mange klæder* 'many clothes'), *det klæder* 'this. SG.NEUT clothes.PL', and with personal pronouns, e.g. *mit klæder* 'my.SG. NEUT clothes.PL', in East Jutland even with the definite neuter form, *klæderet* 'clothes.PL-the.SG', in fact an intranslatable form. This is, so to speak, a relation in the opposite direction of the relations discussed in section 2 above: There we had was singular nouns with plural characteristics, here we have a plural noun with singular neuter characteristics. The relation is also found with the plural form *sager* 'things', 'matters', e.g. *meget sager* 'much things' (instead of *mange sager* 'many things'), with noun phrases, *det sager* 'this things', *mit sager* 'my.SG.NEUT things.PL', in East Jutland (Vendsyssel) also definite singular form *sageret* 'things.PL-the.SG.NEUT', all parallel to the forms with *klæder* 'clothes'. Also compounds with the nouns show the features mentioned, e.g. *meget sengeklæder* 'much bedclothes', *mit legesager* 'my.SG.NEUT toys.PL'. These aspects are described in detail in Arboe (forthcoming) together with instances of other plural nouns used with the adjective *meget* 'much', in the singular, e.g. *meget vogne* 'much carts' (instead of *mange vogne* 'many carts'). Further, the pronoun *det* 'it' can be used in a 'collective' way; in some contexts, *it* refers to a group of animals or people, e.g. *unge mennesker … det lærer ingenting i dag* 'young people … it learns nothing today' (instead of 'they learn' etc.), presumably with a little derogative twist.

5. Concluding remarks

The state of things concerning gender and number shows large differences between Standard Danish and the Jutlandic dialects as have been demonstrated above. Many more examples in the form of sentences could have been cited to give a touch of the 'real use' of the nouns in sections 1-3, and as for section 4, new examples are still appearing during the research in the preparation of entries in the *Jysk Ordbog*, the Dictionary of Jutlandic Dialects. The description of uncountable nouns, collectives, mass nouns, 'matter neuters', 'matter plurals' is – whichever label one may prefer – an ongoing and fascinating affair.

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Translating the implicit

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> *'Then you should say what you mean,' the March Hare went on.*
> *'I do,' Alice hastily replied; 'at least — at least I mean what I say —*
> *that's the same thing, you know.'*
> *'Not the same thing a bit!' said the Hatter.* (Carroll 1866:97)

Abstract
Translations will always involve a loss of meaning because of the translator's interpretation of the source text and because of differences between the source language and the target language. Such a loss is inevitable and becomes perhaps even more significant when the translator has to transfer implied information such as irony. This article will examine how to translate implied information in literary texts. To illustrate some of the linguistic challenges facing the translator, some examples from Jane Austen's novel *Pride and Prejudice* (1813) will illustrate how irony can be translated into Danish. Is the loss of meaning in translation a question of linguistic impossibility or is it a question of the translator's personal interpretation?

1. Introduction

Translating what is implicit in a text might seem impossible, and yet the main focus of this article is how to translate implicit information. By *implicit,* I understand what is implied or understood though not directly expressed by the speaker/author in a text or a discourse. Implicit information is often part of the original author's intended meaning, and therefore it is up to the reader to interpret and understand this intended meaning if the communication is to succeed. When it comes to translation, the translator's task is not only to understand and decode the speaker's intended meaning,

but also to transfer it correctly to the new target readers/hearers so that they may have the same – or at least almost the same – experience as the readers/hearers of the original source text.

The aim of this article will be to shed light on some of the problems that translators are faced with when they translate implied information such as irony. Irony is traditionally regarded as a stylistic figure which often can be used rhetorically. In recent years, irony has been studied in argumentive, pragmatic or enunciative approaches. What is common to these different approaches is to consider irony as having communicative effects. Such effects can be realized by e.g. antiphrasis or hyperboles that transfer an echoing or polyphonic effect. However, it is important to stress that the effect of irony has to be combined with certain non-linguistic phenomena such as gestures, mimics and intonation in oral language. In written language, it is possible to find some linguistic *irony-triggers*, but several linguistic and non-linguistic phenomena have to collaborate, i.e. the linguistic form, the co(n)text, the discourse and the interrelations between the author and the reader and pragmatic phenomena. In this article I will focus especially upon linguistic triggers of irony and the main questions that I will examine here is first whether it is possible to translate what is implicitly said in a source text and second, if such a translation is possible, whether it is possible to achieve the same effect on the target language readers as the original text had on the source language readers.

My hypothesis is that irony can be translated. In this sense, the translator has a central role as (s)he is responsible for the decoding and the transfer of the intended irony. In order to guarantee the translator's decoding of irony, it is important that (s)he is aware of possible linguistic markers of the implied ironic meaning, i.e. (s)he has to know when the language itself, by linguistic means, points out the speaker's implied meaning.

Of course, instead of expressing her/himself implicitly, the speaker could have chosen an explicit expression. An explicit and unambiguous alternative is always at his disposal if (s)he wants to follow Grice's maxims faithfully but, as we know, hardly anybody ever expresses himself explicitly, for many reasons, e.g. because of politeness, for political or argumentative reasons, etc. In most situations of communication, we intuitively choose an indirect expression in order to achieve all the additional effects that a direct and explicit expression would not allow.[1] In this context, irony seems to

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[1] E.g. many expressions of politeness are examples of indirect and implicit information and very often violate Grice's cooperative principle and the maxims of quantity and quality, see Brown & Levinson (1987).

be a good illustration of the speaker's implied information being left to the hearer's understanding and interpretation.

When it comes to translation of irony and the implicit, the translator's role is very important: The translator is a hearer, a 'hearer to the highest degree', in so far as he is the one who must understand and interpret the speaker's implied intentions before even beginning the translation. Only when (s)he has done that is (s)he capable of translating and transferring the speaker's intentions to the target language readers. But perhaps even more important is the fact that the translator is also a second speaker, i.e. (s)he is in the same position as the original author, only in a different language with a different set of readers. The translator thus becomes a central figure and acts like a mediator between the source language and the target language.

2. Irony and translation

I have chosen to take a closer look on the linguistic challenges that translation of irony represents for translators when it comes to the transfer of the text and its author's intentions. I have chosen to study only written literary examples, although the examples examined below often represent dialogues.

Most of the examples in the following are from Jane Austen's novel *Pride and Prejudice,* first published in 1813 and translated into Danish in 1929, again in 1952 by Lilian Plon and finally, in 2006, by Vibeke Houstrup. The reason for the choice of Jane Austen is that she is renowned for her use of irony, verbal as well as situational, cultural and dramatic. She is famous for her descriptions of figures who sometimes turn out to be caricatures/ parodies of social classes, attitudes and positions and norms in society. She uses irony in order to criticize the hypocrisy and the pretentiousness of her main characters so that the contrast between appearances and reality becomes obvious to the reader. In her writing, she makes use of free indirect speech. Her personal critical comments on some of her main characters are often loaded with an implied ironic ambiguity which only can be interpreted as irony if you are able to decode the author's original intentions.[2]

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[2] Just a few words about the main plot in the novel : We follow the Bennet family and their five unmarried daughters. They live in the countryside and the mother's main interest in life is to have her daughters married to a wealthy man. Especially the description of Elizabeth Bennet and Mr Darcy, who is characterised as a proud and rather disagreeable man, is central in the novel. The love story between Elizabeth and Mr. Darcy is essential to the description of the characters in the novel in which Jane Austen critizes the typi-

Many studies have been dedicated to the analysis of the phenomenon of irony, its pragmatic characteristics, its rhetorical, cognitive and psychological effects, etc., but very few studies have been dedicated to the challenges of translation of irony. The lack of linguistic analyses might be explained by the fact that irony is traditionally considered to be an isolated pragmatic and/or cultural phenomenon with no special linguistic interest. It is considered to be a phenomenon of thinking and therefore not a phenomenon of any special linguistic interest, because irony is not ONLY a linguistic phenomenon, it affects many paralinguistic phenomena as well. I will here try to show, by means of literary examples, that irony poses a linguistic challenge to the translator and to the choices made in a translation.

3. Irony and gains and losses in translation

Irony is here considered to be a phenomenon which concerns the ambiguity of linguistic expressions, the implicit information as well as the contextual and situational relations between the speaker and the hearer who most often is the target for the speaker's ironic comments. The question which is important to the translator is whether (s)he should employ specific strategies in order to maintain the same discourse effects in the target language as those used in the source language. As the original author's intended ironic meaning is hidden and implied, the translator has to find out if it is possible to convey it in an equivalent way in the translation or if the implicit meaning has to be made more explicit in the target language text. Newmark states the importance of being aware of the differences that exist between source language and target language and also the fact that when you translate, you can never achieve total equivalence:

> The translator and the text-writer have different theories of meaning and different values. The translator's theory colours his interpretation of the text. He may set greater value than the text-writer on connotation and correspondingly less on denotation. … The resulting loss of meaning is inevitable and is unrelated, say, to the obscurity or the deficiencies of the text and the incompetence of the translator, which are additional possible sources of this loss of meaning, sometimes referred to as 'entropy'. (Newmark 1988:8)

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cal class society in England at the beginning of the 19th century. She often does this by employing a narrative voice which reflects both the inner thoughts of the figures and her own critical attitude.

If we agree with Newmark's point of view, all translations will involve a loss of meaning. This loss could then be even more important when the meaning is hidden or implicit.

As irony very often exploits 'otherness', the understanding and interpretation of it become central for the reader's reception. Even though irony violates Grice's maxims, especially the maxim of quality, such a violation is not a distinctive feature of irony. We know that it is hardly ever possible to achieve full explicitness in verbal communication because of our constant violations of Grice's maxims, but the amount of implied ironic information which has to be inferred by the hearer can be even harder to understand than in a situation of normal verbal communication.

The transfer of this otherness is crucial, and it is frequently a more delicate entreprise than might seem to be the case at first sight. The intended effects of irony will only succeed if the hearer is capable of comprehending the implicit, often antiphrastic, message in the verbal expression and of interpreting it according to the speaker's intention. Sometimes the implied information will be intensified in the target language text, in an attempt to respect the original author's intentions. In fact, it is often stated that the translation of implied informations in a source text demands an explicitation in the translated text. In general this statement is said about all kinds of translations as stated by Blum-Kulka, who says that:

> The process of translation, particularly if sucessful, necessitates a complex text and discourse processing. The process of interpretation performed by the translator on the source text might lead to a TL text which is more redundant than the SL text. This redundancy can be expressed by a rise in the level of cohesive explicitness in the TL text. This argument may be stated as « *the explicitation hypothesis* » which postulates an observed cohesive explicitness from SL to TL texts regardless of the increase traceable to differences between the two linguistic and textual systems involved. It follows that explicitation is viewed here as inherent in the process of translation.
> (Blum-Kulka 2009:292)

It is often claimed that translation of irony is impossible because it's a phenomenon very closely related to the culture of the source language and to the contextual situation in which it is expressed. However, I would like to claim that it is possible to translate irony inspite of its implied meaning. In fact, you find many examples in literature where the ironic

effects in a source text have been transferred with equivalent effects into a target language text. When looking for correspondances between stylistic and formal effects of irony, you intuitively look for gains or losses in a translation. Some of the questions to be raised in this context is whether or not the ambiguity of irony is maintained in the translation and whether the target text has become more or less ironic? One way to find an answer to these questions is to compare translations in order to find out if irony can be transferred from one language (the source language) to another (the target language) and if the intended effects are possible to keep as Adams states:

> Looking at translations and originals with a critical eye makes us immediately aware of differences, […]. We have to discriminate between a translation that creates, deliberately or otherwise, wholly different effects than its original; and a translation that makes use of different means toward a similar "ultimate" effect. That involves distinguishing means from ends in a way that, within the frame of literary work, is certainly not automatic or easy, and may not necessarily be possible. (Adams 1973:20)

4. Translation strategies and irony

If irony is considered to be a specific cultural phenomenon with a special linguistic expression, the translator's task is to find another corresponding linguistic expression in the target language. One strategy might be to find an intermediate between the two cultures which will, so to speak, weaken the strengh of the original expression. Another strategy might be to maintain and reproduce the cultural characteristics as closely or as literally as possible which will challenge the reader's intelligence and understanding of the source culture. And yet another strategy could be to assist the new target reader in, as Schleiermacher puts it:

> obtaining the most correct and complete understanding and enjoyment possible of the former [the author] without, however, forcing him out of the sphere of his mother tongue (…)
>   (Schleiermacher 1992:41, in Bartscht's translation)

According to Schleiermacher, only the last two strategies seem to be possible choices for the translator, i.e.

Either the translator leaves the writer alone as much as possible and moves the reader toward the writer, or he leaves the reader alone as much as possible and moves the writer toward the reader. Both paths are so different from one another that one of them must definitely be adhered to as strictly as possible, since a highly unreliable result would emerge from mixing them, and it is likely that author and reader would not come together at all.   (1992:42)[3]

It is not my purpose here to discuss whether one or the other of these strategies is more or less 'correct'. I will merely examine a few examples and their translations in order to see how irony can be translated and provoke an equivalent effect in another language and culture.

When the translator has to decode and transfer the implicit ironic meaning of a written discourse, he will not find any support in non-linguistic means like e.g. intonation, gestures or mimics which often accompany the use of irony in an oral context.

However, sometimes his task is less difficult, especially when it is possible to find explicit linguistic expressions such as *he said ironically and smiled / he said in an ironic tone.* In such cases the translation will not cause any major trouble for the interpretation nor for the translation itself. An example of this strategy is the following example from Jane Austen's novel *Pride and Prejudice*:

(1)   Elizabeth saw what he was doing, and at the first convenient pause, turned to him **with an arch smile**, and said,
        "You mean to frighten me, Mr. Darcy, by coming in all this state to hear me? But I will not be alarmed, though your sister *does* play so well. There is a stubbornness about me that never can bear to be frightened at the will of others. My courage always rises with every attempt to intimidate me."   (Austen 1813:150)

(1a)   [Elizabeth] lagde mærke til det, og ved den første pause sagde hun til ham **med et ironisk smil**:
        "De har i sinde at gøre mig nervøs, Mr. Darcy, ved at stille Dem op på den måde, det er jeg klar over, men jeg lader mig ikke forskrække, selvom Deres søster spiller meget bedre. Jeg er stædig

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3   Schleiermacher's ideas are found in more recent approaches to translation, e.g. in Venuti (2002:15-16). Venuti talks about *foreignization* (Schleiermacher's leaving the author in peace and moving the reader towards him/her) vs *domestication* (Schleiermacher's moving the writer towards the reader).

> og vil ikke lade mig kue af andre. Jeg bliver altid dobbelt så modig, når nogen prøver at skræmme mig."   (Austen/Plon, 1952:145)

According to the Oxford Advanced Learner's Dictionary (2000), the adjective *arch* means that a person "deliberately shows amusement because [he/she] knows more than other people often with a disapproving attitude". The Danish translator has chosen *ironisk* as her solution, probably because of Elizabeth Bennet's general ironic attitude. At any rate, in this case, the text itself explicitly informs the translator about the solution to be made.

Without explicit linguistic indications, the translator must normally recontextualise the ironic effect: The message of the source text must not only be given a new form in another language but it also has to be integrated in a new context which has other – and different – values with regard to conventions for communication, social and cultural norms and values, expectations, etc.

At first sight no specific strategies have to be used in the translation of irony. The translator can use strategies as adaptation which opens up for a free and equivalent translation or (s)he can choose a 'close' and literal translation as long as the linguistic typology allows such a strategy.

The translator's decoding and interpretation of irony seems to be just as easy or just as difficult to him/her as it is for the source language reader. The translator is not wearing and transferring a specific ironic 'voice' but (s)he is just constrained by the typological, morpho-syntactic and semantic characteristics of the language in question.

4.1. Irony triggers and markers

As different means, linguistic as well as non-linguistic, can carry irony, we might ask if it is possible to single out particular markers which allow an immediate decoding and interpretation of irony.

As already mentioned, the occurrence of irony depends on the context and the situation. Probably, you cannot find particular explicit linguistic markers of irony; most often it will be a question of the understanding of implicitness. But it seems possible to decode some so-called *irony triggers* which, together with other signs, linguistic as well as non-linguistic, may lead the reader towards the intended irony of the source text. The presence of such triggers leads to a reading of a certain text or discourse as being ironic.

Though irony is intended, the speaker's intention is most often implicit and the message therefore ambiguous. Nevertheless, it seems

possible to find some indications which can release and trigger an ironic effect. Such indications are always closely related to the enunciation and its context. It is possible to distinguish at least five different kinds of triggers which are often combined and interrelated:

1) specific linguistic expressions
2) co-text
3) paralinguistic phenomena
4) supposed common and shared knowledge
5) type of situation/genre of discourse

In spite of the interrelations of these possible irony triggers, they will not be discussed systematically in this study which will be limited to the first category, i.e. linguistic expressions

Probably no single – linguistic, paralinguistic or situational – form or expression can be ironic *per se*, but there are some so-called *irony polarities* like the French expression *Un petit saint* ('A little angel')*,* the Danish expression *Her går det godt!* ('Things are going well!'), the latter often used when a situation is not good at all – and there might be even more. Such irony polarities are probably the only explicit indications of the sender's intended irony.

A whole situation can function as an irony polarity, e.g. if the context reflects a funny, or even tragic-comic situation like example (2a) and (2b) which is from an old French song from the 1930s translated into English (and other languages):

(2a)	(2b)
Allô, allô James ! Quelles nouvelles ?	'Allo 'allo, Jean? What is the news Jean?
Absente depuis quinze jours,	I've been away two weeks today.
Au bout du fil je vous appelle;	While on the phone, I'd like to know, Jean,
Que trouverai-je à mon retour ?	What happened since I've been away?
Tout va très bien, Madame la Marquise,	All's going well, Madame la Marquise,
Tout va très bien, tout va très bien.	All's going well, yes, going fine!
Pourtant, il faut, il faut que l'on vous dise,	Of course, Madame, there's just the merest trifle,
On déplore un tout petit rien:	That is, if you can spare the time!
Un incident, une bêtise,	A little news, it could have waited,
La mort de votre jument grise,	Your favourite mare was suffocated!
Mais, à part ça, Madame la Marquise	Apart from that, Madame la Marquise,
Tout va très bien, tout va très bien.	Yes, everything is going fine!
[...]	[...]

The song[4] goes on, insisting on even more and more miserable incidents, but still with the semantic contrast, the antiphrasis, as its fundamental structure. The song is an example of one of the classic expressions of irony, the antiphrasis, that is a figure of speech where a word or – as in this example a whole situation – is used in a way that is opposite to its literal meaning It is the use of the phrases in the opposite sense of the real situation that creates the ironic effect. In this example, the miserable situation and the comment *All's going well* are in clear contrast. The English translation is very close to the French original source text. Such a strategy has been possible because of the universal understanding of the tragi-comic effect that is created between the unhappy circumstances and the butler's comment *Tout va très bien, Madame la Marquise / All's going well, Madame la Marquise*; it's the whole situation with all its contrasts that must be considered to be an irony polarity. If you consider the real situation in which the song was originally written, i.e. as a critique of the growing nazism in Europe in the 1930s and a certain optimism from some of the French governments at that time, the irony that the writer expresses becomes even stronger.

As for the chosen strategy of the translation, the close translation can be explained by a very simple syntactic structure in the source language which can be transfered quite easily in spite of the typological differences between French and English. The universality of the antiphrasis as a rhetoric figure explains why the translator does not need to search for an adaptation to a different cultural context. The situation can be understood even without knowledge of the historical background.

Judging by this example, it seems likely that when irony is expressed by means of the antiphrasis, this classic rhetoric figure of speech can be translated literally without searching for cultural – or linguistic – adaptation. You can explain this ease by the fact that contradiction is neither a social nor a cultural phenomenon; it is a universally acknowledged phenomenon. The translator does not need to recreate or adapt the phenomenon to the target language.

Probably irony polarities must be considered to be more or less fixed phrases/situations which are often used in conventionalised situations. Still the context and the situation have to be appropriate in order to provoke the sense of irony.

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[4]   Text and music are written by Paul Misraki in 1935. The English lyrics is by Jack Hughes (1936).The refrain *Tout va très bien, Madame la Marquise /All's going well, Madame la Marquise* has the status of an irony polarity that says that you close your eyes to the facts of a bad situation.

Several of the abovementioned indications may support each other in a complex relationship which allows the intended irony to flourish.

4.1.1. Linguistic irony triggers

Even though irony is intended by the speaker, there are few explicit linguistic signs at the hearer's disposal. However, it seems that some linguistic forms can advance an ironic reading without, so to speak, provoking it. Such linguistic forms can be called *irony triggers*.

Some suggestions of linguistic irony triggers[5] could be:
- Lexical: semantically loaded adjectives, the use of words that denote an extreme or an exaggeration, intensifiers
- Morphological and syntactic: word order, repetition, neologisms, superlatives and incongruity between complex construction of sentences and simple, banal content, topicalizations
- Semantic: understatement, hyperbole, antiphrasis
- Pragmatic: violation of Grice's maxims

Even though many of these categories are relevant, none of them can be considered to be absolutely certain indicators of irony. The importance of the context, the general situation of communication, the relationship between the speaker and the hearer have to be taken into account.

4.1.2. Some examples

The co-text and shared knowledge are supposedly the most important indications for the reader's / the translator's correct interpretation and decoding of ironic effects. Consequently these indications should be easy to translate and transfer from a source language to a target language. And yet, the ironic intention might get lost or be misunderstood. Consider the introductory sentence in Jane Austen's novel *Pride and Prejudice*:

(3)   It is a **truth universally acknowledged** that a single man in possession of a good fortune **must be in want of** a wife.

(Austen 1813:1)

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[5]   See Müller (1995) for further suggestions for a classification of such linguistic elements that can – under certain circumstances – be considered to be candidates for irony triggers.

As it is the very first sentence in the novel, there is neither any context nor any co-text, so there is no possibility for the reader to share any knowledge with the speaker (author/translator). And as Austen's novel takes place at the beginning of the 1800s, we cannot suppose that a reader nowadays will be familiar with society and its norms and habits at that time. But with our knowledge of Austen, we must presume that the introductory sentence is a kind of echoic information[6] about the general attitude in British society at that time. It is an example which in fact says the opposite of its literal meaning: It is the women who indeed 'acknowledge' the truth while men with a fortune do not necessarily need to get married. It's only after finishing the whole novel that the ironic intention becomes clear by means of the co-text and the knowledge, the reader has acquired by reading the novel.

When we take a closer look at the semantic and syntactic elements in the phrase, there are some triggers, i.e. the noun *truth* can be interpreted as a hyperbole which often is an indication of irony; the adverb *universally* is a strong indication of exaggeration, so the meaning is that everybody knows this truth and they all agree about its relevance. The modal verb *must* indicates deontic modality, i.e. a necessity and the expression *be in want of* is a formal way of saying 'to need something' or 'to have desire to possess something'. The irony goes on in the next phrase:

(4)   However little known the feelings or views of such a man may be on his first entering a neighbourhood, this truth is so well fixed in the surrounding families that he is considered as the rightful property of some one or other of their daughters.   (Austen, 1813:1)

where it is stated that it is obvious – at least to the 'neighbourhood' – that a man who is well-off needs a wife, and so the 'neighbourhood' is in fact doing him a favour by trying to convince him to marry one of their daughters.

In the Danish translation from 1952, Plon chooses the following solution:

(3a)   Det er en **almindelig udbredt opfattelse**, at en velhavende ungkarl absolut *må* **mangle** en kone.   (Austen/Plon 1952:5)

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[6]   See Sperber & Wilson (1992:57-62).

In the Danish translation, the noun *truth* has been translated by *opfattelse* which means 'opinion' or 'point of view', so the chosen translation into Danish seems to be a weakened semantic solution in comparison with the English noun *truth*, i.e. something that cannot be discussed. In the later translation from 2006 by Houstrup, the same solution is used:

(3b)   Det er en **almindeligt udbredt opfattelse**, at en enlig mand med en passende formue **må have brug for** en hustru.

(Austen/Houstrup 2006)

Both translators agree upon the solution of *almindelig udbredt* (*widespread*) instead of *acknowledged* so the original hyperbole which was further intensified by the adverb *universally* in the source language has been neglected by both translators and consequently, the ironic tone somehow disappears.

The modal verb *must* is translated in two different ways: Plon chooses the Danish modal verb *må* in italics in order to maintain the deontic modal value, i.e. an absolute necessity and she opts for the verb *mangle* (*be short of* or *lack*), whereas Houstrup just uses *må* without any indication of a strong or weak modal meaning; for *be in want of* we here find the translation *have brug for*, an equivalent of *need* in English – just as you need food and drink.

In the suggested translations into Danish, the hyperbole is weakened and looses some of its ironic force, and we see that the translation of the nouns are do not have exactly the same semantics as in the source language. This means that even though both of the Danish translations work rather well, the ironic intentions disappear or are weakened.

Another example where the ironic effect is weakened in the Danish translation is the translation of the description of Mr Darcy who is disliked by many of the other main characters in the novel:

(4)   The whole of what Elizabeth has already heard, his claims on Mr. Darcy, and all that he had suffered from him, was now openly acknowledged and **publicly canvassed**; and everybody was **pleased** to think how much they had always **disliked** Mr. Darcy before they had known anything of the matter.   (Austen 1813:120)

Mr. Darcy is here described according to the general critical opinion of him, but at the same time it is also an ironic and critical comment on the behaviour and conduct of this particular social class where the use of gossip is a frequent entertainment in daily life. The verb *canvass* is used as a strong indication of the author's criticism of the social class. Normally to *canvass something* means to discuss an idea thoroughly. With the adverb *publicly*, the author points out that it is a general discussion in this social group of people where all of them are *pleased* to talk about scandals in their close neighbourhood. The semantics of the verb *please* and the semantics of the verb *dislike* indicate an antiphrasis. The ironic tone is the author's hidden ironic and critical comment on her figures who love to discuss Mr. Darcy and his life without knowing anything about it. The example illustrates an implicit voice or point of view (the author's) in the text with which the translator has to cope in the translation.

In the Danish translation by Plon, the translation of the verb *canvass* seems less critical than it was in the source language version; the chosen solution in the target language just recalls that the subject was a generally well-known subject to be discussed everywhere. The antiphrasis has been preserved quite literally as this rhetoric figure does not cause any real troubles because an antiphrasis is generally recognizable in spite of the culture concerned:

(4a)   Alt, hvad Elizabeth havde hørt – hans krav til Mr. Darcy og alt, hvad han havde været udsat for – blev nu **åbenlyst fremsat** og var et yndet diskussionsemne overalt. Man **glædede sig** over, at man allerede **havde afskyet** Mr. Darcy, før man kendte noget til sagen.
                                          (Austen/Plon 1952:118)

There are only a few differences between the two Danish translations. Houstrup's translation says :

(4b)   Hvad Elizabeth allerede havde hørt […] blev nu **åbent erkendt** og indgående drøftet i al offentlighed, og alle **glædede sig** ved tanken om, hvor **lidt** de hele tiden **havde brudt sig om** Mr. Darcy, allerede inden de vidste noget om sagen.   (Austen/Houstrup 2006:149)

The verb *canvass* has in Houstrup's translation been interpreted in a perhaps more general way as *erkende* which means *recognize*. The original sense has almost disappeared as well as the critical ironic intention in the source text. So in the Danish translations, Austen's intended irony

looses some of its original force and becomes less critical of the attitudes of the characters because of the translators' lexical choices and semantic solutions. The ironic dissociation from the figures which was present in Austen's text has not been transferred exactly in any of the two Danish translations. Both of them express the denotative meaning of the verb *canvass* and somehow lose the ironic and connotative meaning which was originally intended.

In example (5), the irony triggers have to be found in the combination of the co-text and the semantics of the chosen nouns, i.e. *delight* vs *rattle of the chaise*:

(5)   Her fellow-travelers the next day were not of a kind to make her think him less agreeable. Sir William Lucas, and his daughter Maria, a good-humoured girl, but as empty-headed as himself, had nothing to say that could be worth hearing, **and were listened to with about as much delight as the rattle of the chaise**. Elizabeth loved absurdities, but she had known Sir William too long. He could tell her nothing new of the wonders of his presentation and knighthood; and his civilities were worn out like his information. (Austen 1813:131)

The protagonist Elizabeth is bored to death by her two 'fellow-travelers' and their company which is as entertaining as the creaking of the carriage. The implied irony is to be found in the unusual combination of the noun *delight* which have positive connotations and the the noun *rattle* which gives negative associations to unpleasant sounds. In Plon's Danish translation the same effect is achieved as the connotations of the nouns are the same in Danish as in English:

(5a)   Hendes rejsefæller den næste dag var langt mindre behagelige. Sir William Lucas og hans datter Maria der var en godmodig pige, men lige så tomhjernet som sin fader, havde intet at sige, som var værd at lytte til, og **Elizabeth havde lige så megen fornøjelse af deres konversation som af vognens raslen.** Hun elskede originale mennesker, men havde kendt Sir William for længe. Hun havde hørt alle hans vidunderlige beretninger om præsentationen ved hoffet, og hans høfligheder var lige så forslidte.   (Austen/Plon 1952:128)

A similar exemple is found in (6) where the father, Mr. Bennet, makes use of an antithesis-strategy when he says that he is pleased by the daughter's

unhappy love story. What triggers the ironic effect here is the combination of the co-text, the father's congratulations because of the betrayal of his daughter, the use of the verbs *congratulate* and *be crossed in love* whose semantics are opposite to each other and, last but not least, the fact that the reader at this moment in the novel has some knowledge of Mr. Bennet's personality, i.e. a man who is very ironical. This is thus an example of knowledge shared between the author and the reader (and also the translator). The reader will therefore be able to easily interpret the intended irony:

(6)   Mr. Bennet treated the matter differently. "So, Lizzy," said he one day, "your sister is crossed in love, I find. I **congratulate** her. Next to being married, a girl **likes to be crossed in love** a little now and then. It is something to think of, and gives her a sort of distinction amongst her companions. When is your turn to come? You will hardly bear to be long outdone by Jane. Now is your time. Here are officers enough at Meryton to disappoint all the yong ladies in the country. Let Wickham be *your* man. He is a pleasant fellow, and would jilt you creditably."

        "Thank you, sir, but a less agreeable man would satisfy me. We must not all expect Jane's good fortune."   (Austen 1813:119)

(6a)   Mr. Bennet så helt anderledes på sagen: "Nå, Lizzy," sagde han en dag, "din søster er blevet skuffet i kærlighed, hører jeg. ***Det glæder mig***. Næst efter at blive gift er det en ung piges **største fryd nu og da at lide af ulykkelig kærlighed**. Hun har noget at spekulere på, og det gør hende interessant i veninderness øjne. Hvornår er det din tur? Du skal ikke lade dig overgå af Jane. Din tid er kommet. Der er officerer nok i Meryton til at skuffe alle landets unge damer. Lad det blive Wickham. Han er en rar fyr og skulle nok kunne holde dig grundigt for nar."

        "Mange tak, fader, men jeg ville være tilfreds med en mindre rar mand. Vi kan ikke alle vente at være lige så heldige som Jane."

                                                                    (Austen/Plon 1952:117)

        The Danish translation by Plon follows very closely the source text, except for one thing: the use of italics in '*Det glæder mig.*', which explicitly transfer Mr. Bennet's ironic tone to the target reader. This

example illustrates that the translation of implied information in a source text sometimes takes place by means of an explicitation in the translated text.

5. Conclusion

When translating irony, the translator must be capable of distinguishing the literal meaning from the author's intended meaning in order to achieve equivalent effects in the translation. As this study has tried to illustrate, it seems possible to find some so-called *irony triggers*, e.g. semantically loaded adjectives, semantic and/or pragmatic phenomena, e.g. antiphrasis, hyperboles and violation of the conversational maxims. This study has illustrated that irony can be translated, especially when the connatotations of e.g. nouns in the source language text are more or less the same as in the target language text. However, the comparison of the source language text and the target language text has shown that the force of irony in translation is often weakened although some of the ironic effect still remains. When it comes to stilistic figures such as hyperboles and antiphrasis, the translator's task is less difficult because (s)he can transfer the ironic effect into the target language text. In spite of the presence of irony triggers, we have seen that different translators do not translate the same text or discourse in exactly the same way because of differences in understanding and interpretation of lexicon, semantics and culture. In some cases, the translator does not respect the source language or the original expression. In other cases, the translator prefers a close, almost literal translation in order to maintain the author's intentions. As illustrated by the translation of some examples of irony from Jane Austen's novel *Pride and Prejudice,* understanding and interpretation of implied information often depends on the translator's interpretation, and there will always be some traces left of the translator's personal linguistic preferences in a translation of implicit meaning.

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The dead ends of language: The (mis)interpretation of a grammatical illusion

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Abstract

This paper[1] explores the so-called 'comparative illusion' or 'dead end' experimentally – a pseudo-elliptical, seemingly grammatical, but ill-formed sentence, e.g. *More people have been to Paris than I have*. Repeatability of the event and choice of quantifier (*more* vs. *fewer*) do not affect acceptability significantly, whereas plurality of the *than*-phrase subject does. The illusion is fast and (superficially) easy to parse, suggesting that it is (mis)interpreted directly, not via ellipsis resolution or syntactic reanalysis of some intermediate representation. (Mis)interpretation neither leads to a single representation, nor does it rely on broad superficial heuristics, but falls into a small set of possibilities. Furthermore, even when people are told that such examples may in fact be meaningless, they are still tricked, showing that the effect is very robust.

1. Introduction

There are many examples of fully grammatical structurally complex sentences that people find unacceptable. This paper focuses on a specific instance of the opposite phenomenon, namely, the comparative illusion – a type of ungrammatical but acceptable sentence – and on how this linguistic illusion is (mis)interpreted.

Language is full of ambiguity, but not all ambiguities are problematic, and in many cases, they go undetected. For instance, there are many examples of lexical ambiguity where individual words have more than one meaning, e.g., *bat*, *rock*, *mean*, etc. Furthermore, many sentences, such as (1), contain local structural ambiguities:

(1)   Which dessert would Mary like the artist to paint?

The fronted *wh*-phrase, *which dessert*, is temporarily interpreted as the object of the matrix verb *like* and subsequently reinterpreted as the object of the verb *paint* in the embedded clause (Christensen, Kizach & Nyvad 2013a; Christensen, Kizach & Nyvad 2013b). Other sentences, such as those in (2) below, are globally ambiguous and have more than one meaning, each with its own sentence structure:

(2)   a.   She met a man who once talked to Elvis at the airport.
                 (Which event took place at the airport?)
       b.   He preferred American music and movies to politics.
                 (Do the movies also have to be American?)

All these ambiguities are normally unproblematic, at best giving rise to amusement. There are, however, also ambiguities that are difficult or impossible to parse:

(3)   a.   The doctor told the patient he was having trouble with to
             leave.
       b.   Without her contributions would be impossible.

The sentences in (3), taken from Pritchett (1992:5, 23), are so-called garden path sentences. For a sentence to be a garden path, it must contain a local structural ambiguity; in addition, there must be a preference for one interpretation, which gives rise to a strong tendency to parse the sentence erroneously. In other words, the sentence is assigned a wrong and globally impossible structure and has to be reanalyzed, which is very difficult, if not impossible – very unlike the effortless shift between the two structures in (2) above (Ferreira, Christianson & Hollingworth 2001; Frisch et al. 2002; Mason et al. 2003; Osterhout, Holcomb & Swinney 1994; Pritchett 1992). Garden path sentences are often used to illustrate the difference between linguistic competence (what you tacitly know about your language(s))

and linguistic performance (how this knowledge is put to use). It should be noted that garden path sentences are most often only problematic in writing; when presented orally, prosody usually helps to disambiguate and recover from the garden path (try adding a pause after *with* in (3)a) or to avoid it completely (e.g. by adding stress to *her* in (3)b).

Grammaticality in the face of unacceptability also occurs with multiple center-embedded ('nested') relative clauses. The problem here is that the parser runs out of working memory (Warren & Gibson 2002):

(4)   Cars men women hate buy pollute and rust
          (Compare: *Cars that are bought by men who women hate*
          pollute and rust)

The way the sentences in (2)-(4) are (mis)interpreted suggests that syntactic parsing is automatic (unconscious, fast, and obligatory), and that the parser chooses one structure rather than delivering all possible analyses simultaneously (which would also require extra working memory). Which structure is the preferred (initial) structure depends on various structural and nonstructural factors, including lexical semantics, context, and frequency (Christensen, Kizach & Nyvad 2013a; Christensen, Kizach & Nyvad 2013b; Hofmeister & Sag 2010; Kizach, Nyvad & Christensen 2013). In other words, instead of a 'width' strategy, where all possible analyses are kept open in working memory in parallel, the parser uses a 'depth first' strategy and incrementally builds the most plausible single structure until there is reason to change it.

The opposite of the grammatical but unacceptable syntactic garden path also exists, namely, in the form of what Christensen (2010; 2011) has called a "dead end", elsewhere called a "comparative illusion" (Phillips, Wagers & Lau 2011; Wellwood et al. 2009). Compare (5) and (6):

(5)   More people have been to Paris than to Copenhagen.

(6)   *More people have been to Paris than I have.

The sentence in (5) is a completely normal elliptical clausal comparative construction. The preposition phrase (PP), *than to Copenhagen*, is the elliptical and right-dislocated complement of *more*, see the structure in Figure 1.
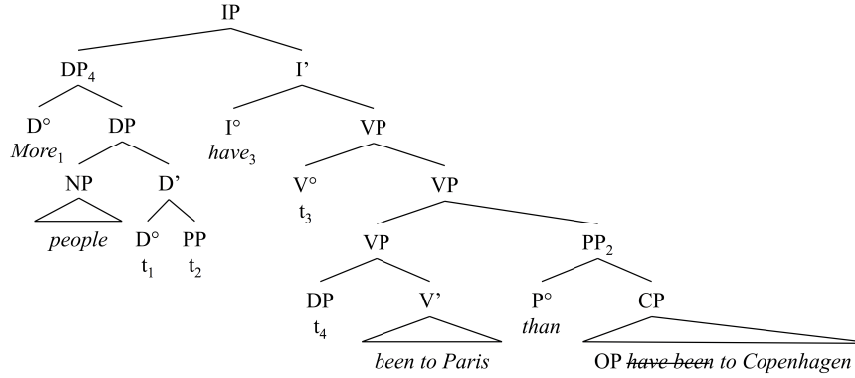
Figure 1: Partial syntactic analysis of the clausal comparative construction in (5). The analysis is based on Larson (2014), slightly simplified for reasons of clarity. In the base-position, t_1, the quantifier *more* selects a preposition phrase (PP) headed by *than* in the position t_2. Subsequently, *more*, raises to the higher D-position where it precedes *people*. In the resulting configuration, *more* is an operator, *people* its restriction, and the *than*-phrase its focus domain (*more* x, x=*people*, *than* x *been to Paris*). The *than*-phrase is right-dislocated and right-adjoined to VP prior to the raising of the DP to subject position. In the PP, *than* takes a clausal complement corresponding to a free relative clause with a silent *wh*-operator OP and elided *have been*.

When parsing a sentence such as (5) with elided elements (illustrated with strike-through in (7) below), we tacitly understand the left-out 'silent' or 'invisible' elements and undo the ellipsis; furthermore, these elements are reconstructed in the structural position where they receive full interpretation (including, e.g., scope relations) (namely at t_2 in Figure 1):

(7) a. More people have been to Paris than to Copenhagen.
             (with ellipsis and right-dislocation)
     b. More people have been to Paris than ~~have been~~ to Copenhagen.
             (ellipsis undone)
     c. More people [than ~~have been~~ to Copenhagen] have been to Paris […].
             (reconstruction: right-dislocation undone)

The sentence in (6) above is different. It is a dead end, a grammatical illusion: acceptable but ungrammatical. Many people stubbornly maintain that it is indeed acceptable and grammatical, and that it makes perfect

sense – right until they are asked to explain what it means (I return to such potential interpretations below).[2] The sentence in (6) differs from the one in (5) in that the *than*-phrase is pseudo-elliptical. That is, there is no actual elided (unexpressed) material; it only looks or sounds like it. The effect becomes apparent when attempting to undo the ellipsis (which isn't there) and to reconstruct (which is impossible); the result is absurd:

(8)   a.   *More people have been to Paris than I have.
                    (pseudo-ellipsis)
        b.   *More people have been to Paris than I have ~~been to Paris~~.
                    (pseudo-ellipsis 'undone')
        c.   *More people [than I have ~~been to Paris~~]
                    have been to Paris […].
                    (reconstruction: right-dislocation 'undone')

The structure of (8)a is illustrated in Figure 2:
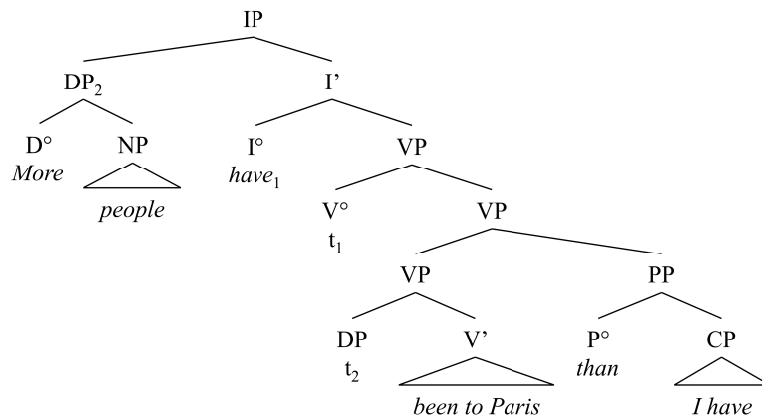
Figure 2: The syntactic structure of the dead end in (6)/(8)a. Note that the PP headed by *than* does not contain elided material and does not originate inside the DP *more people*, cf. (8)b-c.

(There is, in fact, a potential, grammatical but absurd interpretation of (6), where *have* is interpreted as the possessive main verb, namely, *More*

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2   Anecdotally, I have tested translated versions of the sentence in (6) on native speakers of Danish, English, Faroese, German, Icelandic, Polish, and Swedish – always with the same effect.

people than I own have been to Paris. I return to this in section 4 below. The focus in this paper is the interpretation with *have* as an auxiliary.)

The structure of (6), Figure 2, is a linguistic parallel to visual illusions such as the 'Devil's Tuning Fork' in Figure 3. The first part of the sentence, *More people have been to Paris*, is well-formed in itself, and so is the final part, *than I have*; together, however, they do not form a grammatical sentence.
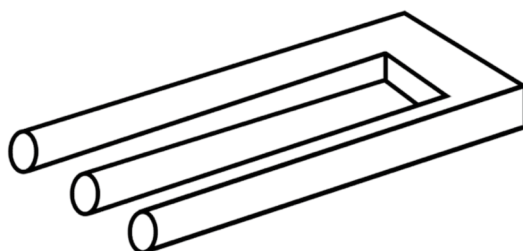
Figure 3: The Devil's Tuning Fork (also called a blivet) is an optical illusion; an impossible (globally incoherent) object consisting of two possible but incompatible parts: three round bars or prongs in one end, two connected square bars in the other.

This seemingly well-formed, yet meaningless (or incongruous) construction is well known in certain linguistic circles (Christensen 2010; Christensen 2011; Myers 2009:7; Hinzen 2006:131; Phillips, Wagers & Lau 2011:165; Saddy & Uriagereka 2004:384; Smith 2005:10; Wellwood et al. 2009; Montalbetti 1984:6). At present, however, empirical studies on the phenomenon are almost nonexistent; the studies by Christensen (2010; 2011) and Wellwood et al. (2009; 2011) are notable exceptions.

Using fMRI (functional magnetic resonance imaging), Christensen (2010) found that activation in the brain correlated with syntactic complexity. In the experiment, participants (19 native speakers of Danish) were asked to read a number of Danish sentence pairs and to judge whether the meaning of the second sentence (the probe) followed from the first sentence (the target). Target sentences included garden paths, dead ends, and normal control sentences, as in (9)-(10). (The probes were simple sentences corresponding (or not) to a sub-part of the corresponding target sentence). The sentence in (9)a is a syntactic garden path and as such it requires extra syntactic processing. The local ambiguity between *toughest* as a modifying

adjective (the preferred interpretation) and *toughest* as a noun leads to parser down the garden path and (attempted) conscious reanalysis is required. (9) b, on the other hand, is completely unproblematic; coordination as such does not require extra syntactic processing. Furthermore, though the string *The toughest men* is potentially ambiguous, as it is in (9)a, the bias towards analyzing it as a DP, [$_{DP}$ *The* [$_{NP}$ [$_{AdjP}$ *toughest*] [$_{NP}$ *men*]]], results in the correct parse.

(9)   a.   The toughest men know use soap too.
            (Compare: *The toughest people that men know use soap too*)
      b.   The toughest men know and use soap too.

(10) a.   *More children have looked at animals than you have.
      b.   More children have looked at animals than at cars.

Garden paths, such as (9)a, were found to increase cortical activation compared to unambiguous control sentences, (9)b. A comparison of the two sentence types revealed significant differences in activation in a number of brain areas previously found to be activated by syntactic complexity (Christensen 2008; Christensen 2010; Christensen & Wallentin 2011), including Broca's area in the left hemisphere and parts of the so-called premotor cortex. This effect, where the level of cortical activation correlates with syntactic complexity, is predicted and relatively uncontroversial.

Analysis of the brain response to dead ends and corresponding controls revealed the opposite pattern. The same areas that showed increased activation when processing garden paths relative to controls, showed increased activation when participants processed normal elliptical sentences, such as (10)b. This effect fits nicely together with the analysis illustrated in (7) above; elliptical clausal comparative sentences, (10) b, trigger syntactic reconstruction, which requires additional syntactic processing (cf. the structure in Figure 1). Thus, reanalysis (in garden paths) and reconstruction (in normal ellipsis) showed more or less the same overall cortical effect. The most interesting result, however, was that dead ends, such as (10)a, triggered a relative decrease in activation – similar to the controls for garden paths, (9)b. In other words, the brain seems to process dead ends in the same way as normal, unproblematic sentences resulting in a relative decrease in cortical activation. This suggests that the participants did not discover that the dead ends were pseudo-elliptical and

treated them as normal non-elliptical sentences, not as semantic anomalies, such as (11)a, a typical selectional restriction violation, nor as semantico-syntactic subcategorization errors such as the illicit versions of the locative alternation in (12)d and (12)e (Arad 2006):

(11) a.   #She drank a big glass of ice-cold, refreshingly smooth sand.
      b.   She drank a big glass of ice-cold, refreshingly smooth beer.

(12) a.   They sprayed paint on the wall.
      b.   They sprayed the wall with paint.

      c.   They poured water into the bowl.
      d.   *They poured the bowl with water.

      e.   *They covered the blanket over the baby.
      f.   They covered the baby with the blanket.

If dead ends had been treated as semantic anomalies, the results should have shown increased activation in Broca's area (Christensen & Wallentin 2011; Hagoort, Hald & Bastiaansen 2004), the exact opposite of what the actual results showed. The absence of increased activation (relative to controls) suggests that there is no extra syntactic processing. That is, there is no reconstruction because there is no ellipsis (which would have elicited an anomaly response), and since there is no structural ambiguity to resolve, there is no syntactic reanalysis. Furthermore, there are no phrase structure violations, so there is nothing that prevents the parser form making a syntactic representation. There are also no semantic or pragmatic violations leading to an implausible or absurd interpretation. (Most people judge comparative illusions as being acceptable, not as ungrammatical or anomalous.) All this suggests that the sentence is assigned a syntactic structure – regardless of the absence of an actual full, congruent semantic interpretation. This, in turn, suggests that semantic processing can be 'shallow' (Ferreira & Patson 2007; Sanford & Graesser 2006; Sanford & Sturt 2002).

   Reconstruction from ellipsis and right-dislocation is automatic, rapid and unconscious. In the comparative illusion, reconstruction is not triggered because there is no obvious candidate in the immediate context to be inserted at the potential ellipsis site. More importantly, the parser does not detect such an ellipsis site. In online parsing, most people are

systematically tricked by the grammatical illusion, and reconstruction or reanalysis is not applied. Instead, comparative illusions are misinterpreted (not reanalyzed or reconstructed) in a number of ways.

In an unpublished poster presentation, Wellwood et al. (2009) present the results from a study on comparative illusions (12 participants, acceptability judgment task on a 7-point scale; two experiments, 48 and 36 items + fillers). In a more recent study (Wellwood et al. 2011), they largely corroborate the findings from 2009, and so the discussion here refers almost exclusively to the 2009 study. Wellwood et al. (2009) argue that people misinterpret such sentences to involve event comparison, as illustrated in (13), and that there are two possible ways of reaching an event comparison interpretation, namely, either by syntactic reanalysis or by semantic coercion ('pragmatic reconstruction' or inference, or context-driven 'enriched interpretation').

(13) a. <u>More</u> people have been to Paris than I have.
     →
   b. People have been to Paris <u>more (often)</u> than I have.

To test the syntactic (reanalysis) vs. the semantic (coercion) hypotheses, Wellwood et al. included two different quantifiers, *more* and *fewer*, in one of their experiments. The quantifier *more* ('larger in number') is identical to the adverb *more* ('often'), whereas *fewer* is unambiguously a quantifier and, hence, cannot change syntactic category via syntactic reanalysis from D to Adv. A significant difference would support the syntactic account (only *more* is compatible with '…more than I have', cf. *'…fewer than I have'), whereas an absence of difference would support the semantic hypothesis. Indeed they found no significant difference between sentences with *more* and *fewer*. The ambiguous *more* did not elicit a different response from the unambiguous *fewer*, which presumably was reinterpreted as *less often*, as illustrated in (14), suggesting that syntactic reanalysis did not apply.

(14) a. <u>Fewer</u> people have been to Paris than I have.
     →
   b. People have been to Paris <u>less (often)</u> than I have.

In short, Wellwood et al. (2009) argue that listeners/readers assign an event comparison interpretation by semantic coercion, not syntactic reanalysis. Furthermore, they argue that the effect of the illusion depends on two

crucial factors, namely, repeatability of the event denoted by the VP and the grammatical number of the *than*-subject. When the VP describes a repeatable event (e.g., 'calling the family' and 'getting involved with team sports') people are tricked significantly more frequently by the dead ends than when the VP is non-repeatable (e.g. 'beginning law-school' and 'being laid off'). In addition, Wellwood et al. (2009) report an effect of the grammatical number of the *than*-phrase subject. When it is a bare plural (e.g. *workers* and *people*), people are tricked significantly more often than when it is singular, either a pronoun (e.g. *he*) or a definite full DP (e.g. *the boy*), both of which are dependent on context for reference and "may lower acceptability by drawing attention to themselves and to illicit individual comparison."

The aim of this paper is to explore the (mis)interpretation of the comparative illusion and some possible factors that influence the strength of the illusion. The experiment in the next section was explicitly designed to test the three factors from Wellwood et al. (2009): Do the grammatical number of the *than*-subject (singular vs. plural, [±Plur]), repeatability of the VP [±Rep], and the type of quantifier [Quant] (Danish *flere* 'more' vs. *færre* 'fewer') affect the acceptability of (and hence, the strength of) the comparative illusion.

In sections 4 and 5 it will be shown that people are systematically tricked by comparative illusions such as (6) above. Even when it is explicitly pointed out that such sentences may be meaningless, a significant proportion of people are still tricked. Furthermore, people consistently fail to agree on an single interpretation; instead, the interpretations are drawn from a small consistent set.

2. Repeatability, Plurality, and the choice of Quantifier

As described in the introduction above, Wellwood et al. (2009) argue that people misinterpret the comparative illusion to involve event comparison, see (13) above, either by syntactic reanalysis or by semantic coercion ('pragmatic reconstruction'). As their experiment showed no difference between sentences with *more* (ambiguous between the quantifier meaning 'larger in number' and the adverb meaning 'more often') and sentences with *fewer* (no effect of [Quant]), Wellwood et al. (2009) argue that interpretation did not involve syntactic reanalysis and hence, it must be semantic coercion. Furthermore, Wellwood et al. (2009) argue that the effect of the illusion depends on two crucial factors, namely, repeatability of the

event denoted by the VP and the grammatical number of the *than*-subject, such that [+Rep] and [+Plur] makes the illusion stronger. Consequently, the following three predictions were made for Danish:

Prediction 1: [+Rep] is more acceptable than [–Rep], i.e. participants make more errors when the VP is repeatable (e.g. 'make mistakes', 'visit the family', 'break the rules') than when the VP is not repeatable (e.g., 'finish the course', 'lose hearing', 'commit suicide').

Prediction 2: A [+Plural] subject in the (pseudo elliptical) *than*-phrase makes the sentence more acceptable compared to sentences with singular [–Plural] subjects.

Prediction 3: The choice of quantifier [Quant] is not significant. There is no difference between *flere* ('more') and *færre* ('fewer'), neither of which are ambiguous between a quantifier reading and an adverb reading (unlike English).

2.1 Methods and materials
This experiment involved 32 participants (14 male, 18 female; mean age 23.34 years, range 20-34 years).

The stimulus consisted of four target (task-related) conditions ([±Repeatable] VP and [±Plural] *than*-phrase subject) and three filler conditions, see Table 1.

Target sentences	[±Rep]	[±Plur]
Flere/færre mænd har spist kød end kvinder har ifølge rapporten. *More/fewer men have eaten meat than women have according to report-the* 'More/fewer men have eaten meat than women have according to the report.'	+	+
Flere/færre drenge har mistet hørelsen end piger har i Danmark. *More/fewer boys have lost hearing-the than girls has in Denmark* 'More/fewer boys have lost the sense of hearing than girls have in Denmark.'	–	+
Flere/færre pædagoger har taget medicin end læreren har i Sverige. *More/fewer nursery-teachers have taken medicine than teacher-the has in Sweden* 'More/fewer nursery teachers have taken medicine than the school teacher has in Sweden.'	+	–
Flere/færre bankfolk har begået selvmord end frisøren har i år. *More/fewer bankers have commited suicide than hairdresser-the in year* 'More/fewer bankers have commited suicide than the hairdresser has this year.'	–	–
(table continued on next page)		

Fillers	Type
Flere/færre journalister har omtalt sagen end ignoreret den i medierne. *More/fewer reporters have discussed case-the than ignored it in media-the* 'More/fewer reporters have discussed the case than ignored it in the media.'	CP-comp
Flere/færre journalister end forskere har omtalt sagen i medierne. *More/fewer reporters than researchers have discussed the case in media-the* 'More/fewer reporters than researchers have discussed the case in the media.'	DP-comp
Flere/færre journalister end i medierne har forskere fået fyresedlen. *More/fewer reporters than in media-the have researchers gotten dismissal-notice-the* 'More/fewer reporters than in the media have researchers gotten the dismissal notice.'	*Ungram

Table 1: Representative examples of target sentences and fillers.

The three filler conditions were as follows: 'CP-comp' were well-formed clausal (event) comparisons. 'DP-comp' consisted of nominal (set) comparisons; and '*Ungram' consisted of ungrammatical sentences (word salad permutations of phrases from target conditions). The task-related stimuli (96 sentences in total) were divided into four lists to ensure that each participant only saw any of the sentences in one version (either with a plural or a singular subject in the than-phrase, and either with *flere* 'more' or *færre* 'fewer' as the quantifier). The set of fillers (72 in total) were divided into two lists, again making sure that each participant saw only one version of the same sentence (±Plur); each filler list was combined with two task-related lists. Each of the four lists thus consisted of 60 sentences in fully randomized order, and each list was shown to eight different participants. The stimulus was presented visually on a computer screen one sentence at a time on a PC running DMDX (Forster & Forster 2003). Prior to the actual session, a training session was run to familiarize participants with the task. The entire session lasted approximately 5 minutes.

Participants were asked to judge whether the sentences were 'good' (well-formed) or 'bad' (either ungrammatical or semantically unacceptable). They were instructed to respond as fast and as accurate as they could. RT and answer were recorded for each sentence.

2.2 Results
The data was analyzed with a generalized linear mixed-model using the software R (R Development Core Team 2009) and the packages lme4 (Bates, Maechler & Bolker 2012), languageR (Baayen 2011), and MASS (Venables & Ripley 2002). The analysis showed no significant effects

on response time (all p>.12). As for the error rates – the extent to which people found the grammatical illusions acceptable – only the [±Plur] factor has a significant effect (p<.001); all other contrasts and interactions are non-significant ([±Rep] p=.071, [Quant] p=.541; all interactions p>.16). As is visible in Figure 4, there is tendency for repeatable [+Rep] to be more acceptable than non-repeatable [–Rep], but this effect does not reach statistical significance (p=.071).
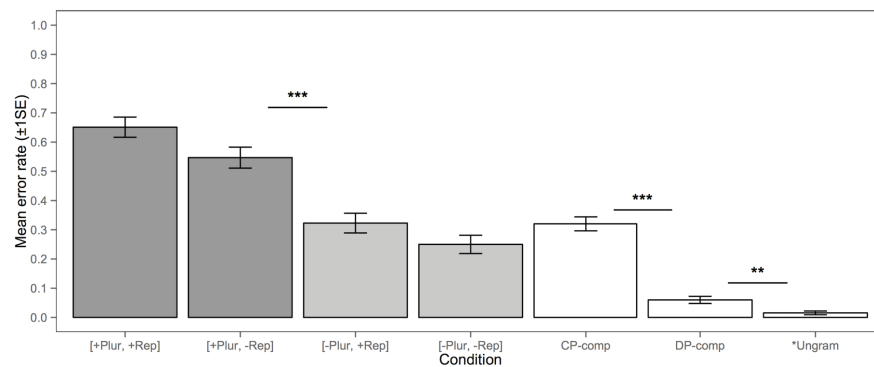
Figure 4: Mean error rates per condition ±1 standard error. (An error rate of 0 would mean that everyone found the example unacceptable, whereas an error rate of 1 would mean that they everyone found the example acceptable.) ***p<.001, **p<.01.

2.3 Discussion

Prediction 1 [±Rep] was not borne out. The participants did not make significantly more errors when the VP was repeatable [+Rep] compared to non-repeatable VPs [–Rep] (p=.071). In other words, VP denoting a repeatable event did not strengthen the illusion, contra Wellwood et al. (2009). Prediction 2 [±Plur], on the other hand, was indeed borne out. A [+Plur] subject in the (pseudo elliptical) *than*-phrase makes the sentence acceptable more often compared to sentences with singular [–Plur] subjects (p<.001). Following Wellwood et al. (2009), this could be taken to suggest that people use semantic coercion to induce an event comparison. As expected (prediction 3), the choice of quantifier [Quant], *flere* 'more' vs. *færre* 'fewer', has no significant effect (p=.541). This result corroborates Wellwood et al. (2009) who found no difference between *more* and *fewer* in English, suggesting that people did not apply syntactic reanalysis to change the quantifier into an adverb.

Wellwood et al. (2009) argue that because "susceptibility to the illusion is modulated by semantic properties", a semantic coercion account is more feasible than a syntactic reanalysis account. Furthermore, they argue, comparative illusions do not reflect broad superficial heuristics. This seems to suggest that people consistently interpret sentences such as (6) above (as well as those in Table 1) as instances of event comparison. However, the present study shows that the semantic property of event repeatability [±Rep] has no significant effect, whereas the [+Plur] property does. People did equally well on controls and [–Plur] illusions; in other words, people were not fooled by [–Plur] illusions. This is not because such sentences are well-formed, but because the stimulus was designed such that an inclusive interpretation was ruled out; e.g. 'more men … than the woman' does not allow an inclusive interpretation where 'the woman' is a subset of 'the men', whereas 'more people … than the woman' does. Furthermore, as I will show in section 4 below, people disagree on what the actual interpretation is, and this interpretation is not always a comparison of number of events. I shall also argue that all these (mis)interpretations are structurally more complex than the actual but ungrammatical one in (2) above. First, I present data showing that the parsing of comparative illusions is relatively fast and, interestingly, fastest when people are tricked by the illusion.

3. People are fast at getting it wrong

This experiment tests whether people are faster or slower at responding whether illusions are meaningful or not compared to controls (though the experiment in section 2 did not show any such effect), and whether there is a relationship between error rate and sentence type.

The participants were instructed to evaluate whether or not the sentences (presented in randomized order) made sense or not by pressing one of two keys on a keyboard, and to respond as fast and as confidently as possible. A total of 60 people (17 male, mean age 23.18 years, range 18-44) participated in the experiment. The stimulus was presented visually on a computer screen one sentence at a time on a PC running DMDX (Forster & Forster 2003).

The stimulus consisted of four types of sentences, 40 sentences in total (all repeatable events):

(15) a.   *Flere folk end i London har været i Paris.   (nonsense)
          More people than in London have been in Paris
          "More people than in London have been to Paris.

     b.   *Flere folk har været i Paris end jeg har.   (illusion)
          More people have been in Paris than I have
          "More people have been to Paris than I have."

     c.   Flere folk har været i Paris end i London.   (com-CP)
          More people have been in Paris than in London
          "More people have been to Paris than to London."

     d.   Flere folk end mig har været i Paris.   (com-DP)
          More people than me have been in Paris.
          "More people than me have been to Paris."

The results were subjected to a generalized linear mixed-effects analysis using R (R Development Core Team 2009) and the lme4 package for R (Bates, Maechler & Bolker 2012), using answer and RT (log-transformed to approximate the normal distribution) as dependent variables (fixed effects: type and order; random effects: participant and item; random intercepts).

    As expected, the analysis of the answers (0 = 'no, does not make sense'; 1 = 'yes, it makes sense') showed that comparative illusions scored significantly higher (were judged as meaningful more often) than nonsense and significantly lower than the Com-CP and Com-DP control sentences, which did not differ significantly from each other (p<.001; mean answers: Nonsense .04, illusions .56, com-CP .86, com-DP .82). Likewise, people responded faster to nonsense than to comparative illusions (p=.019), which in turn was significantly faster than controls (p<.001) (mean RT in milliseconds: nonsense 3066, illusions 4255, com-CP 4325, com-DP 3591). (This experiment was not designed to test for plurality, but post hoc tests revealed no significant difference in RT or error rate between [+Plur] and [–Plur], p>.24.)

    The analysis of the RT also showed significant differences between 'no' and 'yes' responses. While it took longer to say 'yes' to nonsense (p<.001), it took longer to say 'no' to the other three types (p<.05). In other words, providing the right answer, 'no' to nonsense and 'yes' to Com-

CP/DP, was faster than answering incorrectly. However, the comparative illusions patterned with the meaningful controls ('no' slower than 'yes'); in other words, participants were faster at giving the incorrect answer, the opposite pattern of the one observed for the other three types.

In summary, the pseudo-elliptical comparative illusions are faster to process than truly elliptical clausal comparatives. (They are slower than the comparative DP construction, which are comparison of sets of individuals, and this could be explained by the fact that the com-DPs are shorter and that the than-phrase is adjacent to the more-phrase.) Furthermore, people are as fast at answering incorrectly that the illusions are meaningful as they are at correctly answering that clausal comparatives are meaningful. This supports the hypothesis that comparative illusions are (superficially) easy to parse and (mis)interpreted directly, not by via ellipsis resolution and syntactic reanalysis.

In the next section, I present evidence that the (mis)interpretations of comparative illusions indeed do not rely on broad superficial heuristics, but fall into a small set of possibilities.

4. A set of interpretations

As part of the introduction to classes and lectures on language and the brain in 2009-2011 at Aarhus University, Denmark, and Uppsala University, Sweden, students were asked to write on a piece of paper in their own words what they thought the sentence in (16) meant, and hand it in anonymously.

(16)   Flere folk har været i Paris end jeg har.
       More people have been in Paris than I have
       'More people have been to Paris than I have.'

The results are summarized in Table 2 (data from Christensen (2011). The Swedish data (25 speakers) is included here to show that the overall pattern is not restricted to Danish, but the discussion below will focus on the Danish data only.

Paraphrase	Danish		Swedish		Total	
	n	**%**	n	%	n	%
(a) Some people have been to Paris [**except me**]	**11**	**28.9**	3	12.0	14	22.2
(b) More people have been to Paris [**than (just) me**]	**8**	**21.1**	7	28.0	15	23.8
(c) Some people have been to Paris [**more (often)** than I have]	**6**	**15.8**	1	4.0	7	11.1
(d) It doesn't make sense	**3**	**7.9**	7	28.0	10	15.9
(e) More people have been to Paris [**than I own**]	**5**	**13.2**	4	16.0	9	14.3
(f) Other	**5**	**13.2**	3	12.0	8	12.7
Total	**38**	**100.0**	25	100.0	63	100.0

Table 2: Percentages of paraphrases provided to the sentence in (16). The 'other' answers (f) include verbatim repetition of the target sentence itself.

Only 7.9% responded that the sentence was meaningless. As 13.2% of the participants noted, the target sentence can be paraphrased as *More people than I own have been to Paris*, paraphrase (e) in Table 2. Despite this being an absurd reading, it is in fact the only possible full interpretation. The reason is that the verb *have* is ambiguous; it can be either an auxiliary verb (marking perfect aspect) or a main verb meaning 'to own'. Both the *than I own* (main verb *have*) and 'it doesn't make sense' (auxiliary *have*) are in fact correct responses. Together these responses make up 21.1%. The discussion here, however, focuses on the auxiliary verb interpretation of *have*.

There were three other, more interesting paraphrases, namely (a), (b), and (c) in Table 2, which are all incompatible with the actual syntax and lexical material of the target sentence, (16), see the structure in (2) above. Paraphrase (a) is interesting for two reasons: One, the interpretation is simply not licensed by the lexical material, and two, it contains negation, either in the form of the negative operator *not* (Danish *ikke*), '…but not me', or as part of the preposition *except* (Danish *undtagen*), '…except me'. The right-dislocated *than I have* in the target sentence does not contain negation. To get interpretation (a), *more…than* has to be interpreted as

some…except, where the quantifier *more* is replaced by *some*, and the preposition *than* + clausal complement is replaced by *except* (or by *but not*) + DP complement , see Figure 5. Interestingly, this 'except me' interpretation does not figure in Wellwood et al. (2009).
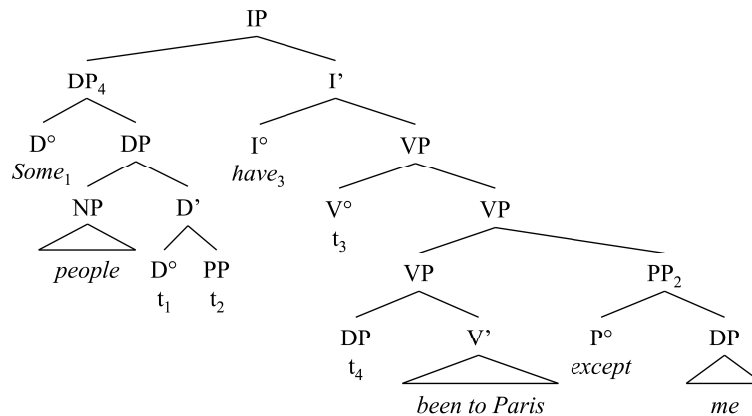
Figure 5: The structure of the exclusive reading of of (6)/(16).

Paraphrase (b) is only possible if the verb *have* in the *than*-clause is deleted (or ignored), and the nominative *I* is replaced by the accusative *me*, see Figure 6. Wellwood et al. (2009) found no support for a 'than (just) me' reading, i.e. a comparison of number of individuals (which they assumed would otherwise have supported syntactic reanalysis); they found no difference between sentences that support a 'more x than just me' reading (e.g., *More girls drive to school than she does*, cf. *More girls than just her*) and those that do not (*More girls drive to school than he does*, cf. **More girls than just him*). However, in the present study, this interpretation was in fact provided by a full 21.1% of the participants.
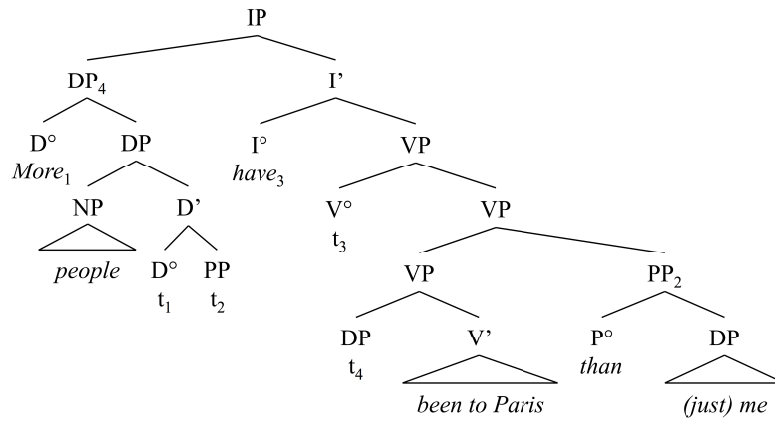
Figure 6: The structure of the comparison-of-sets-of-individuals reading of (6)/(16).

According to Wellwood et al. (2009), paraphrase (c), *(Some) people have been to Paris more (often) than I have*, is derivable either by syntactic reanalysis (moving *more* into the embedded clause) or by semantic coercion (pragmatic 'reconstruction' or inference, or context-driven 'enriched' interpretation). This is possible because the English *more* is ambiguous between being a quantifier (comparative of *many*) and an adverb (comparative of *much*). However, the corresponding Danish expression, *flere* ('more'), is unambiguous. It can only be a quantifier (comparative of *mange* 'many'); the adverbial version is *mere* (the comparative form of *meget* 'much').

The 'more/less often' interpretation is equivalent to a 'more/fewer times' reading. If indeed both *more* and *fewer* (Danish *flere* and *færre*) are interpreted as being inserted as quantifiers in the embedded clause as illustrated in Figure 7, that would account for the absence of a [Quant] effect in Wellwood et al. (2009) as well as in the experiment presented in section 2 above.
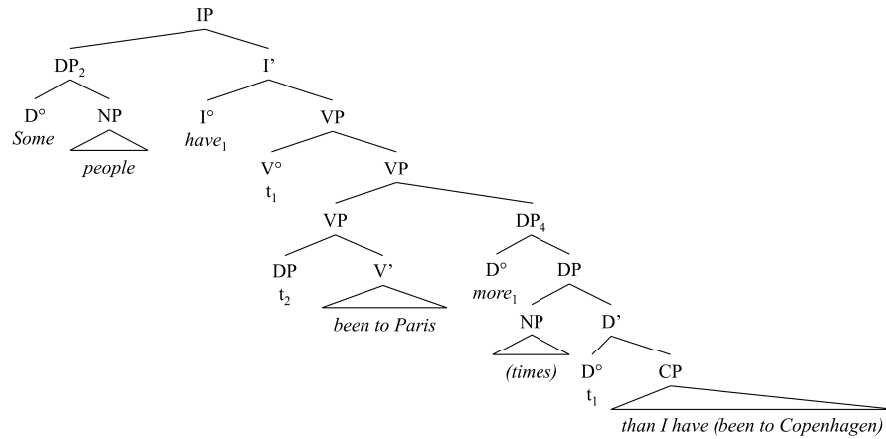
Figure 7: The structure of the comparing-number-of-events reading of (6)/(16).

As argued in section 1, the neuroimaging data suggest that the illusion does not trigger extra syntactic processing in the form of reanalysis or reconstruction (Christensen 2010). In addition, the results for the experiment in section 3 showed the comparative illusions induced faster RT than elliptical controls, and even faster at getting the interpretation wrong (not spotting the illusion), which also suggest that reanalysis is not applied. The three (mis)interpretations (Figure 5 – Figure 7) are therefore the results of direct syntactic misanalysis. People do not arrive at the ill-formed parse (the target sentence in Figure 2) and reanalyze it to get to one of the three reported interpretations. It is interesting to note two important things: One, the set of interpretations is constrained, and two, all three (mis)interpretations are structurally much more complex than the actual but ungrammatical parse of the comparative illusion in Figure 2 – not 'shallow' or partial 'good enough' representations. I agree with Wellwood et al. (2009) that a semantic coercion account is more feasible than a syntactic reanalysis account and that comparative illusions do not reflect broad superficial heuristics. The data presented here support this idea. However, the data also show that people do not always arrive at event-comparison interpretations, but also sets-of-individuals and exclusive interpretations – all of which have complex syntactic representations.

Unlike garden paths, comparative illusions are not taken to be ungrammatical; instead they go unnoticed until people are asked to explain what it means. In this respect a comparative illusion is similar to the so-

called depth charge sentence in (17) which people consistently misinterpret to mean exactly the opposite of what it actually means (Kizach, Christensen & Weed 2015; Natsopoulos 1985; Wason & Reich 1979); compare (17) and (18), which by most speakers are give the same interpretation:

(17)   No head injury is too trivial to be ignored.

(18)   No head injury is too trivial to be treated.

The problem with (17) is that it is overly complex; for one thing, it involves no less than three types of negation, in addition to a semantic anomaly and a pragmatic violation; for details and a recent 'deconstruction' of the depth charge construction, see Kizach, Christensen & Weed (2015). Though the comparative illusion is crucially different, both comparative illusions and depth charges yield consistent but wrong interpretations, depth charges only one, comparative illusions (at least) three (plus the fact that comparative illusions are meaningless or absurd).

   The fact that the (mis)interpretations of the comparative illusion can (more or less) be divided into the categories in Table 2 also shows that it is far from being a normal sentence. People even disagree as to whether part of the meaning of (16) is 'I have been to Paris' or whether it is 'I have not been to Paris', a rather important difference. On the other hand, the results also show that this type of grammatical illusion is different from an ordinary semantic anomaly, such as a selectional restriction violation, as in (11)a and (12)d and e, which most people easily detect and agree about. Though I have argued that the semantic interpretation drawn from comparative illusions reflect a 'shallow' interpretation (as an in-depth interpretation would have revealed that something is not normal), it should be emphasized that these interpretations do not reflect arbitrary guesswork or broad superficial heuristics. Note the parallel between the structure of the DP in the 'normal' clausal comparative construction, Figure 1, and the exclusive 'except X' reading in Figure 5, the comparing-sets-of-individuals reading, 'more than (just) me' interpretation in Figure 6, and the event comparison reading, 'more (times)' in Figure 7.

   In the experiment presented in section 2 above, A [+Plur] *than*-clause subject facilitates acceptability and makes people more susceptible to the comparative illusion. A [+Plur] subject is compatible with comparing sets

of individuals (Figure 7, e.g. 'more reporters than researchers'), comparing number of events ('more often/times', Figure 6), but not necessarily with the exclusive 'except, reading (Figure 5, e.g. '*some reporters except researchers', but 'some researchers except linguists'). A [–Plur] subject is also compatible with event comparison ('more times/often), but not with comparison of sets of individuals ('*more reporters than the researcher') and not necessarily with the exclusive reading (*'some reporters except the researcher' but 'some researchers except the linguist). The exclusive 'except' reading is most compatible with pronominal subjects or proper nouns ('linguists except her/Johanna'). In other words, there are more potential ways that a comparative illusion with a [+Plur] subject could be construed / interpreted to be grammatical compared to when the subject is [–Plur]. The effect of repeatability of the event described by the VP is not significant here; people apparently find 'eating meat more times than X' and 'losing the sense of hearing more often than X' equally acceptable – or rather they fail to notice the difference. This is compatible with the fact that in online parsing, the parser readily accepts anomalous intermediate representations (e.g. 'to decide a tree'), which however has a negative effect on overall acceptability, but not ungrammatical, i.e. syntactically ill-formed intermediate representations. In other words, we accept the implausible, but not the impossible (Kizach, Nyvad & Christensen 2013).

One might speculate that the reason why 79% of the participants (i.e. those who provided paraphrases (a)-(c) and (f) in Table 2) did not see that the comparative illusion is in fact ill-formed (globally incoherent) could (at least partially) be attributable to the nature of the task; perhaps people felt obliged to come up with an interpretation that makes sense, just as people usually understand what other people say even when they make various errors. People might have assumed that the teacher (me) observed the cooperative principle (Grice 1975) while flouting the maxim of manner by not being clear, unambiguous, brief and orderly. The following internet-survey investigates whether it makes a significant difference to explicitly point out that such sentences might be meaningless. The illusion, however, turns to be very robust indeed.

5. Are people just being cooperative?
A total of 545 people (169 male, age 17-77, mean 33 years) from all parts of Denmark completed the survey described below, which was constructed

using LimeSurvey (http://www.limesurvey.org/) running on the Aarhus University internet server.[3]

The stimuli consisted of eight Danish comparative illusions and eight normal and meaningful control sentences, parallel to (10)a and (10) b, respectively (plus 24 unrelated fillers not discussed here). The sentences were presented one a time in random order together with a list of five possible paraphrases (also in random order), as illustrated in (19) below, based on the results from the study in section 4 above. One of the possible paraphrases was always 'It doesn't make sense'; another option was always to answer 'Other', if one thought that none of the listed paraphrases was appropriate.[4] People had unlimited time to respond.

(19)   *More people have been to Paris than I have.   [–Sing]
   a.   'I haven't been to Paris, but many others have.'
   b.   'More people than me have been to Paris.'
   c.   'Many people have been to Paris more often than I have.'
   d.   It doesn't make sense.
   e.   Other

Seven of the eight comparative illusions had a singular subject in the *than*-phrase, as in (19) (see Danish version in (16) above), while the eighth sentence had a plural subject, (20):

(20)   *Flere kvinder har været på ferie end mænd har i år.   [+Plur]
       More women have been on holiday than men have in year
       'More women have been on holiday than men have this year.'

Admittedly, this was not intentional. However, as predicted from the discussion above, the effect of [±Plur] was significant. A full 87% of participants found this sentence meaningful (only 13% said 'It doesn't make sense'):

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[3]   Results from incomplete forms were excluded from the analysis and so was one partici-pant who wrote in the comments that he just made random responses because he felt that the survey was too long.

[4]   The original survey also included 'Many people have been to Paris' in the list of para-phrases. Here, those responses are categorized as 'Other'.

Paraphrase	[+Plur] (1 item)	%	Mean [-Plur] (7 items)	SE	%
(a) …[but not X]	2	0.37	53.57	1.13	9.83
(b) …[than (just) X]	246	45.14	23.43	0.71	4.30
(c) …[more (often)...]	188	34.50	72.71	0.99	13.34
(d) Nonsense	71	13.03	383.14	1.41	70.30
(e) Other	38	6.97	12.14	0.12	2.23
	545	100.00	545.00		100.00

Table 3: Paraphrases provided for the sentence in (20), (see also Table 2 above). SE = standard error of the mean.

From the results in Table 3, two major conclusion can be drawn. Firstly, although there is a significant effect of the option of answering 'It doesn't make sense', the illusion is still rather robust. Compared to the 7.9% in the experiment in section 2 of Table 2, a total of 70.3% responded that the comparative illusions were meaningless (I return to the 13% in the [+Plur] sentence shortly). In other words, pointing out that the stimulus sentences could be meaningless did indeed have a significant effect. Nonetheless, a large proportion of the participants, namely no less than 29.7%, provided meaningful, and therefore incorrect, paraphrases in spite of the explicit possibility that the target sentences could be meaningless. In comparison, 87.6% (SE=.79) responded correctly to the control sentences.[5] (Note also the small variation in the response pattern to the [–Plur] sentences reflected in the very small values for the standard error, SE, in Table 3.)

The second conclusion that can be drawn from Table 3 is that plurality matters, as was also shown in section 2 above, see Figure 4; see also parallel examples with [+Plur] subjects in Table 1. The sentence with a [+Plur] subject in the *than*-phrase, i.e. (20), elicited a response pattern very different from the responses to sentences with a [–Plur] subject. That it is in fact not a well-formed sentence becomes clear when attempting to resolve the pseudo-ellipsis and reconstruct the right-dislocation, as illustrated in (21) below:

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[5] One might also speculate that the temporal adjunct in (21)a ('this year') somehow masks the pseudo-ellipsis; it could be that it strengthens the illusion and makes the sentence more acceptable. However, the experiment in section 3 also tested for the presence versus absence of such an adjunct. The results showed no difference in acceptability (generalized linear mixed-effects analysis, p=.925).

(21) a. *More women have been on holiday than men have this year.
          (comparative illusion: pseudo-ellipsis)

      b. *More women have been on holiday than men have ~~been on holiday~~ this year.
          (pseudo-ellipsis 'undone')

      c. *More women [than men have ~~been on holiday~~] have been on holiday […] this year.
          (reconstruction: right-dislocation 'undone')

Interestingly, the type of sentence (20)/(21) is considered "non-illusory" and "meaningful, not just acceptable" and are used as controls in Wellwood et al. (2011), as well as in Wellwood et al. (2009). However, as is evident from the data from 545 speakers in Table 3, the sentence is far from normal. 246 people (45.14%) responded that it means 'more women than men have been on holiday this year' (comparison of individuals), whereas 188 (34.50%) responded that it means 'women have been on holiday more often than men have this year' (event comparison), and 71 people (13.03%) said that it is meaningless. This is very unlike normal sentences and even structurally ambiguous ones, as in (2) above. If someone were to maintain that it is a perfectly fine structure with a single interpretation, say, 'more women than men', and hence not a grammatical illusion, then they would clearly be ignoring the judgments of the remaining 299 speakers who disagree in this survey. In my opinion, this only underlines the strength of the illusion and again point to the similar robustness of effect of the depth charge construction in (17) (Kizach, Christensen & Weed 2015).

      In summary, the illusory well-formedness of comparative illusions is very robust. Though people are less apt to be tricked when it is made explicitly clear that such sentences might be meaningless, almost 30% still provided meaningful paraphrases; with a plural subject in the *than*-phrase, it was a full 87%. The conditions in the informal study (section 2) are closer to 'normal' language use, suggesting that the interpretations provided are actual interpretations, not merely an artifact of being cooperative and pleasing to the experimenter.

6. Discussion and conclusion

This paper has explored the pseudo-elliptical, seemingly grammatical, but ill-formed sentence type called the 'comparative illusion' or 'dead end'. In doing so, I have drawn on a number of experiments. The brain imaging

study discussed in section 1 shows that comparative illusions do increase activation in Broca's area of the brain, which suggests that such sentences do not trigger additional syntactic processing (unlike garden path sentences and truly elliptical sentences). People (mis)interpret them directly, not via ellipsis resolution or syntactic reanalysis of some intermediate representation. This is also supported by the evidence presented in section 3 which showed that the illusion is fast and (superficially) easy to parse; people are even faster at stating that the illusion makes sense than in stating the opposite.

The experiment in section 2 investigated the effect of three factors on the acceptability of the comparative illusion. The results show that whether the event described by the sentence is repeatable or not [±Rep] does not affect acceptability. There is also no difference in acceptability between *more* and *fewer* [Comp]. The third factor, plurality of the *than*-phrase subject [±Plur], however, does have a significant effect. When the subject is plural, people are tricked significantly more often, finding it more acceptable. The [Plur] effect corroborates Wellwood et al.'s (2009) findings, but the non-significance of repeatability [±Rep] runs counter to their results and their main argument, namely, that comparative illusions are consistently assigned an event comparison interpretation.

The data in section 4 show that comparative illusions are not associated with a single representation agreed upon across people. In contrast, the (mis)interpretations are consistently drawn from a small, stable set of possibilities. This, together with the fact that all these interpretations are syntactically more complex than the actual structure of the illusion, show that interpretation does not rely on random guess work. Wellwood et al. (2009) argue that "comparative illusions do not reflect broad superficial heuristics" and I agree. The structure of the DP in the 'normal' clausal comparative construction, Figure 1, the exclusive reading, Figure 5, comparison of individuals, Figure 6, and event comparison, Figure 7, are remarkably similar. However, the data presented here also shows that the comparative illusion is not always assigned an event comparison interpretation by semantic coercion, contra Wellwood et al. (2009).

Finally, the survey in section 5 shows that people are not just being cooperative when asked to explain what comparative illusions, such as (6), mean. Even when people are told that such examples may actually not make sense, they are still tricked, showing that the effect is very robust. Since people have great difficulty accepting that such sentences are in fact meaningless (globally incoherent), even when this is explicitly pointed out

to them, it might be tempting to argue that they are indeed as meaningful as people claim. The problem is, however, that people do not agree on the interpretation. This disagreement is very different from what is the case with syntactic global, (2), as well as local (garden path) ambiguities, (3). Global syntactic ambiguities have two possible interpretations, and the choice between them is dependent on context, though one is preferred over the other. The set of possible interpretations of *More people have been to Paris than I have* given in Table 2 cannot be explained as different but mutually compatible presuppositions, implicatures or subjective connotations. For example, in Table 2, (b) is incompatible with (c) and (d) (which are mutually compatible), and all three are incompatible with (e).

Phillips et al. (2011) argue that the parser is prone to illicit dependency formation (resulting in binding or agreement errors) when non-structural information (e.g. pragmatics and frequency) is available simultaneously with structural information relevant to dependency formation. In a comparative illusion, such as (6), the clause-initial quantifier, *more/fewer*, signals a comparative construction involving *than* (i.e. it is early structural information); on the other hand, due to the diversity of this type of construction (i.e. non-structural information), the parser cannot form a definite prediction about the right edge of the sentence. For example, *More people have been to Paris* can be followed by a number of different *than*-phrases:

(22) More people have been to Paris…
    a. …than (just) me.
    b. …than elephants.
    c. …than I can possibly count.
    d. …than to Copenhagen.

This accounts for why the syntactic information alone may be insufficient for a full in-depth structural parse. However, as also noted by Phillips et al. (2011:21), it does not account for why people usually fail to see that comparative illusions are anomalous.

What triggers the illusion is a conspiracy of factors. First of all, the syntactic parser automatically constructs a syntactic representation, unless it is hindered by e.g. massive center-embedding (nesting), tricky local ambiguities (garden path effects) or downright syntactic errors. Second, there is a collocation between *more* and *than*, a piece of non-structural information, which however, is not strong enough to predict the structural

contents of the *than*-phrase. Third, the grammatical number of the *than*-subject; plural *than*-subjects induce stronger effects than singular ones, possibly because it is potentially compatible with more (mis)interpretations than singular subjects. Fourth, quantifiers and degree expressions are complex in terms of syntax, semantics, as well as pragmatics. Finally, in the absence of obvious evidence to the contrary, we expect language to make sense, as it usually does. However, that does not normally seem to stop people from detecting other types of complexities, anomalies, or ungrammaticalities.

While garden paths are grammatical but unacceptable, comparative illusions are ungrammatical but acceptable; together these structures highlight not only the difference between competence and performance but also a contrast between the way syntax and semantics are processed. We easily detect when the syntactic parser is lead astray by ambiguities and garden path sentences, or completely derailed by errors; it is less easy to detect when semantic decoding yields incongruous or implausible interpretations, or when it leads to syntactically guided misinterpretations – that is, when interpretation runs into a dead end.

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An from Old to Middle English

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Abstract

In this pilot study[1] we build on the research of Crisma (2015), who outlines three stages in the development of *a(n)* in the history of English: In Stage One, *an* is simply the numeral 'one'; in Stage Two, *a(n)* acts as an overt existential operator in certain contexts; in Stage Three, *a(n)* is reduced to an expletive. Stages One and Two are attested in the Old English period; Stage Three is the Present-Day English system. In this study we investigate the use of *a(n)* in Middle English texts, to determine whether Stage Two continues into Middle English, and whether we can see the beginning of Stage Three. We find that the distribution of *a(n)* provides evidence that Stage Two is attested in texts written in the first Middle English period (M1, 1150-1250), while characteristics of Stage Three appear in texts from the third period (M3, 1350-1420).

1. Introduction

Crisma (2015) outlines the development of *an* in the history of English from its original status as the numeral *one* to its present status as an 'indefinite article'. Three different stages are recognised in this trajectory: in Stage One, attested by some early Old English (OE) West Saxon texts (Bede's *Ecclesiastical History* and Alfred's *Laws*), the grammar of *an* is similar to that of modern Icelandic, with *an* simply the numeral 'one'. Stage Two, observable in OE in Ælfric's *Lives of Saints* and, surprisingly,

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[1] We thank an anonymous reviewer for helpful comments and suggestions. All errors and omissions remain our own.

in a very innovative *Orosius*,[2] is similar to modern Hebrew and is characterised by the fact that only *overt* operators can take wide scope; here, *an* acts as an overt existential operator whenever an indefinite noun phrase is interpreted as specific or when it takes wide scope over some other operator. Stage Three, where *a(n)* is reduced to an expletive, is represented in Crisma (2015) by Present-Day English (PDE), with an unanalysed gap of almost a millennium between the establishment of Stage Two and the current Stage Three system. The primary aim of this chapter is to replace this millennium gap with a realistic dating of the earliest evidence for Stage Three. This is a descriptive pilot study: we examine data samples from Middle English (ME) texts to determine whether 1) Stage Two characteristics persist throughout the period, and/or 2) we can see the beginning of the Stage Three PDE system in the ME data.

One striking characteristic of the use of *an* in OE is that it is totally incompatible with a generic interpretation: thus, sentences like *A dog has four legs* are never encountered in OE data from either Stage One or Stage Two. In Table 1 in Crisma (2015:133), there are 62 tokens of noun phrases headed by a singular count noun that receive a generic interpretation, none of them introduced by *an*.[3] This distribution was taken as evidence that the numeral *an* of Stage One was re-analysed as an existential operator at Stage Two, hence the incompatibility with the generic reading. Thus, the telltale piece of evidence that marks the change from Stage Two to Stage Three of the development of the indefinite article is the presence of *a(n)* introducing generic singular noun phrases. This is true independently of how the indefinite article is analysed in PDE, whether it is a classifier as in Borer (2005); or a marker of the count reading as in Ackles (1997), which focuses on *an* in the history of English; or an expletive as suggested in

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[2] It is surprising because *Orosius* is a fairly early OE text, written c898, while *Lives of Saints* was written c997.

[3] This of course does not mean that only bare singulars could be interpreted as generics in OE. Crisma (2011) argues that bare plurals in OE had basically the same interpretive properties as in PDE, since they could be generic as well as existential. It remains an open issue whether OE noun phrases introduced by *se*, the ancestor of *the* and *that*, could also be interpreted as generic: in the singular, as in PDE, or in the plural, as in modern German, as shown in (i) and (ii) respectively. Example (ii) is from Zamparelli 2000: 165, his example (430), citing Brugger (1993); the original spelling is preserved here.

> (i) **The dolphin** is a mammal
> (ii) ...daß   **(die) Elefanten**   wertvolle   Zähne   haben
>   *...that   (the) elephants   precious   teeth   have*
>   '... that elephants have valuable teeth'

Crisma (2015). Although there is little consensus on the formal analysis of the indefinite article, it is still possible to determine the point in the history of English when the present situation establishes itself, with *a*(*n*) becoming compatible with generic singular count nouns and in fact obligatory in that context unless the definite article is used.

2. Selecting the Middle English Texts

For this initial study of the use of *a*(*n*) in ME, we used texts from the Penn-Helsinki Parsed Corpus of Middle English, second edition (PPCME2).[4] The PPCME2 is divided into four time periods, each covering 70-100 years: M1 (1150-1250), M2 (1250-1350),[5] M3 (1350-1420), and M4 (1420-1500). For most texts, the date of composition and the date of the manuscript fall within the same period; for those texts which are composed in one period with the earliest manuscript from a later period, two periods are specified, e.g. M34 (written in M3 with an M4 manuscript) for *The Book of Vices and Virtues* (see below).

We selected texts from the first three ME periods using several criteria:

1) size: larger texts result in larger numbers of tokens from each text, so that texts and periods can be reliably characterised with respect to the use of *a*(*n*);

2) genre: we chose to start this study using prose texts rather than poetry;

3) dialect: except for *Ayenbite of Inwyt* (Kentish), we limited our investigation to texts from the East and West Midlands.

From period M1 we included *Peterborough Chronicle* (c1150);[6] *Katherine Group* (c1225), consisting of five smaller texts (*Sawles Warde*, *Hali Meidhad*, *St. Katherine*, *St. Juliana*, and *St. Margaret*); and a sample of *Ancrene Riwle* (c1230). From period M2, we included a sample of *Ayenbite of Inwyt* (1340); from period M3, two texts from Chaucer (*Tale of Melibee* and *The Parson's Tale*, both c1390) and a sample from one M34 text, *The Book of Vices and Virtues* (c1450). We had a particular point in including *Ayenbite* (M2) and *Vices* (M34): both texts are translations from

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[4] For more detailed information about the corpus and the individual texts, see the PPCME2 website: http://www.ling.upenn.edu/hist-corpora/PPCME2-RELEASE-3/index.html

[5] It should be noted that the second ME period (ME2) is not well-represented; the data from ME2 therefore should not be used without caution.

[6] *c* (= *circa*) indicates a date preceding or following the given date by 25 years.

the Old French *Somme le Roi*, and the samples we included from each were translated from the same passages of the French text.

3. Collecting the Evidence

The collection of a database of ME nominals that would serve as the empirical basis for the present study was largely modelled on the work done on OE in Crisma (2015). Differences, which are discussed below, were due to differences in the annotation of the two parsed corpora and to a slightly different perspective in interpreting the data.

The first step was to collect all nominal arguments – subjects and objects[7] – with a morphologically singular head noun from the selected PPCME2 texts. These were collected in two different sets: nominals in the first set were those introduced by *a(n)*, while nominals in the second set were 'bare' in the sense of Carlson (1977); that is, they were not introduced by numerals, articles, demonstratives, quantifiers, possessives or genitives. During the coding phase, we decided to treat separately nominals headed by *man* and *thing*; the former is extensively discussed in section 5. The nominals were then manually coded according to their denotation properties, using in most cases the same labels used in Crisma (2015), with a few notable exceptions discussed below. Using this procedure, each noun phrase in the sample that fit the criteria is associated with a composite label describing the various properties that are relevant for the present study.

The first element of the label encodes whether the noun phrase is introduced by *a(n)* (AN) or is a bare singular count noun (BSG). At this stage of the coding, bare mass nouns were coded as (BMS) and discarded. Note that deciding whether a particular instance of a singular noun is mass or count is not always straightforward. So, alongside clear cases such as (1), there are dubious cases as in (2):

(1) clear mass noun (CODE <NPTYPE:BMS>)
     it   is the endelees blisse of hevene, ther   **joye** hath no
     it   is the endless   bliss of heaven, where joy   has no

     contrarioustee of   wo   ne   grevaunce
     adversity   of   woe nor grievance
     (CMCTPARS,327.C2.1673)

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[7] Crisma's (2015) object data included only direct objects, since indirect objects are not annotated as such in the York-Toronto-Helsinki Parsed Corpus of Old English Prose (YCOE). However, the PPCME2, unlike the YCOE, unambiguously labels indirect objects, and therefore these objects could be easily and automatically included in the database.

(2) ambiguous between mass noun and count noun (CODE
     <NPTYPE:BN>)
     He seide þet **fulle feoht**   was sett
     He said   that utter war / (a) furious battle   was created

     betwenen ða cristene   &   þa heðene
     between   the Christians and the heathens
     (CMPETERB,51.275)

All dubious cases were coded BN ('bare noun'), as shown in (2), and
discarded along with mass nouns, to avoid including ambiguous cases in
the database of otherwise unambiguous tokens. On the other hand, clear
cases of coercion, where a normally mass noun was converted to a count
noun by the presence of *a*(*n*), were coded AN, as in (3), and included in the
database for the study.

(3) coercion of mass noun to count noun (CODE <NPTYPE:AN-EXS>)
     And by the manere   of his speche it semed that   in
     And by the manner   of his speech it seemed that in (his)

     herte he baar **a crueel ire**
     heart he carried   a   cruel anger
     (CMCTMELI,218.C2.56)

     The second element of the label indicates whether the nominal has
an existential (EXS) interpretation, as in (3) and (4), or a generic (GNR)
one, as in (5).

(4) a. existential interpretation (CODE <NPTYPE:BSG-EXS>)
        Eue heold iparais   **long tale**   wið
        Eve held   in-paradise (a) long conversation   with

        þe neddre
        the   serpent
        (CMANCRIW-1,II.54.520)

     b. existential interpretation (CODE <NPTYPE:AN-EXS>)
        As   ha þeos bone hefde ibeden com **a kempe**   of
        When she this plea had   made came a champion from

        helle on englene heowe
        hell   in angel's   guise

'When she had made this plea, a champion came from hell in the guise of an angel' (CMJULIA,107.187)

(5)   a. generic interpretation (CODE <NPTYPE:BSG-GNR>)
       þu   seist þt   muche confort haueð **wif** of   hire were
       you say that much comfort has (a) wife from her husband
       'you say that a wife has much comfort from her husband …'
       (CMHALI,147.282)

       b. generic interpretation (CODE <NPTYPE:AN-GNR>)
       Certes   **a shadwe**   hath the   liknesse of the thyng
       Certainly a shadow   has   the   likeness of the thing

       of which   it is   shadwe
       of which   it is   (the) shadow
       (CMCTPARS,292.C2.187)

Again, it was sometimes not possible to decide between the two alternative readings, existential and generic, because some sentences were genuinely ambiguous between the two, as shown in (6). Such cases were tagged AMB.

(6)   ambiguous between existential and generic (CODE<NPTYPE:AN-AMB>)
       And therfore seith **a philosophre** in this wise
       And therefore says a philosopher   in this manner
       'And therefore a (particular) philosopher says / philosophers say in this manner …'
       (CMCTMELI,224.C1.277)

As in Crisma (2015), labels for nominals with an existential interpretation may encode some additional information. First, there is the possibility that overt material, such as a (reduced) relative clause, makes the noun phrase clearly specific, as in (7); this is indicated by the additional tag SPC.

(7)　existential specific nominal (CODE <NPTYPE:AN-EXS-SPC>)
Ayong man called Melibeus myghty and riche
A young man called Melibee mighty and rich

bigat upon his wyf that called was Prudence **a**
begat upon his wife who called was Prudence a

doghter which that called was Sophie
daughter who that called was Sophie
'A young man called Melibee, mighty and rich, begat upon his
wife, who was called Prudence, a daughter who was called Sophie.'
(CMCTMELI,217.C1b.5)

Second, the nominal may co-occur with elements potentially participating in scope interactions, such as negation, quantifiers, but also *irrealis* modality or certain verbs in the matrix clause (some epistemic verbs, commands, etc.). For these cases, the tag SCOPE or NG (for 'negation')[8] was added, followed by -nrw, -wd or -amb, depending on whether the nominal had narrow or wide scope or whether the scope was ambiguous:

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[8] Overall, we found 10 cases of indefinites in the scope of a negative element, four introduced by *a(n)* and six bare singulars. This very low figure is expected, given that English continues to be a (strict or non-strict) Negative Concord (NC) language into the 15th century (see Ingham 2013); thus, the vast majority of subjects and objects in the scope of negation are introduced by *nan/non*, as in (i):

(i)　ach　hare　wununge　n-aueð　nan　ʒete.
　　but　their　dwelling　NEG-has　no　gate
　　'but their dwelling has no gate' (CMANCRIW-1,II.60.609)

In the earliest texts (M1 and MX1), the form is consistently spelled *na(n)*, which might be analysed as a negated *a(n)*. However, it would not be correct to count it as a possible variant of *a(n)* alternating with bare singulars: in negative clauses displaying NC, in fact, there is no possible alternation between two forms, since nominals introduced by *na(n)* are the only option. It is only in clauses without NC that there is a choice between a bare singular and *a(n)*+N. Establishing what determines the absence of NC in the 10 cases we included in our study goes beyond the scope of the present work, but it is clear that these cases must be kept separate from nominal phrases introduced by *na(n)*. It is also worth mentioning that the problem exists only for the earliest ME stages: starting from M2, the negative determiner is consistently spelled with the vowel <o>, that is, it is consistently *no(n)* throughout all the texts included in PPCME2 with the exception of Northern texts, while the (ancestor of) the indefinite article is regularly spelt *a(n)*.

(8)   existential nominal with narrow scope (CODE <NPTYPE:AN-EXS-SCOPE-nrw>)

Ich chulle lete makie þe   of golt **an ymage** as cwen   icrunet
I   shall   let   make   thee of gold an image as queen crowned
'I will have a golden image made of you as a crowned queen'
(CMKATHE,36.269)

(9)   existential nominal with wide scope (CODE: <NPTYPE:AN-SCOPE-wd>)

&   seide to hire þus. haue cwen **acrune** isent te   of
and said to her   thus. have queen a-crown sent to-you from

heouene
heaven
'and (he) said the following to her: Queen, have a crown, sent to you from heaven'
(CMKATHE,38.308)

(10)   existential nominal with ambiguous scope (CODE: <NPTYPE:AN-SCOPE-amb>)

thanne seketh he **an ydel   solas**   of   worldly thynges
then   seeks he a useless consolation from worldly things
'then he seeks a useless consolation from worldly things'
(CMCTPARS,313.C1.1073)

It should be noted that in scope interactions between logical connectives, a universal quantifier with wide scope is logically equivalent to an existential quantifier with narrow scope. Thus, the sentence *A dog does not like lettuce* has two logically equivalent representations, one with a universal quantifier[9] taking scope over the negation and the other with the negation taking scope over an existential quantifier. This equivalence proved to be particularly challenging for the coding of the ME texts, because tokens of this type were very frequent; the fact that we were not able to decide between the two alternatives meant that we would have needed to discard many potentially revealing examples. Therefore a new tag was introduced for these cases that was used in the place of EXS and GNR: NPE, for 'No Presupposition of Existence'. This tag captures what generics and existentials with narrow scope have in common, namely that

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[9]   To be precise, the operator in question is Gen rather than the universal quantifier.

they do not presuppose the existence of the referent. It is no coincidence that in OE, at Stages One and Two in the development of *a(n)*, it is precisely in nominals that are generic or existential with narrow scope that *a(n)* is either categorically excluded (generics) or certainly disfavoured (narrow scope existentials).

(11)   nominals that are ambiguous, either generic or narrow scope existential

    a.   (CODE <NPTYPE:BSG-NPE>

        tis put he hat   þt beo ilided   þt **beast** þrin
        this pit he commanded that be covered   that beast therein

        ne falle
        NEG fall
        'he commanded that this pit be covered lest (a) beast fall therein'
        (CMANCRIW-1,II.48.446)

    b.   (CODE <NPTYPE:AN-NPE>)

        whan **a gret** **lord** haþ no child he may chese   a pore
        when a great lord has no child he may choose a poor

        mannes sone ȝif he   wole and make of   hym his eir
        man's son   if he   will and make of   him his heir

        bi adopcioun
        by adoption
        'when a great lord has no child, he may choose a poor man's son if he wants and make him his heir by adoption'
        (CMVICES4,100.63)

The total counts for nominals coded in this way are presented in Table 1, which is modelled after Table 1 in Crisma (2015). Here texts are also arranged in chronological order by date, and the left-to-right arrangement of the columns reflects the increasing saliency of existential presupposition in each group of nominals: it is absent with generics (GNR), nominals with no presupposition of existence (NPE) (the new category introduced in this study), and existential nominals taking narrow scope (EXS-SCOPE-nrw). At the right side of the table we find nominals taking wide scope (EXS-SCOPE-wd) and nominals with a designation specified in the environment (EXS-SPC), where there is an obvious presupposition of existence. As

for the columns in between, those where the scope is ambiguous (EXS-SCOPE-amb) or there is no other logical operators (EXS), they have a less obvious status with respect to existential presupposition, and they constitute a sort of 'gray area' which has little use for the present study.

PERIOD	TEXT	GNR		NPE		EXS-SCOPE-nrw		EXS-SCOPE-amb		EXS		EXS-SCOPE-wd		EXS-SPC		AMB		TOT	
		BSG	AN	BSG	AN	BSG	AN	BSG	AN	BSG	AN	BSG	AN	BSG	AN	BSG	AN	BSG	AN
M1	cmpeterb	0	0	2	1	1	0	0	0	1	2	0	0	0	6	0	0	4	9
	cmhali	9	2	12	0	1	0	0	0	1	2	0	0	0	0	0	0	23	4
	cmjulia	2	0	0	1	1	1	0	0	1	11	0	0	0	0	0	0	4	13
	cmkathe	1	0	0	0	1	4	0	0	2	7	0	1	0	2	0	0	4	14
	cmmarga	1	0	2	0	3	3	0	0	1	8	0	0	0	2	0	0	7	13
	cmsawles	1	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	1	3
	cmancriw	54	2	10	8	12	3	0	0	11	5	0	0	0	2	0	1	87	21
M2	cmayenbi	1	2	0	2	0	1	0	0	0	1	0	0	0	1	0	1	1	8
M3(4)	cmctmeli	1	10	2	17	0	6	0	0	0	9	0	0	0	4	0	4	3	50
	cmctpars	5	30	1	33	0	4	0	2	0	8	0	0	0	3	0	1	6	81
	cmvices4	0	7	0	5	0	1	0	0	0	0	0	0	0	2	0	1	0	16
	TOTAL	75	53	29	68	19	23	0	2	17	53	0	1	0	24	0	8	140	232

Table 1. The distribution of bare singular (BSG) nominals and nominals with *a(n)* (AN) in Middle English

For the M1 period, the situation is basically that of Stage Two in OE: *an* acts as an overt existential operator with indefinite nominals that are interpreted as specific (EXS-SPC: 0 BSG, 14 AN) and with nominals that take wide scope over some other operator (EXS-SCOPE-wd: 0 BSG, 1 AN). For nominals in the absence of other logical operators, *a(n)* is favoured by about 2 to 1 over BSG (EXS: 17 BSG, 35 AN); for NPE nominal, either generic or narrow scope existential, as well as for existential nominatives taking narrow scope, BSG is favoured by about 2 to 1 over *a(n)* (EXSSCOPE-nrw: 19 BSG, 11 AN; NPE: 26 BSG, 11 AN). On the basis of these frequencies, we conclude that the use of *a(n)* in the M1 period is basically what we expect if the system is a continuation of Stage Two of OE. But in addition to these expected patterns, we also see the first real change: in two texts, *Ancrene Riwle* and *Hali Meidhad*, there are two examples each of generics (GNR) used with *a(n)*, as in (12).

(12) **a lutel hurt** in þe echʒe derueð mare þen amuchel
      a little hurt in the eye   harms more than a-great-one

      iþe   hele
      in-the   heel
      (CMANCRIW-1,II.88.1068)

The totals for generics at M1 are 68 BSG, 4 AN. As stated above, in OE all 62 of the singular nominals used as generics were bare nouns.

In contrast to the M1 texts, the distribution of BSG and AN for generics (GNR) in the M3 texts has sharply reversed: there are only 6 BSG and 47 AN. For nominals with no presupposition of existence (NPE), there is also a reversal, with only 3 BSG and 55 AN. Similarly for existential nominals with narrow scope (EXS-SCOPE-nrw) and existential nominals in the absence of other logical operators (EXS), with all 11 and 17 tokens, respectively, using AN. It is clear that the use of *a(n)* with singular nouns has generalised to all contexts, with very few exceptions. This is also true of the one text that we have for the M2 period, *Ayenbite of Inwyt*; however, we have only 9 tokens from this text, which makes the generalizations we draw for this period rather tenuous.[10] In addition, as mentioned in footnote 5, conclusions drawn from texts in the M2 period must be treated with caution, since the period is not well represented by the given texts. Our conclusion from these distributions must be that Stage Three, the PDE pattern, was clearly established by the time of the M3 period of ME, i.e. by 1350-1420, if not already at M2, and it has remained unchanged for more than 650 years.

At this point it is natural to ask whether the reanalysis from Stage Two to Stage Three correlates with the phonological reduction which occurred in the pronunciation of the indefinite article. The OE form *ān* (variously inflected for case and gender) split into two different forms, the numeral for 'one' and the indefinite article, the latter undergoing vowel shortening and loss of final *n*. For the texts included in this study, it is impossible to determine whether the vowel of *a(n)* was long or short, because vowel quantity is generally not marked; it might be suggestive (but certainly not conclusive) that in the texts from period M3, the numeral for 'one' is often spelled *oo(n)* while the indefinite article is never spelled *aa(n)*. As for the loss of final *-n*, Crisma (2009) shows that the modern

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[10] Since we have collected only a sample of the data from *Ayenbite*, this problem can be easily rectified in the future.

pattern, with *a* used before consonants and *an* before vowels, is already established in the *Katherine Group*[11] and continues at later stages. Since the syntax of *a(n)* in the *Katherine Group* is arguably at Stage Two, this pattern might indicate that there is no correlation between (this aspect of) phonological reduction and the reanalysis from Stage Two to Stage Three.

It is also interesting to note that the numbers in Table 1, while not completely categorical, do not show nearly as much variation as the OE data presented in Crisma (2015). Most syntactic changes that have been studied quantitatively involve a great deal of intra-speaker variation, frequently analysed as grammatical competition; these changes are very gradual, taking hundreds of years to go to completion (see Kroch 1989, Pintzuk 1999, Pintzuk & Taylor 2006, Wallenberg 2009, among many others). In contrast, based on the numbers in Table 1, the change from Stage Two to Stage Three in the development of *an* happens very quickly, within a period of about 100 years. The change from Stage One to Stage Two in OE also occurs during a relatively short period of time, about 150 years between the late ninth century and the early eleventh century. Although some of the OE texts show quite regular Stage One or Stage Two grammars, there are also OE texts that exhibit the familiar variation between the two grammars. We do not observe this kind of variation in our study of ME. One possibility is that this is due to our choice of texts, and that it is simply an accident that we did not include in our database ME texts that show a great deal of variation with respect to the use of *an* in the various contexts. As stated above, we are presenting results from a descriptive pilot study, and much work remains to be done. But if the texts we used are indeed representative of periods M1 through M3 of ME, it is possible that the change from Stage Two to Stage Three does not involve grammatical competition, and that there is some characteristic of one stage or the other (or both) which prevents a long-term scenario of grammatical competition. We intend to investigate this possibility in future research.

4. *Ayenbite of Inwyt* and *The Book of Vices and Virtues*

As mentioned in section 2, *Ayenbite of Inwyt* (1340; period M2) and *The Book of Vices and Virtues* (composition c1400, manuscript c1450; period M34) are two ME translations of the same Old French text, and their existence offers the rare opportunity of comparing the rendering of the same text in two different periods of ME. The figures in Table 1, however,

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[11] But not in the other texts of the M1 period.

are quite disappointing from this point of view, for the two texts look very similar. In particular, both texts seem to have generalised the use of *an* with generics and NPE, the two contexts that reveal that *an* has reached Stage Three, i.e. it is the modern 'indefinite article'. It is true that the single bare singular generic in *Ayenbite* is in fact 33% of the number of singular generic nominals used in the text, but the numbers are so low (three in total) that the frequency is meaningless.

The data on generics shown in Table 1 are, however, surprising in one respect: *Ayenbite* has three instances of singular generics and *Vices* has seven. Since they are both close translations, we might question the reason for this difference. A detailed examination of the texts reveals that in five of the seven instances, *Ayenbite* has a singular generic introduced by the definite article; this type of nominal was not included in the database for this study. The use of the definite article with singular generics may indicate that the *Ayenbite* translator avoided the use of *an* with generics, which in turn may indicate that the grammar is still conservative (Stage Two). This conclusion, however, is weakened by the observation that *Ayenbite* has the definite article where the French original also has it; in other words, *Ayenbyte* is more of a word-by-word translation than *Vices*. The *Vices* translation is given in (13a) and the *Ayenbite* translation in (13b), with the Old French original in (13c).

(13) a. riȝt   as **a chirche** is halewed   to þe seruise of God
         right as a   church   is consecrated to the service of   God
         (CMVICES4,105.173)

      b. Ase **þe cherche** is yhalȝed   to godes   seruice
         as   the church   is consecrated to God.GEN service
         (CMAYENBI,106.2074)

      c. ausi comme **li   moustiers** est dediez   au   service Dieu
         so   as   the minster   is dedicated at.the service God
         (SOMME LE ROI 145, p.215)

      'just as a / the church is dedicated to God's service'

Table 1 does not include two types of data that show that the two texts under discussion are indeed very different, namely, the use of pronominal *man* and the use of generic noun phrases headed by *man*. Before

we present the data, some clarification is in order. There is robust evidence
that *man*, or some weakened form thereof*,* could be a pronoun in OE and
at least in the earliest stages of ME, analogous to modern German *man*. At
some point in the history of English, pronominal *man* was lost, and various
hypotheses have been put forth to describe and account for this loss (see in
particular Raumolin-Brunberg & Kahlas-Tarkka 1997, Rissanen 1997, van
Bergen 2000, Los 2002). The PPCME2 uses the part-of-speech (POS) tag
MAN for the 'indefinite pronoun MAN': 'If a given text clearly uses MAN
(or also [the lexeme] ME in early texts) as a pronoun, then all unmodified
uses of subject MAN are tagged MAN'.[12] Two examples of items tagged
MAN in the PPCME2 are presented in (14):

(14)   a. þet   hit wæs togeanes riht þet **man** scolde setten
           that   it   was   against right that man should set

           clerc   ofer muneces
           cleric over monks
           'that it was against right to set a cleric to rule monks'
           (CMPETERB,43.66)

       b. lutel me   is   hwet **me** do mid mi bodi on eorðe.
           little me.DAT is   what man do with my body on earth
           'it matters little to me what one does with my body on earth'
           (CMMARGA,65.168)

      The POS tagging, however, is not entirely consistent, as is indeed
expected for an element that 'formally wavers between a noun and a
pronoun' (Los 2002:182). Thus, for example, *man* in (15) is not tagged
MAN but N (common noun) in the PPCME2:

(15)   riʒt as a chirche is halewed   to þe seruise of God
          right as a church   is consecrated to the service of God

          where **man** schal non oþer þing do but þe seruice of God
          where man shall no other thing do but the service of God
          'just as a church is consecrated to the service of God, where one
          shall do nothing but the service of God'
          (CMVICES4,105.173)

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[12] Citation from the PPCME2 website: http://www.ling.upenn.edu/hist-corpora/annotation/
index.html

The reason for the N tag in (15) may well be that this is an isolated case, for *Vices* seems to have abandoned pronominal *man* altogether, the degrammaticalisation[13] process described in Rissanen (1997) being completed.[14] But this example is very similar to (14a), and it might be a relic of a competing grammar that had grammaticalised pronominal *man*.

Apart from these inconsistencies in POS tagging, there is a more general problem regarding *man*: if at Stage Two a generic nominal headed by a singular count noun could occur bare, this possibility obviously extended to generic uses of the noun *man*,[15] which is then not easily distinguished from pronominal *man*. It is precisely to avoid these difficulties that all noun phrases headed by the lexical item *man*, whether POS-tagged as a noun or as pronominal *man*, were excluded from Table 1. For a preliminary investigation of noun phrases headed by unmodified *man* that seemed to receive an impersonal or arbitrary interpretation, as (15) above, we labelled them MANARB. Our label MANARB, different from MAN in the PPCME2, is also used when *man* is preceded by *a*, as in (16a-b), and is not restricted to subjects, as in (16b-c):

(16) a.   And   by   richesses   may   **a man**   gete   hym   grete   freendes.
           and   by   riches   may   a   man   get   him   great   friends
           'and by riches a man may get himself great friends'
           (CMCTMELI,232.C2.605)

      b.   Pride   dryueþ   **a man**   out of   felawschip
           pride   drives   a   man   out of   fellowship
           (CMVICES4,101.77)

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[13] As an anonymous reviewer points out, Rissanen (1997) uses the term 'degrammaticalization' but modifies it: "… an unlikely development which could be called degrammaticalization …" (Rissanen 1997:517); "… the apparent degrammaticalization of man." (Rissanen 1997:521). The reviewer suggests that this process can be better described as 'retraction' in the sense of Haspelmath 2004:33-5. We intend to investigate the history of *man* in early English in future research.

[14] Though, as Rissanen (1997:521) points out, even after the loss of pronominal *man*, after *some*, *any*, *every*, *each*, *man* was 'probably pronominalized to some extent'.

[15] Not to mention those cases where it is impossible to decide whether *man* is the generic use of the noun *man* or is rather akin to PDE *man*, something similar to 'mankind'.

c. Prede: deþ **man** out of uelaȝrede.[16]
   pride   does   man   out   of   fellowship
   (CMAYENBI,102.1997)

   'Pride drives one out of the community'

When *Ayenbite* and *Vices* are compared with respect to their use of MAN and MANARB, their grammars appear to be very different, as shown in Table 2, where the data for GNR from Table 1 are also repeated.

TEXT	GNR		MANARB		MAN	TOT	
	BSG	AN	BSG	AN		BSG*	AN
cmayenbi	1	2	8	0	38	47	2
cmvices4	0	7	1	29	0	1	36

Table 2. The distribution of GNR, MANARB and MAN in *Ayenbite* and *Vices*
* pronominal *man* (MAN) is included in the total for bare singulars (BSG)

If the nominals labelled MANARB are indeed the generic use of *man*, Table 2 shows that the grammar of *Ayenbite* is still at Stage Two, with a clear predominance of bare generics, while that of *The Book of Vices* is at Stage Three, since singular generics (almost) always occur with *an*.

    It is interesting to note that in *The Book of Vices*, the POS tag MAN, used for grammaticalised pronominal *man*, does not appear at all, which may indicate that *Vices* used *man* only as a noun;[17] it therefore seems reasonable to explore the hypothesis that this absence may correlate with the status of *an* as a Stage Three indefinite article. However, the GNR/MANARB/MAN data from all the texts we considered, presented in Table 3, do not seem to offer any evidence for a correlation between loss of pronominal *man* and the establishing of Stage Three *an*. It can be seen

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[16] The French original of Ayenbite and The Book of Vices, given in (i), uses *homme* as the object and not *on*, which may explain why Ayenbite uses the full form *man* rather than the reduced *me*.

(i) Orgueil met homme hors de compaignie
    pride   puts   man   out   of company
    'Pride drives one out of the community'
    (SOMME LE ROI 72, p.210)

A systematic comparison between the original and the two translations, however, goes beyond the scope of the present work, and is left for future research.

[17] But see the discussion around (15).

that MANARB more or less patterns with GNR with respect to the use of *an*, though the M1 frequencies of MANARB are too low to draw firm conclusions for that stage. However, whether a given text uses pronominal *man* or not seems to be independent from *an* being at Stage Two or Stage Three. Notice the contrast between the Chaucer texts and *The Book of Vices*, both arguably at Stage Three as shown by the rate of *an* with generics: in Chaucer pronominal *man* tagged MAN is extremely common (37 tokens in *Melibee*, 70 in *The Parson's Tale*), while in the *Book of Vices* the POS tag MAN is never used.

		GNR		MANARB		MAN	TOT	
PERIOD	TEXT	BSG	AN	BSG	AN		BSG*	AN
M1	cmpeterb	0	0	0	0	22	22	0
	cmhali	9	2	1	0	6	16	2
	cmjulia	2	0	0	0	9	11	0
	cmkathe	1	0	0	0	22	23	0
	cmmarga	1	0	0	0	14	15	0
	cmsawles	1	0	0	0	6	7	0
	cmancriw	54	2	4	2	84	142	4
M2	cmayenbi	1	2	8	0	38	47	2
M3(4)	cmctmeli	1	10	0	25	37	38	35
	cmctpars	5	30	3	111	70	78	141
	cmvices4	0	7	1	29	0	1	36
	TOTAL	75	53	17	167	308	117	212

Table 3. The distribution of GNR, MANARB and MAN in Middle English texts
* pronominal *man* (MAN) is included in the total for bare singulars (BSG)

5. What is 'a man'?

The data, however, are even more complex than they appear. Consider first that a strong piece of evidence for analysing impersonal *man* as a pronoun is that we have found two instances of co-referential *man* in a C-command relation. Since this configuration does not give rise to a Principle C violation, the two instances of *man* are pronouns and not

nouns for the purposes of Binding. The examples in (17a-c), adapted from Cabredo-Hofherr (2008:5) are from modern German, PDE and modern French, respectively:[18]

(17) a. **Man**$_i$ erkältet sich　　wenn **man**$_{i/k}$ nicht aufpasst.
　　　 MAN　cools　himself　if　　man　NEG　pay-attention
　　　 'One catches a cold if one does not pay attention'

　　 b. **One**$_i$ catches a cold (easily) when **one**$_{i/k}$ isn't careful.

　　 c. **On**$_i$ attrape un rhume si **on**$_{i/k}$ ne　fait pas attention.
　　　 ON　catches　a　cold　if　ON　NEG　do　NEG　attention
　　　 'One catches a cold if one does not pay attention'

Thus it is no surprise to find pronominal *man* in this same configuration in ME:

(18) Wel　gratter þing his huanne **me**　is　zuo yuestned　　ine
　　 well greater thing is　when　　man　is　so　established in

　　 þe　loue and adrayngt in þe　zuetnesse of god. þet no
　　 the love and drunk　　in the　sweetness　of God that no

　　 solas ne　no confort **me**　ne　　onderuangþ: bote of him.
　　 joy　NOR no comfort man　NEG take　　　but　of him
　　 'It is a much greater thing when one is so firm in the love of God and inebriated by his sweetness that he does not take any joy or comfort but from him'
　　 (CMAYENBI,107.2082)

In the example in (18), the two instances of co-referent pronominal *man* are the reduced form *me*, tagged as MAN in the PPCME2. They correspond to *on* in the original French text:

(19) plus est grant　chose quant **on** est si　afermez　　　en
　　 more is　grand thing　when　ON is　so　established in

　　 l'amour et　　abuvrez de la　douceur　Dieu que nul solaz
　　 the-love and drunk　of the sweetness God　that no joy

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[18]　French *on* in (17c) is a reduction of *hom* 'man'.

ne nul confort **on** ne reçoit se de lui non,
NEG no confort ON NEG receives if from him NEG
'It is a greater thing when one is so firm in the love of God and ine-
briated by his sweetness that he does not receive any joy or comfort
if not from him'
(SOMME LE ROI 158, p.216)

What is really surprising, however, is that the corresponding
passage in *Vices*, given in (20a), has two instances of *a man* in the same
configuration, and they are co-referential. This example in *Vices* is not
isolated, because there are two analogous cases in the Chaucer texts, given
in (20b-c):

(20) a. and wel gretter þing is it whan **a man** is so affermed
and well greater thing is it when a man is so established

in þe loue and so dronke in þe swetnesse of God þat no
in the love and so drunk in the sweetness of God that no

solas ne counfort sauoureþ **a man** nouȝt but on liche of hym
joy nor comfort savours a man NEG but un like of him
(CMVICES4,106.181)

b. and that is when **a man** ne douteth no travaille in tyme
and that is when a man NEG fear no toil in time

comynge of the goode werkes that **a man** hath bigonne.
coming of the good works that a man has begun
(CMCTPARS,313.C1.1061)
'and this is when one does not fear the future toil for the good
works that he has begun'

c. therfore sholde **a man** fle and eschue werre in as
therefore should a man flee and avoid war in as

muchel as **a man** may goodly
much as a man may possibly
'therefore one should flee and avoid war as much as one may at
all do so'
(CMCTMELI,235.C1.696)

The existence of these examples indicates that not only *man* (or some reduced form thereof) but also *a man* could be re-analysed (or grammaticalised) as an impersonal pronoun. Thus, while Table 3 may give the impression that *Vices* has abandoned pronominal *man*, this is in fact not true; it still has pronominal *man*, *albeit* in a totally unexpected form: *a man*.

It is very difficult to determine how many of the 29 instances of *a man* in *Vices* and the 136 in Chaucer (25 in *Tale of Melibee*, 111 in *The Parson's Tale*), are pronominal. Of course, there are also cases in which two instances of *a man* receive disjoint reference:

(21) Eek if **a man**, by caas   or aventure, shete   an arwe, Or
      also if a man by chance or accident shoots an arrow or
      caste a   stoon, with which he sleeth **a   man**, he is homycide
      casts a stone with which he kills   a   man he is murderer
      'Also, if someone, by chance or accident, shoots an arrow or casts
      a stone with which he kills someone else, he is a murderer'
      (CMCTPARS,306.C2.762)

However, this is not an argument to consider them non-pronominal, as shown by the following French example, where the two uses of *on* receive disjoint reference:

(22) **On**$_i$ dit maintenant qu' **on**$_k$ doit manger 5 légumes   par jour.
      ON   say now   that ON must eat   5 vegetables per day
      'They say now that one must eat 5 (servings of) vegetables per day'
      (Cabredo-Hofherr 2008:7)

In sum, examples such as those in (20) add a new piece to the puzzle of the 'degrammaticalisation' of *man*, showing that not only the simple form *man* and the reduced form *me* but also the complex form *a man* could be instances of pronominal *man*. Whether this complex form of pronominal *man* directly contributed to its eventual loss is a topic that we leave for future research, but it is clear that this form cannot be omitted from any account of the loss of pronominal *man* in English.

5. Conclusions

This pilot study presents two novel empirical findings: first, we show with quantitative evidence that the modern 'indefinite article' is clearly established by the end of the fourteenth century, with a puzzling lack of variation; second, we present original syntactic evidence that the complex form *a man* could also be a grammaticalised impersonal pronoun in ME.

These findings open the way for new lines of investigation. First of all, it would be desirable to understand the reasons for the lack of ME texts displaying real variation in the use of *a(n)*; this question can be addressed by enlarging the empirical base to gain a more complete picture of the diachronic development that led to the final establishment of the 'indefinite article' in the modern sense. Then, there is the intriguing problem of the morphosyntactic analysis of pronominal *a man* and its role in the eventual demise of pronominal *man* in English. These topics are left for future research.

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Possible contributions of Ethnopragmatics to second language learning and teaching

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Abstract

The purpose of this paper is to explore the possible pedagogical application of the theory of *Ethnopragmatics* in the field of second and foreign language learning and teaching with the purpose of promoting intercultural communicative competence. This theory has been developed in recent years by Anna Wierzbicka, Cliff Goddard and associates and can be seen as part of the broad paradigm of Cognitive Linguistics. Unlike other theories of pragmatics, its focus is on examining cultural aspects of language and communication from an insider's perspective, without relying on universal concepts such as politeness, directness/indirectness, etc. that can be foreign to many cultures. Its main methodological tool is Natural Semantic Metalanguage, a small number of very simple concepts that are found in all languages and which can be used to explain more complex and language specific concepts.

1. Introduction

For a couple of years I had the pleasure of sharing with Johanna Wood the planning and teaching of a course on Intercultural Communication. In this course, among other things, we focused on pragmatics from two different perspectives: an *etic* perspective represented by the universalist and "classical" theories of pragmatics by Grice, Austin, Brown & Levinson and Sperber & Wilson, and an *emic*[1] perspective in the newer and still

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[1]   *Etic* and *emic* refer to two opposite ways of studying culture: from an external, comparative point of view, on the one hand, and an internal or insider's point of view, on the other (Spencer-Oatey & Franklin 2009:16).

developing theory of Ethnopragmatics – sometimes called intercultural semantics/pragmatics – (Wierzbicka 1985, 1991, 1996, 1997, 1999, 2005, 2006a, 2010; Goddard 2004, 2006, 2010). Discussing with Johanna and working on this course with the emic perspectives on culture awoke my interest in exploring the pedagogical application of such theories in connection with an area that occupies a good part of my research: intercultural communicative competence in foreign language learning and teaching. Therefore, it is fair to say that I owe Johanna and our course on Intercultural Communication at least part of the inspiration for my present line of study.

The aim of this article is to present the possible applications of Ethnopragmatics to the area of foreign and second language learning and teaching and, in particular, its contribution to the development of intercultural communicative competence. For that purpose, I will start with a presentation of the concept of intercultural communicative competence, which is central to foreign language teaching today, and I will discuss the challenges that both teachers and learners are faced with, when learning a foreign language means much more than acquiring a "correct" use of the language in terms of grammar, vocabulary and pronunciation. I will give a brief introduction to the theory of Ethnopragmatics, including its main methodological tool, Natural Semantic Metalanguage, and I will present current and developing applications in the field of education. The article is exploratory and programmatic in nature, as much is still to be done in order to bring Ethnopragmatics into the language classroom.

2. Intercultural communicative competence

In the last decades, there has been a clear evolution in how foreign and second language learning and teaching are conceived. A shift can be traced from the previous focus on grammatical structures as organizing principle, through an interest in notional and functional content (i.e. functions of the language such as introducing oneself, asking for help, making an invitation), which acted as stepping stone to the more recent communicative approach, with its focus on *communicative competence.* Here, the goal is to allow learners/speakers[2] to use the language in authentic communication situations (Pozzo & Fernández 2008).

Communicative competence requires much more than a mere linguistic competence or ability to produce correct language. Although

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[2]   Learners are from the very beginning considered "language users" in this approach.

grammar, vocabulary and pronunciation rules still need to be acquired, they must be supplemented by other kinds of knowledge and competences: a pragmatic competence that implies knowing how to communicate adequately in a given context, a discourse competence, or ability to go beyond sentence level to create cohesive and coherent - oral and written, dialogic and monologic - text, and, finally, a strategic competence which allows foreign language users to compensate for lacking vocabulary or constructions by making use of resources such as body language, ad hoc translations or word coinage, help from others, etc.

The aforementioned competences comprise many relevant aspects of language, but the approach has nevertheless been criticized for having merely an instrumental goal and for paying little attention to the cultural features of each particular language (Porto 2013). Something was still missing if language teaching was to contribute to creating "intercultural speakers" (House 2008) or citizens of the world who not only can make themselves understood in intercultural encounters, but also have a deep insight in other cultures and an open and receptive attitude to "others". An additional competence dimension was needed to embrace this requirement and thus the concept of *intercultural communicative competence*, coined in the 1990s by Michael Byram (1997), became the key to a wholly new turn in language teaching. Particularly the Council of Europe (2001) adopted this intercultural approach in the cornerstone document *Common European Framework of Reference for Languages* (CEFR), where intercultural competence is defined to include knowledge, skills and attitudes. Among the skills, the CEFR mentions:

> ›   the ability to bring the culture of origin and the foreign culture into relation with each other;
> ›   cultural sensitivity and the ability to identify and use a variety of strategies for contact with those from other cultures;
> ›   the capacity to fulfil the role of cultural intermediary between one's own culture and the foreign culture and to deal effectively with intercultural misunderstanding and conflict situations;
> ›   the ability to overcome stereotyped relationships (Council of Europe 2001: 103-104)

and as to attitudes,

> › openness towards, and interest in, new experiences, other persons, ideas, peoples, societies and cultures;
> › willingness to relativise one's own cultural viewpoint and cultural value-system;
> › willingness and ability to distance oneself from conventional attitudes to cultural difference. (Council of Europe 2001:105)

This proposal responds to the Council of Europe's expressed wish to defend European language diversity as a valuable resource that can contribute to mutual understanding and enrichment:

> It is only through a better knowledge of European modern languages that it will be possible to facilitate communication and interaction among Europeans of different mother tongues in order to promote European mobility, mutual understanding and co-operation, and overcome prejudice and discrimination. (Council of Europe 2001:2)

This understanding of intercultural competence goes beyond the idea of "multiculturalism", which only implies knowing *about* other cultures (Cerezal 1999). Raising intercultural consciousness means favouring dialogue, positive curiosity and real exchange. In a sense, the speaker is not the same after the intercultural encounter or experience (Kumaravadivelu 2003). Byram's famous model (1997:34) shows how comprehensive this competence is and how many aspects of cognition, behaviour and emotion it affects:

	Skills Interpret and relate (*Savoir comprendre*)	
Knowledge of self and other; of interaction: individual and societal (*Savoirs*)	**Education** political education critical cultural awareness (*Savoir s'engager*)	**Attitudes** relativising self valuing other (*Savoir être*)
	Skills discover and/or interact (*Savoir apprendre/faire*)	

Figure 1 – Byrams model of intercultural communicative competence (1997:34)

The European document has of course resonated around the continent and in countries around the world, and Denmark has not been an exception. In the next section, a brief characterization of the Danish understanding of the concept will be presented.

2.1. Intercultural communicative competence in the Danish educational system

The first line of the ministerial study programs for all foreign languages at the upper secondary school[3] level reads: "X [name of the language] is a subject of skills, knowledge and culture".[4] From the very beginning it is made clear that language subjects are much more than just learning the language. A close reading of the ministerial documents reveals that the culture aspect of the subject must be understood in terms of intercultural consciousness-raising rather than a mere multicultural approach. I base this conclusion on formulations such as the following (Undervisningsministeriet 2006):

> Gennem arbejdet med tysk sprog opnår eleverne kompetence til at kommunikere på tysk og indsigt i kulturelle, historiske og samfundsmæssige forhold i tysksprogede lande. Dette giver lyst og evne til at reflektere over og med forståelse gå i dialog med andre kulturer.
>
> (*Through the work with the German language, students obtain competence to communicate in German and insight into cultural, historical and social conditions in the German-speaking countries. This gives the desire and ability to reflect on other cultures and, based on understanding, engage in dialogue with other cultures.*)

> Engelsk som kulturfag betyder, at faget er en døråbner til andre kulturer. Eleverne opnår i mødet med det fremmede en mulighed for at sætte deres egen kultur i relief. Færdigheder og viden erhvervet i engelsk udvikler elevernes forståelse af egen kulturbaggrund og

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3   I choose to focus on this educational level as it is here where most foreign languages are introduced to the Danish student. English is introduced in the first grade of primary school and either German or French are introduced in the fifth grade, but it is in upper secondary school where the most systematic language work is done. At university level, unfortunately, only students enrolled in language studies are trained in foreign languages (with very few exceptions).

4   My own translation of "[X] er et færdighedsfag, et vidensfag og et kulturfag" (see Undervisningsministeriet 2006).

danner grundlaget for, at de kan kommunikere på tværs af kulturelle grænser uden kulturelt betingede misforståelser.
(*English as a culture subject means that the subject is a door opener to other cultures. The students get, in the meeting with the other, an opportunity to put their own culture in relief. The skills and knowledge obtained in English develop students' understanding of their own cultural background and provide the basis that allows them to communicate across cultural boundaries without cultural misunderstandings.*)

Studiet af italiensk kultur og litteratur giver viden og indsigt, som bibringer eleverne såvel forståelse af italiensk samfund og kultur som øget omverdensforståelse og interkulturel bevidsthed. Italiensk A giver kendskab til en kultur, der spiller en væsentlig rolle i Europas kulturelle udvikling og skærper elevernes æstetiske opmærksomhed. Endelig sætter italienskfaget eleverne i stand til gennem kulturmødet at reflektere over egen kultur i sammenligning med den italienske kultur.
(*The study of Italian culture and literature provides knowledge and insight that brings students both an understanding of Italian society and culture and increased understanding of the world around them and intercultural awareness. Italian A provides knowledge of a culture that plays a significant role in Europe's cultural development and sharpens students' aesthetic awareness. Finally, the subject Italian allows students, through the meeting of cultures, to reflect on their own culture in comparison with the Italian culture.*)

Samtidig skal eleverne opleve spansk som en del af deres egen kulturelle bagage, som de kan anvende i deres møde med andre kulturer.
(*At the same time, the students must experience Spanish as part of their own cultural baggage, which they can use in their meetings with other cultures.*)

The ministerial documents define intercultural competence on the basis of a report from 2003 where the following four competences are mentioned as the cornerstones of language education:

- Foreign language as a window to the world
- Communication with L2-speakers relevant to the student
- Aesthetic understanding and response
- Intercultural transmission (Undervisningsministeriet 2003)

Interestingly, each of these competences covers one or more aspects of intercultural communicative competence as defined by Byram and the Council of Europe, which makes it clear that Denmark has adopted the intercultural approach recommended by the CEFR. The question is whether this declaration of intent is put into practice, and whether Danish foreign language teachers are equipped for the task, from the point of view of institutional support, training and availability of suitable materials. One visible problem arises already in the very same ministerial documents: the intercultural focus seems to be quite absent from evaluation criteria for foreign language subjects. These criteria do not seem to surpass the mere "knowledge" level regarding culture. At the time of evaluating learning in foreign language, the focus seems to lie on traditional linguistic performance and, at the most, on some kind of cultural contextualization**.**

In the next section, I will focus on the more practical aspects of implementing intercultural language learning and teaching and I will outline some of the challenges faced by both teachers and learners.

3. Focusing on culture – challenges and needs

One of the main challenges to the implementation of interculturally oriented language teaching is probably changing the mindsets of teachers and learners, who still picture the language classroom as a place for purely or mostly linguistic training. In two studies carried out in Denmark by Fernández (2009) and Andersen & Blach (2010), both learners and teachers rank "culture" as the least important aspect of language learning and teaching compared to the four skills, grammar and even translation.
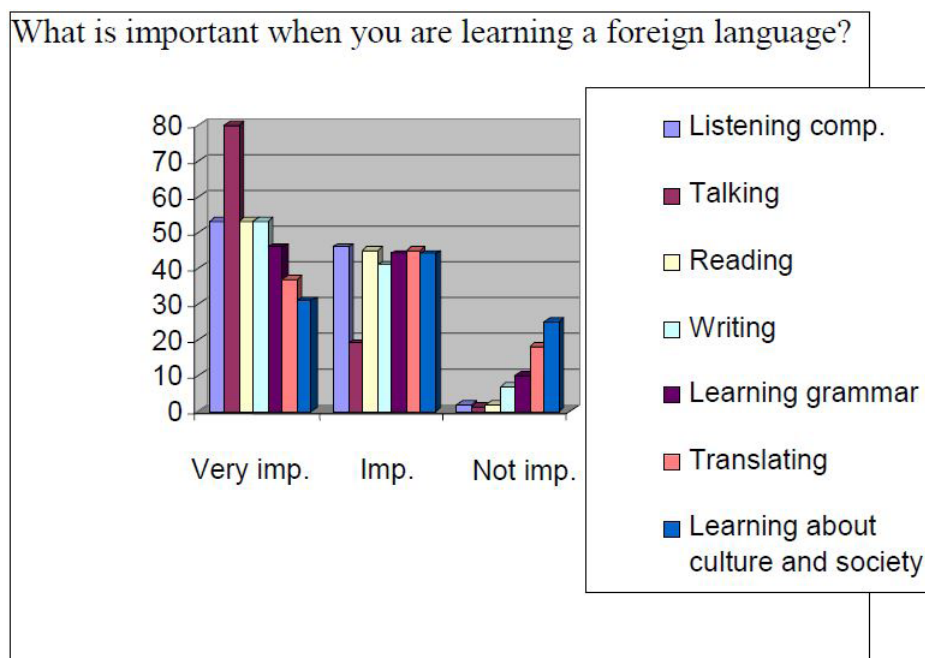
Figure 2 - Importance of the cultural component to (86 % of) students enrolled to start a foreign language study at Aarhus University in 2008/2009 (n=123) (Fernández 2009)

Also teacher cognition studies carried out around the world with focus on the intercultural aspects of language teaching – Aleksandrowicz-Pedich *et al.* (2003), Sercu, Méndez García y Castro Prieto (2005), Jedynak (2011), Young & Sachdev (2011), Koike & Lacorte (2014)[5] – have revealed that language teachers have difficulties in either understanding the concept of "intercultural competence", finding time or resources to implement it in the classroom or going beyond a mere "informational" approach (i.e. the sole transmission of information or facts about the target culture/society). Alleged explanations for these deficiencies are defective teacher training, disinterest on the part of the learners, lack of institutional support, lack of suitable classroom materials, reluctance to introduce controversial topics in the classroom, lack of sustained contact with the target culture by the teacher, etc.

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[5] For a more detailed presentation of these studies see Fernández (in press).

Fernández (in press)[6] reaches a somewhat similar conclusion in a cognition study of Spanish teachers in Denmark. The main findings of this study are:

- Danish teachers of Spanish are well aware of the fact that intercultural competence goes beyond just learning about the target culture. For instance, they rank "ability to compare and reflect about different cultures, including one's own culture" and "ability to accept that other people are different" as two very important aspects of intercultural competence. Nevertheless, some teachers declare themselves uncertain of the concept of intercultural competence.
- They have substantial difficulties in finding time and resources to implement an intercultural focus, as they are engaged in teaching the basic linguistic aspects of Spanish. An anonymous teacher participating in the study comments: "It is not because it is not important, but it soon becomes something that is set aside when you are under pressure because the students have to know a lot of grammar to pass the exam, etc."[7]
- As could be read in the comment quoted above, it is the impression of the teachers that intercultural competence is not in focus in the official Danish exam, which may contribute to explain why they feel pressed to concentrate their efforts on other aspects of language learning.
- 58% of the participating teachers find that the available teaching materials are inadequate.
- 65% of the respondents state that intercultural competence was not in focus in their teacher education.

The last two aspects, teaching materials and teacher training, will be central to the purpose of this article, as it seems evident that, in order to achieve interculturally oriented foreign language teaching, teachers need to be endowed with suitable resources, both material and cognitive. Therefore,

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[6] This study was replicated in the city of Rosario, Argentina, with Spanish teachers of several countries. The results are somewhat similar to the ones obtained in the Danish study, and can be read in Fernández & Pozzo (2013 and 2014).

[7] *"No es que no sea importante, pero pronto se convierte en algo que se deja de lado cuando se está bajo la presión de que los alumnos tienen que saber mucha gramática para poder aprobar el examen escrito, etc."*

the rest of the article will discuss how the methodology and findings of a particular theory – Ethnopragmatics – can contribute to enriching both language teaching materials and the teachers' own knowledge and perception of their target "languaculture" (Agar 1994, Risager 2004). The focus will be on reinforcing the presence of pragmatic aspects of language and, at the same time, engaging in a specific view of pragmatics that is particularly sensitive to and respectful of individual cultural differences.

4. Pragmatics in language teaching

Pragmatics has been defined as "the study of language from the point of view of users, especially of the choices they make, the constraints they encounter in using language in social interaction and the effects their use of language has on other participants in the act of communication" (Crystal 1997: 301). Traditionally, pragmatics has been seen as comprising two different aspects, labelled *sociopragmatics* and *pragmalinguistics*, respectively. The former is defined as "one's understanding of the sociocultural meaning potential of language in its contexts of use" (van Compernolle 2013:74), while the latter refers to the actual wording of speech acts. Sociopragmatics is a more subtle, intangible aspect of pragmatics and is therefore particularly tricky in a foreign language context. It can be difficult for speakers of any language to be aware of the cultural implications of their language use, as sociopragmatic rules are intuitive and implicit for native speakers. At the same time, they are not necessarily obvious to non-native speakers, who are possibly guided by different sociopragmatic rules. This, of course, may lead to intercultural misunderstandings. It has been proposed that foreign language learners, even when they know the pragmatic norms of the target language, can consciously choose not to follow them, as they do not wish to identify themselves with the foreign culture's beliefs and values (Kinginger and Farrel 2004, Kinginger 2008).

The importance of including sociopragmatic instruction in the foreign language classroom can thus not be overstated. Belz (2003) suggests that educators play a central role in making learners aware of cultural differences in order to avoid misunderstandings and stereotypes, which implies that educators have to be well-trained in these differences. It is not enough with simple exposure to the L2 culture in order for learners to acquire sociopragmatic awareness and, therefore, different teaching strategies have been tested. For example, van Compernolle (2014) insists

on the benefits of providing students with verbalization activities which allow them to mediate and regulate the understanding of sociopragmatic aspects of language. Takahashi (2010) concludes that explicit L2 pragmatics instruction is more effective than implicit instruction. Martí & Fernández (in press) employ non-native group discussion sessions after online intercultural exchanges (between natives and non-natives) as a tool for raising sociopragmatic awareness.

In spite of the fact that it has been strongly recommend in the literature that sociopragmatic aspects of language use are included in the foreign language classrooms[8], both sociopragmatic and even pragmalinguistic contents remain scarce in many teaching materials, as pointed out by several authors (e.g. Miquel & Sans 2004, Pozzo & Fernández 2008, Peeters 2013, Ambjørn 2015). Arguably, they are also to a certain extent absent from language teaching education.

If pragmatics thus deserves a more central role in the foreign language classroom than it has had so far, the next question that has to be answered is what theory of pragmatics can best suit this need.

5. An introduction to Ethnopragmatics
The theory of Ethnopragmatics has been under development during the last thirty years in the work of Anna Wierzbicka (e.g. 1985, 1991, 1996, 1997, 1999, 2005, 2006a, 2010) and later also Cliff Goddard (e.g. 2004, 2006, 2010). Wierzbicka has written extensively about cultural specific words and cultural keywords, establishing an area of study that can be labelled as *intercultural semantics*. The work has extended also to *intercultural pragmatics*, with the description of *cultural scripts*, or ways of communicating and behaving verbally in a particular culture. Common to both areas of study is the belief that most concepts and socially established verbal behavior are language/culture specific, but can be explained to others by using a set of very basic, unanalyzable concepts, called *semantic primes*, that exist in all languages as word-meanings

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[8] Not only theoreticians demand an enhanced pragmatic focus. In a survey conducted in 2015 among 8 Danish university students of Spanish who had just returned from their semester abroad in a Spanish speaking country, the author of this article found that the students felt a lack of sufficient previous pragmatic knowledge in their interactions with native speakers. They expressed that training in rules of address and greeting, colloquial language and general communicative rules for a university student would have been useful prior to their trip.

(Goddard 2010). This set of so far[9] 63 concepts (see Table 1 below for the English version), together with the grammatical rules that allow their combination, have been termed *Natural Semantic Metalanguage* (NSM)*. It constitutes the theory's main methodological tool and can be seen as a non-technical and culturally neutral minilanguage for cultural description, a kind of conceptual lingua franca (Goddard & Wierzbicka 2007). Since 2006, the term *Ethnopragmatics* has been used to encompass this whole line of study.[10]

Table 1 – Semantic primes, English version (from Goddard 2010)
Primes exist as the meanings of lexical units (not at the level of lexemes). Exponents of primes may be words, bound morphemes or phrasemes. They can be formally complex. They can have combinatorial variants (allolexes, indicated by ~). Each prime has well-specified syntactic (combinatorial) properties.

I, YOU, SOMEONE, SOMETHING~THING, PEOPLE, BODY	substantives
KIND, PART	relational substantives
THIS, THE SAME, OTHER~ELSE	determiners
ONE, TWO, SOME, ALL, MUCH~MANY	quantifiers
GOOD, BAD	evaluators
BIG, SMALL	descriptors
THINK, KNOW, WANT, FEEL, SEE, HEAR	mental predicates
SAY, WORDS, TRUE	speech
DO, HAPPEN, MOVE, TOUCH	action, events, movement, contact
BE (SOMEWHERE), THERE IS, HAVE, BE (SOMEONE/SOMETHING)	location, existence, possession, specification
LIVE, DIE	life and death
WHEN~TIME, NOW, BEFORE, AFTER, A LONG TIME, A SHORT TIME, FOR SOME TIME, MOMENT	time
WHERE~PLACE, HERE, ABOVE, BELOW, FAR, NEAR, SIDE, INSIDE	space
NOT, MAYBE, CAN, BECAUSE, IF	logical concepts
VERY, MORE	intensifier, augmentor
LIKE	similarity

[9] The list has been under development for some years through a trial and error process, and new primes have been added along the way.

[10] *Ethnopragmatics* is the title of an edited volume by Goddard (2006).

Cultural keywords are salient words from a particular language that act as "guiding words", as they embody a particular value or a set of values that is central to the culture in question (Levisen 2012:70). They are defined by Goddard (2005:78, quoted in Levisen 2012) as "highly salient and deeply culture-laden words which act as focal points around which whole cultural domains are organized". These words are frequent, relatively simple and derivationally and phraseologically productive. They often appear in book titles, songs, set-phrases, proverbs, slogans and the like. Although there is no established "recipe" for identifying such words, one way to approach the task is doing corpus analysis in search for linguistic evidence. Other methods like questionnaires, discourse-completion tasks, role-plays, etc. have also been used (Goddard & Wierzbicka 2007). Levisen (2012) has made a thorough analysis of some Danish cultural keywords, including *hygge, tryghed* and *lykke*.

Cultural scripts do not describe the semantic content of particular words, but rather focus on shared values, beliefs and ways of behaving and speaking in a given society. In Wierzbicka's words (2006b:35) they are "shared understandings (of a given community of discourse), especially evaluative, prescriptive or proscriptive ones, articulated in universal human concepts". Cultural keywords and cultural scripts share the fact that they are articulated using the same Natural Semantic Metalanguage, which has the advantage of allowing non-experts to understand the descriptions, as no technical words are used (i.e. obscurity is avoided because complex cultural concepts are not explained by even more complicated or technical concepts). NSM also contributes to overcoming ethnocentrism and anglocentrism, as the NSM has no cultural bias (as opposed to technical words used in other lines of pragmatics, such as "politeness", "face", "autonomy", etc.). The use of the common NSM makes it viable to link cultural keywords and scripts (Goddard 2006:11), and this is particularly interesting as many cultural keywords give rise to related cultural scripts. In order to exemplify this, the "semantic explication" (also called "reductive paraphrase") of the Danish cultural keyword *hygge* is presented as example 1), and two related cultural scripts are reproduced in examples 2) and 3).

1)   *A semantic explication for hygge*
       something
       people can say what this something is with the word *hygge*
       someone can say something about something with this word when
       this someone thinks like this about a place:

  a. it can be like this:

  b. good things are happening in this place, because people are with other people now in this place for some time

  c. during this time people want to do some things with the other people in this place, they don't want to do many things
they want to say many things to the other people in this place

  d. people in this place think like this at this time:
"people here are like part of one thing now
people here want all people here to feel something good now
bad things cannot happen to people here now"

  e. when it is like this in a place, people in this place can feel something good,
like people can feel something good when they are somewhere *warm* "warm, hot" [m][11]
because of this, these people want this place to be like this for some time

  f. it is good if it can be like this in a place for some time (Levisen 2012: 91-92)

2) *A Danish hygge social script against, roughly, "being verbally dominant"*
many people think like this:
when there is *hygge* [m] in a place,
it is good if everyone in this place can say something all the time
it is bad if one someone in this place wants to say something all the time
it is bad because if it is like this, other people can't say what they want to say (Levisen 2012:103)

3) *A Danish hygge script against, roughly, "raising sensitive issues"*
Many people think like this:
When there is *hygge* [m] in a place, it is bad if someone says something, if this someone knows that some people in this place can feel something bad because of it (Levisen 2012:105)

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[11] [m] stands for "molecule", a more complex concept than a semantic prime, but which has been or can be explained through a reductive paraphrase (semantic explication) by means of semantic primes and can therefore participate in the definition of other concepts.

6. Discussion of pedagogical implications

To my understanding, the area of interest and the methodological approach proposed by Ethnopragmatics offers a number of interesting perspectives for second and foreign language teaching which will need to be further explored and exploited in the future.

In the first place, so far, little systematic attention has been paid outside this theory to central culturally-laden words that crucially represent aspects of self-understanding of a given group, although knowledge and understanding of such words seems intuitively indispensable for a second language learner and user – particularly because one's own native cultural keywords can easily be misunderstood as universal, or at least as cross-cultural, and lead the L2 user to communicational misunderstanding and, at worst, conflict (think for instance of the so called "Mohamed cartoon conflict" that arose in 2005 because of the clash between the Danish cultural keyword "freedom of expression" and opposing religious values in the Moslem world).

Likewise, cultural scripts offer invaluable insight into what to expect when communicating across cultural boundaries. It can be argued that working with cultural scripts surpasses what can be achieved with a mere speech act approach, as not only the speech act itself but the reasons and underlying assumptions behind the speech act (or a group of speech acts) can be readily grasped in the cultural script. For instance, the Anglo-English cultural script of "personal autonomy"[12] can have an impact in the wording and interpretation of various speech acts, such as requests, invitations and refusals. Therefore, explanations of both cultural keywords and cultural scripts would be a welcome way of introducing more pragmatic content in foreign language teaching materials.

Secondly, working with NSM, a "core or basic vocabulary" (Goddard & Wierzbicka 2004:105), appeals, at least intuitively, to its application in the L2 classroom, where lack of advanced linguistic resources on the part of the learners is often stated as one of the reasons why little attention is paid to cultural aspects of language, particularly at beginning levels. It can be argued that much of the NSM vocabulary will be known (or can be taught) to the L2 learner already after a few lessons, and this seems to offer a pedagogical advantage to be explored. Nevertheless, it has been

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[12] An Anglo English cultural script for "*personal autonomy*"
   Many people think like this:
   When someone does something, it is good if this someone can think like this:
   "I am doing this because I want to do it". (Goddard 2010:109)

pointed out that reading semantic explications or cultural scripts written in NSM can at first sight seem odd and unnatural (as the reader perhaps experienced when reading examples 1-3 above) and, therefore, Goddard himself (2010:114-115) has proposed a series of adjustments that can be done to cultural scripts in order to render them more reader-friendly in a pedagogical context. He suggests making an explicit reference to the L2 country, switching to directives, replacing peculiar constructions like "this someone" with "he/she" and adding contrasting information with L1 culture as possible solutions. An example of such a pedagogical script is given in 4).

4) *A pedagogical script for how not to make a "request" in English*
   In America/Britain/Australia, when you want someone to do something good for you,
   at many times you can´t say something like this to him/her:
   "I want you to do something good for me. I think that you will do it because of this."
   If you say something like this to someone, he/she can feel something bad. (Goddard 2010:115)

Cultural scripts are already present in intercultural communication courses (Goddard & Wierzbicka 2007) and in manuals on intercultural communication (e.g. Jackson 2014), but, as mentioned above, they appear to be absent from foreign language learning manuals, at least the ones available in Denmark, to my knowledge. Therefore, exploring the drafting of "pedagogical scripts" as proposed by Goddard (2010) and testing their usage in the L2 classroom seems like a pending task. This implies, at the same time, exploring cultural scripts in a broader number of languages, as little systematic work has been done so far in some of the foreign languages taught in Denmark, such as Spanish (see Travis 2006, though), German, Italian or Chinese (but see e.g. Ye 2006). It also implies, of course, adding Ethnopragmatics to the language teacher training curriculum, as teachers' understanding of this area is crucial for their classroom performance.

Lastly, another point to consider is applying the technique of reductive paraphrase and cultural script drafting as an instrument of thought and cultural self-evaluation on the part of the learner. So far, this technique has been used by researchers to create publishable descriptions. My proposal is to consider its application not only as a finished product to be read in printed materials, but as a classroom technique with potential to promote

learner's awareness. I have applied this technique in several contexts (with university students of Spanish and of intercultural communication as well as at training courses for pre-service and in-service language teachers) by asking the learners/attendants to draft NSM-based reductive paraphrases of cultural keywords or cultural scripts belonging to their own culture. These experiences have had surprisingly positive results (surprising in the sense that learners did not receive extensive training in the use of NSM prior to the task, but were still able to produce interesting and insightful descriptions). As an illustration of this, consider example 5) below, which reproduces the semantic explanation of the Danish keyword *højskole* produced by a group of bachelor students in the subject "Intercultural Communication" in 2012:

5) A place that you move to for some time to know something more about something.
   People are there because they want to.
   People at this place are part of one thing.
   Good things happen in this place because you are with other people.
   People at this place think like this:
   I want to know something about people and things
   I want to think about big things and small things
   I want to be with other people
   I want to feel and have good moments

Taking into account the importance of having self-awareness as to the peculiarities of one's own culture as a first step in the pursuit of intercultural communicative competence, this application of the NSM approach rather as a process (of thought) than as a product deserves further exploration in the future.

7. Conclusion
In this paper I have discussed the importance of raising intercultural communicative competence in foreign and second language learning and teaching and I have, with particular focus on the Danish context, sketched some of the difficulties faced by teachers when pursuing this task, including lack of adequate training and teaching materials and presence of other more pressing concerns like teaching basic language skills. I have argued that the work developed in recent years by the theoretical approach labelled *Ethnopragmatics*, a branch of Cognitive Linguistics, can probably inform foreign language teaching in fruitful ways if work is done to develop a more

pedagogically oriented version of ethnopragmatic descriptions in a wider number of languages, and this is put to test in classroom interventions and the elaboration of new teaching materials. The potential of this theoretical approach for the promotion of intercultural communicative competence lies in its effort to unravel the mechanisms, values, beliefs and norms that control the verbal behavior of a particular cultural group and in doing so without a predetermined cultural bias.

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Impersonal and referential null pronouns: some thoughts

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Abstract

Johanna Wood has been fascinated by the history of the DP for an extended period (Wood 2003; 2007). For a Festschrift in her honor, it therefore seemed appropriate to look at a kind of DP, the impersonal. She also compiled a list of instances of *pro*-drop in the texts of the early 13th century Middle English Katerine-group using the Penn-Helsinki Corpus (cf. van Gelderen 2000: 139-145) and this article[1] will therefore look at the impersonal in the texts of the Katerine-group. Because the presence of referential *pro*-drop has been linked to null impersonal pronouns (e.g. in Weerman 2007:18), I decided to examine this particular relationship. I will do that in a non-quantitative way by looking at limited examples in selected texts. I conclude that there are null referential pronouns but no null impersonal pronouns in the Katerine-group and that there is also an overt impersonal subject *me*. This shows the correlation between the presence of null referential and impersonal pronouns does not hold. In the last section, I provide some observations on the changes affecting impersonal pronouns after Middle English.

1. Introduction

Impersonal pronouns refer to generic but human entities, and they typically occur only in subject position. Giacalone Ramat & Sansò (2007), Sigurðsson & Egerland (2009), Siewierska (2011), and Gast & van der Auwera (2013) have given definitions and typological descriptions of these constructions. The topic has also stimulated diachronic work over a prolonged period, for instance, Weerenbeck (1943), Fröhlich (1951), and Jud-Schmid (1956) to name a few.

The impersonal pronoun has experienced many changes in the history of English. In Old and Middle English, variants of the noun *man* are used (*man(n), men*, etc.) but by late Middle English *they, one, we, folk*, or the second person singular or plural pronouns get to be used (cf. Mustanoja 1960:219-227). Mustanoja notes that Middle English *man* can be used as subject, object, or attributive genitive but, especially in the latter use, retains a nominal character. The impersonal use of *man* and its variant forms "enjoys the greatest popularity" (220) in early Middle English but there is "a steady decrease" (221) throughout Middle English.

More recently, there has been work on the impersonal pronoun by van Gelderen (1997), van Bergen (1998), Los (2002), Cabredo Hofherr (2006), and Weerman (2007). These authors look at internal causes such as grammaticalization and paradigmatic reorderings. Van Gelderen focusses on the changes that seemingly go back and forth from the noun to the impersonal pronoun to the noun. She argues that this is because some texts use a more grammaticalized version of the impersonal pronoun. The internal grammar may get conflicting evidence and therefore the impersonal pronoun may have a different number feature for different speakers. Van Bergen shows that the Old English impersonal *man* patterns with the other pronouns in terms of word order and not with nouns. Los (2002) notes that this pronoun is lost in the 15th century and that it is similar to the Dutch impersonal cognate *men* in that it is only used as subject and only in the singular. She relates the loss of *man* in English to the loss of Verb-second. Weerman (2007) does not think this scenario is likely because in Dutch, *men* is losing ground although Verb-second is strong. He follows Cabredo Hofherr's (2006) suggestion of a connection between *pro*-drop and the absence of impersonal, impersonal subjects: if referential subjects can be unexpressed so are impersonal ones. Like *pro*-drop, i.e. null referential subjects, impersonals appear only in subject position and only in finite clauses. That idiosyncrasy of only appearing as finite subject, however, is the reason according to Weerman for the frequent demise, e.g. in English and Dutch: it does not quite fit with the other pronouns.

Weerman (2007) does not look at English texts specifically and, in this paper, I would therefore like to examine his claim about the connection of *pro*-drop and null impersonals by looking at impersonals in Middle English texts that retain *pro*-drop, namely those of the Katerine-group. I first give a quick overview of the overt impersonal pronoun in Old and Middle English in section 2 and then, in section 3, provide some data on *pro*-drop and impersonal subjects in texts of the Katerine-group. In section 4, I discuss the reasons for the demise of certain impersonal pronouns.

2. Old and Middle English

In Old English, *man* and *mon* are used as impersonal pronouns and as full nouns. Very often, the impersonal pronoun will be used in cases where modern English would use a passive (Quirk & Wrenn 1955:73; 81). In *Beowulf*, there are 25 instances of a nominative singular *man* and *mon* and six of these are impersonal, as in (1), according to Klaeber (1941:376).

(1)   Swa   sceal **man** don
        so   shall IMP   do
        'One should act like that.' (*Beowulf* 1172, Klaeber's edition)

There are, of course, many instances of *man/mon* that occur with *ænig* 'any' and, although they have an impersonal meaning, they are clearly nouns. There are also genitive, dative, and accusative forms that are clearly nominal.

When the form is used in its impersonal meaning, the agreement on the verb is generally third person singular. Wülfing (1894:457) says that the impersonal use of *man* usually triggers singular agreement in Alfredian prose. Fröhlich (1951:30 ff) mentions some examples in Old English where *man* is used as a plural and Visser (1963:51) writes that *man* and *me(n)* "could have the verb in the singular and the plural". However, Mitchell (1985:145) says that cases where *man* is "immediately followed by a plural verb are to be regarded with suspicion as possible scribal errors". An instance of singular agreement in Old English with *man* is given in (2) and of plural agreement in relatively late Old English in (3).

(2)   swa georne swa **man scolde**
        as   eagerly   as   IMP   should.S
        'as eagerly as one should.' (Wulfstan Homilies, Bethurum edition, 261.16)

(3)   þæt igland þe   **man**   Ii nemn-**að**
        that island REL   IMP   Ii call-P
        'the island which one calls Iona'. (*Parker Chronicle* an. 565, Thorpe edition)

Quirk & Wrenn (1955:142) and Bosworth & Toller (s.v. *man* and *mann*) claim that early scribes indicate the difference between the lexical noun and the impersonal pronoun orthographically, namely as *mann* and *man* (but neither Campbell 1959 nor the *OED* mentions this).

Turning to Middle English, the two versions of Layamon's early Middle English *Brut* differ considerably in the use of the impersonal pronoun and are representative of the changes in Middle English. The more archaic version is Caligula and the other is Otho. Both are from the second half of the thirteenth century but Otho is more modern in having lost some morphology and gained more function words (van Gelderen 1993). In Caligula, of the 363 occurrences of *men*, 19 are clearly impersonal and mainly show plural verbal agreement, as in (4) and (5); see van Gelderen (1997:163). The text is written by two scribes but both show plural, since (4) is from scribe A and (5) from B. The others are plural definites as in (6).

(4)   for   **men** hit **sæid-en** wel iwhær
        because IMP it   said-P   everywhere
        'because it was said everywhere'. (Caligula 6869, Brook & Leslie's edition)

(5)   þat   **men ma3-en** tellen
        which IMP may-P   tell
        'which could be told'. (Caligula 9771)

(6)   Al his **men dud-en** swa þe   king   hehte
        all his men did-P   such the king   commanded
        'All his men did what the king commanded'. (Caligula 545, Brook & Leslie's edition)

In the less archaic version, i.e. Otho, there are 277 instances of *men* of which 10 are impersonal. In Otho, however, the verb is always singular, as in (7) and (8), indicating loss of the number feature. As Cynthia Allen (p.c.) points out, verbs in Otho often lack number marking, so this needs to be considered as well. Although plural *–en* often occurs on *weren* 'were', I have not found impersonal *men* together with it, only the noun. This suggests that the plural was still marked on the verb some of the time and the complete absence of it with impersonal *men* is significant.

(7)   for   **men** hit **saide** wel i-war.
        because IMP it   said   everywhere
        'because it was said everywhere'. (Otho 6869, Brook & Leslie's edition)

(8)   þat   **men mawe** telle
        which IMP   may   tell
        'which could be told.' (Otho 9771, Brook & Leslie's edition)

So, in the Caligula version of Layamon's *Brut*, *men* has plural features and therefore causes plural verbal agreement on the verb whereas, in the Otho version of Layamon's *Brut*, *men* seems to cause singular agreement. The latter indicates the grammaticalization of *men* as an impersonal pronoun.

Jumping a few centuries to Chaucer, *men* "is mostly accompanied by a singular verb" (Kerkhof 1966:196). However, among the first 20 occurrences, three clearly cause the verbs to be plural as in (9) to (11).

(9)   Biside a   toun **men clep-en** baldeswelle
        Beside a   town IMP   call-P   Baldeswelle
        'Next to a town that is called B.' (*Canterbury Tales Prologue* 622, Benson's edition)

(10)   Thurgh which **men might-en** any   light discerne
        Through which IMP   might-P   any   light discern
        'Through which light could be seen.' (*Knight's Tale* 1989, Benson's edition)

(11)   That yet **men wen-en**   that no mannes wit ... ne koude
        That yet IMP   believe-P   that no man's   wit ... not could

        amenden it
        amend it
        'Yet, one believes that no man's wit could amend it.' (*Knight's Tale* 2195-6, Benson's edition)

The relevance of this data is that, despite an initial grammaticalization of *men* as an impersonal, the continued presence of lexical *man* and its plural *men* makes *men* not a 'good' impersonal pronoun and that is why it was lost later on.

As an interim summary, different texts vary greatly with respect to their use of an impersonal 'man', i.e. to how grammaticalized this form is. The grammaticalization of the noun *man* throughout the early history of English involves (a) a loss of lexical content (for example, maleness) and

(b) a fixing of the phi-features as third person singular nominative. In the Caligula version of Layamon's *Brut*, *men* is more lexical since it co-occurs with plural verbs whereas in the Otho version of the same text, *men* is more grammaticalized. Chaucer, on occasion, uses the lexical form of *men* and, on other occasions, the grammaticalized one. In section 4, I return to the issue of changes in the overt impersonals. Before looking at one early Middle English text in more detail, I sketch the situation concerning *pro*-drop (both referential and impersonal) in Old and Middle English in general and in the texts I have just looked at more specifically.

The consensus about Old English seems to be that (limited) referential *pro*-drop was possible (van Gelderen 2000; 2013, Walkden 2013). Some texts show this more than others. *Beowulf* is one of those that has considerable *pro*-drop, as in (12).

(12) swylcum gifeþe bið þæt þone hilderæs hal gedigeð
      such given be that that battle-storm unhurt endures
      'May it be that **he** will withstand unhurt the heat of the battle.' (Beowulf 299-300, Klaeber's edition)

As we saw in (1), this text has impersonal subjects of the *man/mon/me* kind. *Beowulf* also has one null impersonal, as pointed out by Klaeber (1941:376) and Mitchell (1985:147).

(13) Þær mæg nihta gehwæm niðwundor seon, fyr on flode.
      there may night every evil.wonder see fire on water
      'Every night, **one** can see a terrible wonder, fire on the water.' (*Beowulf* 1365, Klaeber's edition).

Is one impersonal enough to connect 'robust' *pro*-drop with null impersonals? Mitchell provides a few other examples from Old English. I will leave it to the reader to draw further conclusions on the connection between referential and impersonal *pro*-drop in *Beowulf*. The Middle English texts I have briefly considered, Layamon and Chaucer, show no *pro*-drop, neither of the referential or nor of the impersonal kind (see van Gelderen 2000 and Walkden 2014). Next will be a discussion of a Middle English text with *pro*-drop and the question will be if it has impersonal null subjects as well.

3. The Katerine-group: impersonals and *pro*-drop

In the texts comprising the Katerine-group in the Bodley manuscript, *Katerine*, *Margarete, Iuliene*, *Hali Meidhad,* and *Sawles Warde,* (d'Ardenne 1977), *pro*-drop is "quite frequent" (van Gelderen 2000:137), i.e. it is displayed "robustly" (Walkden 2014). In the light of what we saw in section 1, I will therefore look at impersonal subjects, both overt and null. This text is from the Southwest Midlands and from the early half of the 13th century.

As for the data on *pro*-drop, Walkden (2014) finds in *Katerine* 8.4 %, in *Margarete* 2.5 %, in *Iuliene* 5.1 %, and in *Hali Meidhad* 9.6 % *pro*-drop in main clauses (uncoordinated ones); no *pro*-drop occurs in *Sawles Warde*. Third person is most frequent, as the two cases in (14) show but first and second person also occur; a second person in a subordinate clause is shown in (15).

(14) *Costentin walde efter ant warpen him þe onne. ah se wide him weox weorre on euche halue ant nomeliche in a lont ylirie hatte þ [tear] he etstutte þa maxence iherde þis þ he wes of him siker ant of his cunne carles.* **war** *king of þ lont þe lei into rome as duden meast alle þe oðre of þe weorlde.* **Bigon** *anan ase wed wulf to weorrin hali chirche ant dreaien cristenemen þe lut þt ter weren alle to heaðendom heaðene as he wes summe þurh muchele 3eouen ant misliche meden summe þurh fearlac.*
‘Constantin wanted to follow and drive him out. But so wide (spread) became the war on every side and especially in a country called Illyria that he stopped there. Then Maxence heard this that he was secure and in his manner careless. **He** became king of the land which was subject to Rome as did most all other of the world. **He** began anon as a mad wolf to persecute the holy church and to draw Christians the few that there were all to heathenism, heathen as he was, some by large gifts and diverse rewards some through fear.' (Katerine, d'Ardenne 17-8, taken from van Gelderen 2000:140)

(15) *do nu deadliche on us al þt tu do maht. make us reue anan riht misliche pinen on tentd fur & feche hweol. greiðe al þ* **const** *grimliche bi þenchen.*
‘Do now deadly to us all that you can. Make us, reeve, straightaway unpleasant pain. Kindle the fire and fetch the wheel. Prepare all that (you) can cruelly think of.' (Iuliene, d'Ardenne 121, van Gelderen 2000:143)

If Weerman's (2007) analysis is correct, one would also expect null impersonal subjects in texts with referential null subjects. There are instances of what could be null impersonal subjects, as in (16), (17), and (18). However, looking at them in more detail, one sees that the subject is a real addressee. Hence, this is regular *pro*-drop.

(16)   *þeos meiden lette lutel of þ he seide. ant smirkinde smeðeliche ȝef him*
       þullich onswere. al ich iseo þine sahen sottliche isette. **cleopest** *þeo*
       þing godes þe nowðer sturien ne mahen.
       'This maiden thought little of what he said and smilingly gave him
       a smooth answer. I see all your savings are foolishly put out. (You)
       call those things good that neither stir nor have power.' (Katerine,
       d'Ardenne 24)

(17)   **ȝeuest** *þin beare bodi to tukin swa to wundre.*
       'and (you) give your bare body to maltreat so scandalously.' (Hali
       Meidhad, d'Ardenne 147)

(18)   *& fuleð þi flesch ec. gulteð o twa half.* **wreaðest** *þen al wealdent wið þt*
       suti sunne. & dest woh to þe seolf.
       'and also fouls your flesh; sins on both sides. (You) anger the almighty
       with that foul sin and harm yourself.'(Hali Meidhad, d'Ardenne 154)

I have not found any instances of an impersonal null subject. One could expect this because, if a 'normal' subject can be dropped, an impersonal should be as well. However, Cynthia Allen (p.c.) points out that the numbers may not be high enough. For instance, *Margarete* has 11 overt impersonals and, if 10% were dropped, one null impersonal would be expected, but it would not be strange if this should happen to not occur.

    As to the impersonal pronouns of the *man/mon* kind in the Katerine-group, there are a few instances of *me*, as in (19) to (21). The agreement on the verb is singular. So just like referential pronouns can be overt, so can impersonal ones in this text.

(19)   þ   **me**   **mei**   hire   demen,
       REL IMP   may   her   judge
       'to which she may be doomed'. (Katerine, d'Ardenne 28)

(20) **Me com**   iþe   marhen
      IMP came   in.the morning
      'They came in the morning'. (Katerine, d'Ardenne 48)

(21) þe   **me**   seide hit   upon
      REL IMP   said   it   on
      'who they accused of it'. (Katerine, d'Ardenne 48)

In the Katerine-group, *mon*, *monnes*, *men* and *monne* also appear. *Mon* is singular and *men* is plural and they are used in all cases except the genitive. In the genitive case, *monnes* is used for the singular and *monne* for the plural. Thus, *me* is an impersonal pronoun, in orthography and meaning quite different from the lexical *mon* and *men*. It is also different in causing singular agreement on the verb which means it is grammaticalized as an impersonal in this text.

So, Cabredo Hofherr's (2006) and Weerman's (2007) claims do not get support from the Middle English Katerine-group because null subjects appear but null impersonal subjects do not although this may be because the numbers are small. The reason for the later demise of the impersonal *man/men* is probably, as Weerman and others have argued, the difficulty for *man/mon* to fit into a paradigm or, as Jud-Schmid (1956:110-112) says, the lack of an unambiguous non-reduced variant. Once new forms arise, the preferred *one* is a regular pronoun, as I now show.

4. Register differences in the modern period
In this section, I turn to the changes in the overt forms of the impersonal. Various researchers have claimed that impersonals, because they only occur as subjects of finite clauses have a hard time fitting in. Currently, the use of a special impersonal occurs in formal registers. Using pronouns, such as *you*, and nouns, such as *people,* is preferred in less-formal registers.

In Old English, it is hard to judge if the *man* pronoun is formal or not. As mentioned, at the end of the Middle English period, many new forms appeared. *One* developed its impersonal use in the late Middle English period: There are no instances in Old English, it was first attested around 1420, and became common in early Modern English. The role of French influence is controversial (Jud-Schmid 1956; Mustanoja 1960:224; Rissanen 1967).

Apart from *one*, other impersonal expressions become more common in early Modern English, as well: *they, folk* and *people*: "The use of *they*

for the impersonal person gains ground rapidly" (Mustanoja 1960:226). The second person singular pronouns *thou* and *you* also increase in use; cf. Jud-Schmid (1956:84,95). Haas (2014) provides the data for *one, people, they,* and *you*. He shows that from 1650 to the present, these forms have been in stiff competition, with *people* always the lowest, probably because it does not fit into the pronominal paradigm. That is like *men/man* in Middle English. I will now discuss that competition in more detail.

I will show, using data from the Corpus of Contemporary American English (COCA), that *you* is preferred over *one* in a less-formal register and will then draw conclusions from that. To ensure an impersonal use of *one* and *you*, I look at the use of these pronouns before a modal because many of these are in fact impersonal. This is not a water-tight method but will give a good indication. In Figure 1 on the left, the total numbers of *one* followed by a modal are given and then the frequency per million words in five registers. On the right, the same is done for *you* and a modal. These numbers show almost a mirror image between spoken and academic, the most informal and formal, respectively.

SPOKEN	FICTION	MAGAZINE	NEWSPAPER	ACADEMIC		SPOKEN	FICTION	MAGAZINE	NEWSPAPER	ACADEMIC
5062	7211	6984	4388	15465		157647	119706	133737	59040	18596
52.97	79.74	73.09	47.84	169.82		1,649.63	1,323.75	1,399.53	643.72	204.20

One followed by a modal in COCA *You* followed by a modal
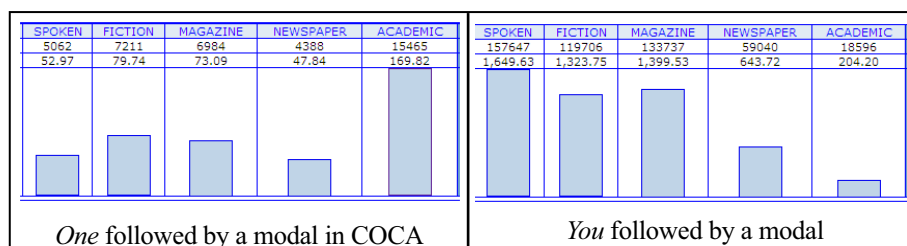
Figure 1: Register differences in COCA

Figure 2 shows the same two pronouns followed by a modal in the last 20 years in the COCA. Here no distinction in register is made but, in general, one can see a steady decline for *one* and a rise of *you*.

1990-1994	1995-1999	2000-2004	2005-2009	2010-2012
10184	9319	8587	7597	3423
97.92	90.08	83.42	74.45	65.94

1990-1994	1995-1999	2000-2004	2005-2009	2010-2012
100853	111930	107704	111472	56767
969.75	1,082.00	1,046.27	1,092.42	1,093.59

| *One* followed by a modal | *You* followed by a modal |
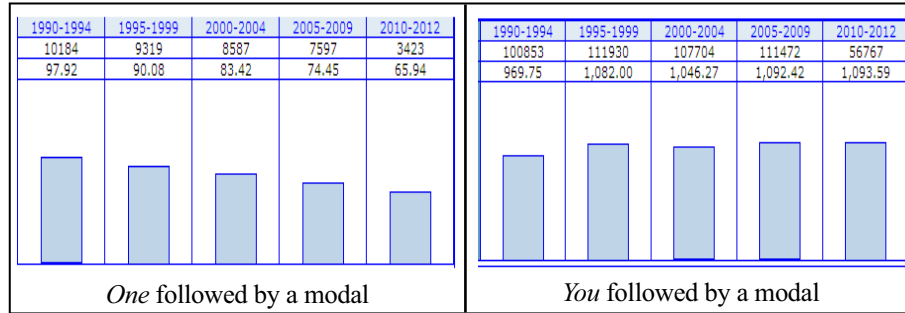
Figure 2: changes in the last 20 years.

The two figures taken together show that there is a steady decline of *one*. The reason is possibly that it is an extra pronoun that does not fit readily into the pronoun structure and is not learned early on.

5. Conclusion

Because the presence of *pro*-drop has been linked to null impersonal pronouns, this paper examined that link. After sketching the situation in Old and Middle English, I focussed on texts of the Katerine-group. These texts have *pro*-drop and are therefore possibly interesting for the relationship argued for in e.g. Weerman (2007). I concluded that there are null referential but no real null impersonal pronouns and there is an overt impersonal subject *me*. This shows that the correlation is not proven here. I also provided some thoughts on the changes affecting impersonal pronouns after Middle English and showed that the pronouns that are being using as personal pronouns, e.g. *you*, are on the increase as impersonal pronouns.

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Abbreviations
COCA   Corpus of Contemporary American English,
IMP   impersonal,
OED   Oxford English Dictionary,
P   plural,
REL   relative,
S   singular.

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I don't know why did they accept that:
Grammaticality judgements of negation and questions in L1 Danish and L1 Finnish learners of English

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Abstract

In a grammaticality judgement test of main clause and embedded sentential negation, *yes-no* questions, and *wh*-questions, performance was less accurate on embedded constructions than on main clause constructions across experienced and inexperienced L1 Danish and L1 Finnish learners of English. Likewise, accuracy scores were higher for negation than for questions across L2 groups. Comparisons between groups revealed that inexperienced L1 Finnish learners accepted *do*-support in embedded *wh*-questions more often than the other L2 groups and the native speaker baseline. This may be interpreted as an instance of cross-linguistic overcorrection, given that neither English nor Finnish embedded *wh*-questions have I°-to-C° movement, but English main clause questions do. No other between-group differences were observed. The results support Hawkins' Modulated Structure building model, which claims that the acquisition of L2 syntax involves incremental structure building.

1. Introduction

The generative conception of language acquisition is rooted in a rationalist approach to acquisition of knowledge, claiming that innate principles guide the form of knowledge in a restricted and highly organised way. This is contrary to an empiricist approach, according to which only the capacity to learn from data-processing is innate (Chomsky 1965:47-59). Since a large body of research suggest that empiricist approaches to linguistics are

'intrinsically incapable of yielding the systems of grammatical knowledge that must be attributed to the speaker of a language' (Chomsky 1965:54), this study[1] adopts a generative, and thereby a rationalist, perspective on language acquisition.

Generative approaches to first (L1) and second (L2) language acquisition aim to account for two principal problems: 1) the logical problem, and 2) the developmental problem (e.g. Hawkins 2001:1). The logical problem, also known as the poverty of the stimulus problem, centers on the paradox that language learners come to know more than they have been exposed to in the input (e.g. Chomsky 1986:xxv-xxvi). In response to the logical problem, generative linguists argue that since the grammatical knowledge observed in speakers of a language contains information that cannot be derived from language input alone, innate principles must be guiding the acquisition of grammar (e.g. Chomsky 1986:55). According to Chomsky (1986:24) 'UG [Universal Grammar] is a characterisation of these innate, biologically determined principles, which constitute one component of the human mind – the language faculty'. Note that grammatical knowledge is assumed to consist of both UG and learned elements; 'a generative grammar purports to depict exactly what one knows when one knows a language: that is, what has been learned, as supplemented by innate principles' (Chomsky 1986:24). UG consists of a number of subsystems, each containing a set of principles and parameters, and of certain overriding principles. Both principles and parameters are innate, but while principles apply universally, parameters must be set to a specific value for the language of acquisition, which can be done from simple linguistic evidence, i.e. exposure to language input (Chomsky 1986:102).

X-bar-theory, one of the subsystems of UG, holds that a phrase (XP) is a projection of its head (X°). The head is the core of the phrase and may be modified by a complement and/or a specifier (Spec). There is an intermediate projection (X-bar or X'), consisting of the head and its complement, and the phrase constitutes the maximal projection (XP), consisting of the bar-level and its specifier. According to X-bar-theory, all phrases of all languages have the structure in (1). However, specifiers and complements may either follow the head or precede the head. The order of specifiers and complements vis-à-vis heads is subject to parameter settings (Haegeman & Guéron 1999:78-79; Hawkins 2001:15-16).[2]

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[1] Many thanks to Johanna Wood for help in developing the grammaticality judgement test and for helpful comments and suggestions concerning the analysis.

[2] For a thorough introduction to generative grammar, see Haegeman & Guéron (1999).

(1)

Heads may consist of lexical and functional categories, giving rise to lexical and functional phrases. Lexical categories are nouns, verbs, adjectives, adverbs, and prepositions, and the corresponding lexical phrases are thus Noun Phrases (NPs), Verb Phrases (VPs), Adjectival Phrases (AdjPs), Adverbial Phrases (AdvPs), and Prepositional Phrases (PPs). Functional categories are built around functional words, i.e. words without lexical meaning, such as determiners and complementizers, and around functional aspects of syntax, such as inflection. Consequently, there are Determiner Phrases (DPs), Complementizer Phrases (CPs), and Inflectional Phrases (IPs) (Haegeman & Guéron 1999:103-104).

The general clause structure can be divided into three main layers. The hierarchically lowest layer is the VP-layer, where thematic structure is encoded, i.e. who did what to whom. The next layer is the IP-layer, where tense, agreement, voice, modality, and polarity are encoded, and where subject predication takes place. Negative polarity is encoded in a so-called Negation Phrase (NegP), which is part of the IP-layer. The highest layer is the CP-layer, where illocutionary force, topic, and focus are encoded (Christensen 2005:27-28 and works cited there). Together, this gives the general clause structure schematised in (2).

(2)
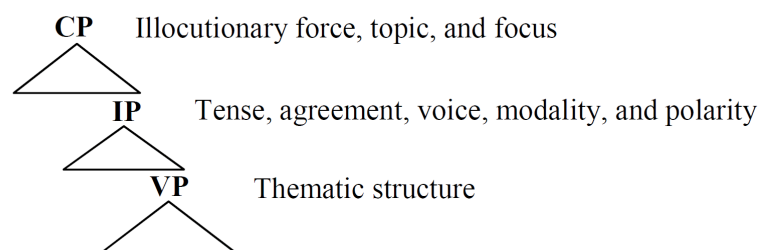
Based on analyses of French infinitival clauses, Pollock (1989) suggest that IP is split into a Tense Phrase (TP) and an Agreement Phrase (AgrP), the so-called split-IP analysis. Specifically, Pollock suggests that

TP is above AgrP and that NegP, when present, intervenes between TP and AgrP. However, based on the order of verbal inflections, Belletti (1990:30) proposes the reversed order of TP and AgrP, leading to the universal structures of positive and negative sentences illustrated in (3)a and (3)b respectively.

(3) a.

```
                    CP
              ┌─────────┐
           spec        C'
                   ┌────────┐
                  C°       AgrP
                       ┌────────┐
                     spec      Agr'
                      |    ┌────────┐
                   subject Agr°    TP
                              ┌────────┐
                            spec      T'
                             |    ┌────────┐
                            T°        VP
                                  ┌────────┐
                                spec      V'
                                 |    ┌────────┐
                                (tr) V°  complement
```

b.

```
                 CP
           ┌─────────┐
        spec        C'
               ┌────────┐
              C°       AgrP
                   ┌────────┐
                 spec      Agr'
                  |    ┌────────┐
               subject Agr°    NegP
                          ┌────────┐
                        spec      Neg'
                              ┌────────┐
                            Neg°      TP
                                  ┌────────┐
                                spec      T'
                                 |    ┌────────┐
                                T°        VP
                                      ┌────────┐
                                    spec      V'
                                     |    ┌────────┐
                                    (tr) V°  complement
```
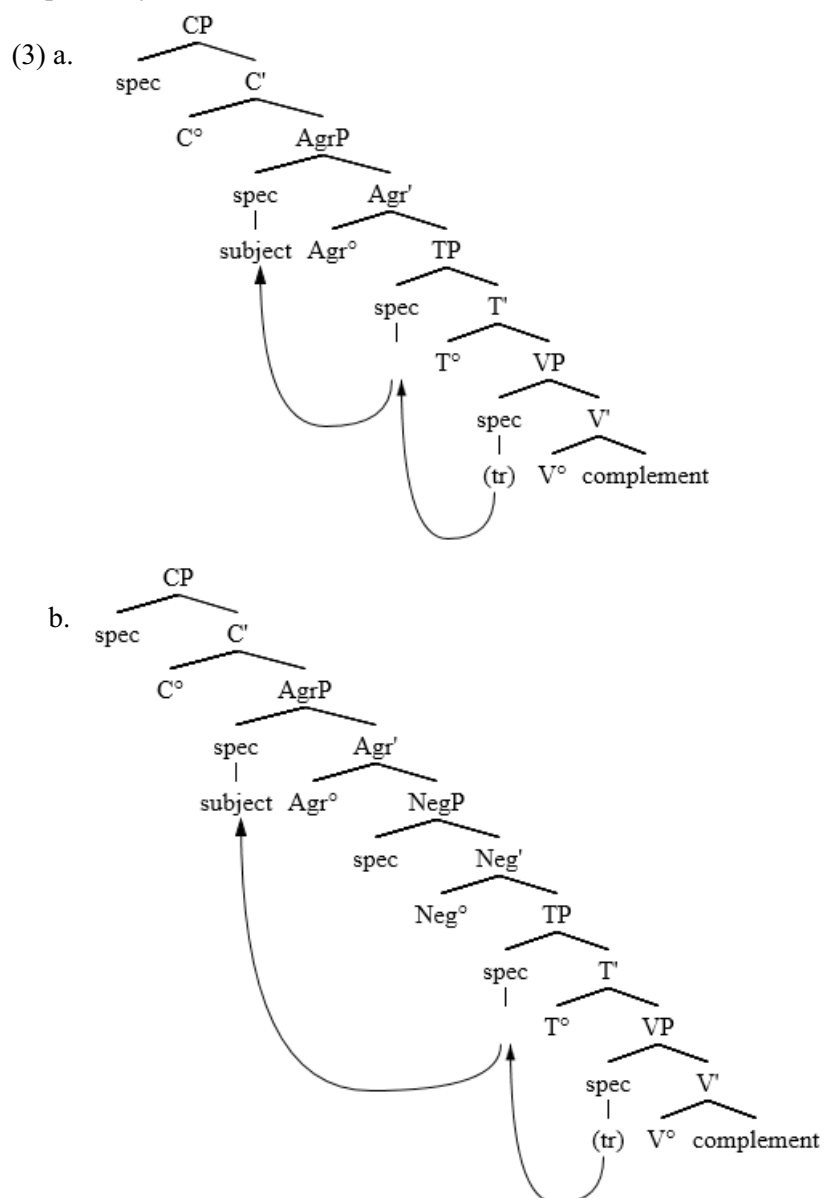
The developmental problem is concerned with the way the grammar of language learners develops (Hawkins 2001:1). This study investigates the development of L2 English negation and question formation in L1 Danish and L1 Finnish learners by by means of a grammaticality judgement test. Negation and question formation are chosen because they display interesting structural differences across the three languages. Negation reflects differences in the IP-layer, while question formation reflects differences in the CP-layer. The following two sections present these differences in detail.

2. Negation

Syntactic negation can take three forms. In sentential negation, as in (4)a, the negator *not* has scope over the entire sentence. In constituent negation, as in (4)b, the negator *not* has scope over one constituent, *French*. Finally, there is anaphoric negation, as in (4)c, where *no* is used as a negative response to a question (Hawkins 2001:83). The present study is concerned with sentential negation only.

(4)　a.　John did <u>not</u> speak French last night.

　　　b.　John spoke <u>not</u> French but Italian last night.

　　　c.　- Did John speak French last night?
　　　　　- <u>No</u>.

Negators are universally base-generated in NegP, but languages differ in whether they realise Neg°, the specifier of NegP or both overtly. Full negators, like English *not* and Danish *ikke*, are assumed to be base-generated in NegP-spec, while clitic negators, like English *n't* and Finnish *ei*, are assumed to be base-generated in Neg°. This variation and variation in other parametric settings, such as differences in verb movement, explain cross-linguistic differences in the surface position of the negator. The next three sections outline negation in English, Danish, and Finnish in more detail.

2.1. Negation in English

The sentential negator has two forms in English, the full form *not* and the reduced form *n't*. *Not* is generally assumed to be in NegP-spec, while *n't* is assumed to be in Neg°. Both forms require a filled Agr°, and consequently

English negation has *do*-support with thematic verb constructions (since finite thematic verbs remain in V°), while negation with modals (which are all base-generated in T° and move to Agr°), auxiliary *be* and *have*, and copula *be* (all of which move from V° to T° to Agr° when finite) requires no *do*-support (Haegeman & Guéron 1999:322; 529-530). The present study tests only constructions with thematic verbs and full negators. There are no structural differences between main clause negation and embedded negation in English. (5) presents an overview over the structure of English negation.

(5)
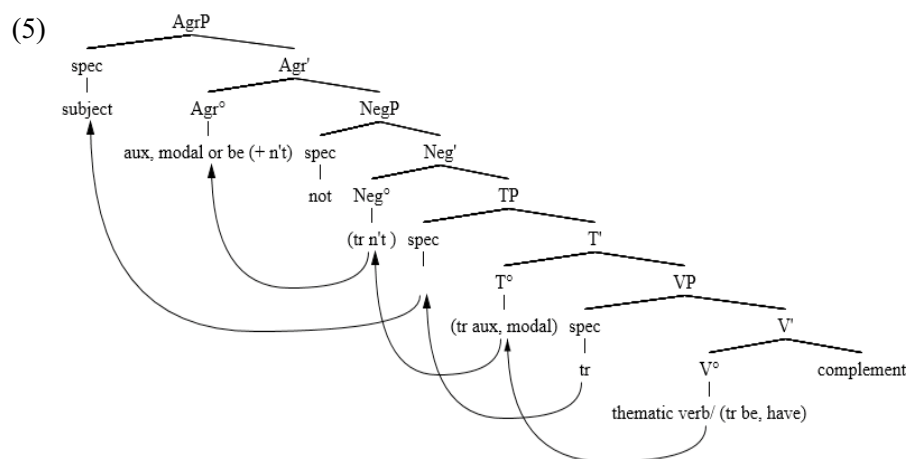
  Haegeman & Guéron note that *not* can coordinate with *whether* but not with *if*, as is clear from the grammaticality of (6)a and the ungrammaticality of (6)b. Based on the assumption that only constituents of the same type can coordinate and the claim that *whether* is in CP-spec, while *if* is in CP°[3], Haegeman & Guéron deduce that *not* must be in a specifier position.

---

[3] See Haegeman & Guéron (1999:175-176) for the arguments behind the structural positions of *if* and *whether*.

(6) a.   John wonders whether or not he should speak
           French.
     b. * John wonders if or not he should speak French.

2.2. Negation in Danish

Christensen (2003) argues that the Danish negator *ikke* is in NegP-spec for
three reasons:1) Danish *ikke* does not move with the verb under subject-
auxiliary inversion, 2) Danish *ikke* does not cliticize (the clitic negators in
English, Norwegian, Swedish, and Icelandic are all in Neg$^{\circ}$), and 3) the full
negators in all the other Scandinavian languages are in NegP-spec.

The surface position of the Danish negator varies between main
clauses and embedded clauses. Danish main clause negation is always
postverbal, since Danish main clauses are always Verb Second (V2), and
finite main clause verbs therefore undergo obligatory V°-to-T°-to-Agr°-
to-C° movement. Embedded negation, however, is preverbal as a standard,
but may be postverbal, since V2 is optional in embedded clauses in Danish.
Embedded V2 is subject to a number of restrictions, as listed e.g. by Vikner
(1995:71-72, 84-85, 2001:226). Consequently, embedded finite verbs may
but need not, undergo V°-to-T°-to-Agr°-to-C° movement. In embedded
non-V2 clauses, the finite verb remains in V°.

I leave aside embedded V2 here, as this study investigates con-
structions for which embedded V2 would be ungrammatical in Danish, i.e.
violating the restrictions on embedded V2. The structure of main clause
negation and embedded (non-V2) negation is exemplified in (7)a and (7)b,
respectively.

(7) a.   John   tal-er   ikke   fransk.
          John   speak-PRS   not   French
          'John does not speak French.'
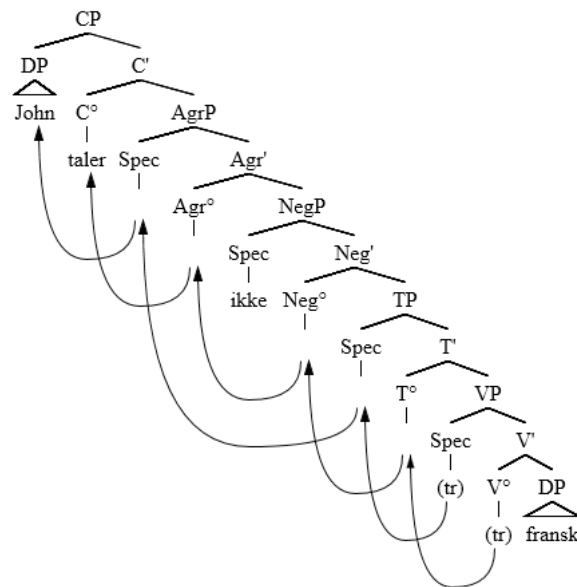
b. Jeg   ved   at   John   ikke   tal-er   fransk.
    I   know[PRS]   that   John   not   speak-PRS   French
    'I know that John does not speak French.'

Jeg ved ...
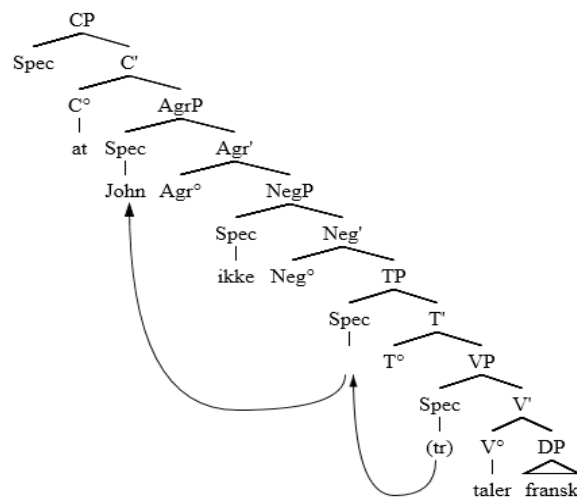
2.3. Negation in Finnish

The Finnish negator is an auxiliary that expresses agreement with the subject, while the lexical verb expresses tense (Karlsson 1999:69-70). Mitchell (2006) argues that the negative auxiliary in Finnish is a syntactic head for three reasons: 1) The negative auxiliary shows agreement with the subject, and subject-verb agreement is typically assumed to express a specifier-head relationship, 2) the presence of the negative auxiliary blocks the expression of subject agreement on the lexical verb, suggesting that the negative auxiliary intervenes in a head position between the lexical verb and the phrase where subject-verb agreement takes place in line with the Head Movement Constraint, and 3) the negative auxiliary can move to C° and merge with the complementizer *että* 'that' as in (8).

(8) Kerro-Ø-n   ett-e-t   puhu-Ø   ranska.
     say-PRS-1SG   *that-NEG-2SG*   *speak-PRS*   *French*
     'I say that you do not speak French.'

In affirmative sentences, the lexical verb moves from V° to T° to Agr° and expresses both tense and agreement. In negative sentences, the negative auxiliary blocks the movement of the lexical verb in T°, and the lexical verb thus expresses tense but not agreement, while the negative auxiliary, moving from Neg° to Agr°, expresses agreement but not tense. The structure of Finnish negation is shown in (9). There are no structural differences between main clause negation and embedded negation in Finnish (Mitchell 1991).

(9)

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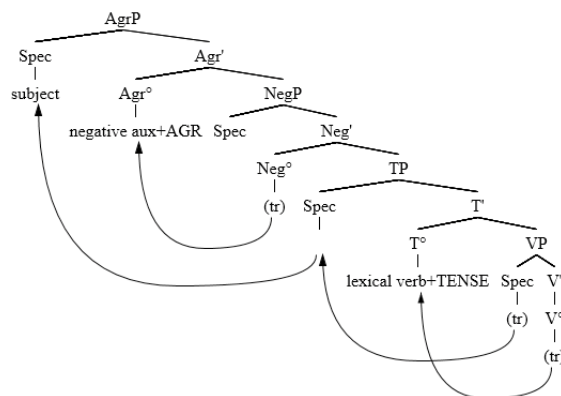
2.4. Summary of negation in English, Danish, and Finnish
(10) presents an overview over the surface structure in English, Danish, and Finnish negation. For reasons of space, only the structural positions overtly occupied are shown. Note that the distinction between main clauses and embedded clauses is accompanied by different word orders in Danish only.

(10)	CP-spec	C°	AgrP-spec	Agr°	NegP-spec	T°	V°	DP
ENG			*John*	*does*	*not*		*speak*	*French.*
DK Main	*John*	*taler*			*ikke*			*fransk.*
DK Emb		*at*	*John*		*ikke*		*taler*	*fransk.*
FIN			*John*	*ei*		*puhu*		*ranska.*

ENG: English, DK: Danish, FIN: Finnish,
Main: main clause, Emb: embedded clause

Summing up, the English negator *not* always follows the element in Agr°. Agr° is the position for modals, finite auxiliaries, and the finite copula *be*. In the case of finite thematic verbs, which remain in V°, Agr° is empty and auxiliary *do* is inserted into T° and moves to Agr° to support the negator. The surface position of *not* is therefore post-auxiliary or post-copula-*be*. The surface position of the Danish negator *ikke* vis-à-vis the finite verb depends on the type of clause due to the fact that Danish main clauses are V2, forcing finite verbs to move beyond the negator in main clauses. Hence, in main clause negations, *ikke* is postverbal. Contrarily, embedded clauses in Danish are not obligatorily V2, and *ikke* is thus preverbal in embedded non-V2 negations. In Finnish negative constructions, the negative auxiliary blocks the movement of the lexical verb midway; in affirmative sentences, Finnish finite verbs undergo V°-to-T°-to-Agr° movement, but since NegP intervenes between TP and AgrP, the negative auxiliary in Neg° stops the verb in T°. The negative auxiliary itself moves from Neg° to Agr°. Consequently, the Finnish negative auxiliary always precedes the lexical verb.

3. Questions
Question formation is a CP-layer phenomenon. The split-IP analysis so central to the discussion of negation is therefore peripheral to the discussion of question formation. Thus, for reasons of space and simplicity, the IP-layer is simply represented by IP as far as questions go.

Questions are universally assumed to involve the presence of a question morpheme Q in C°. That is, questions are assumed to have the same underlying structure in all languages and cross-linguistic differences in surface structure are accounted for in terms of parameter settings. The presence or absence of overt (visible) morphological question markers depends on Q being realised as an overt or a covert (invisible) morpheme. The word order in interrogatives depends on Q being realised as a bound or a free morpheme. If Q is a bound morpheme, it cannot stand alone in C°, and consequently there is I°-to-C° movement. Reversely, if Q is a free morpheme, it occupies C°, and hence no other element can move to this position. Note, that Q can occupy C° even though it is covert. With respect to *wh*-questions, the parameter ±*wh*-movement accounts for cross-linguistic variations in the surface position of *wh*-elements (Hawkins 2001:149-151). English, Danish, and Finnish all have *wh*-movement (Allan, Holmes & Lundskær-Nielsen 1995:495; Karlsson 1999:73-74; Haegeman & Guéron 1999:47), and hence the *wh*-element is in CP-spec. However, the three languages vary with respect to the circumstances under which they have I°-to-C° movement. Consequently, questions in English, Danish, and Finnish all have the structure in (11).

(11)
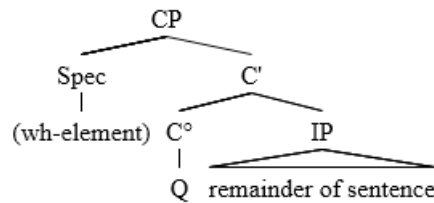
The following three sections outline question formation in English, Danish, and Finnish in more detail.

3.1. Questions in English
In English main clause questions, Q is a covert, bound morpheme and as such it needs another head to attach to, thus triggering I°-to-C° movement, which is realised as subject-auxiliary inversion in English. Auxiliaries, modals, and copula *be*, which are in I° when finite, move to C° to support Q. In the case of finite thematic verbs (which remain in V°), *do*-support is required in order for there to be an element in I° that can move to C°, as in (12)a and (12)b. In embedded questions in English, Q is the free, overt morpheme *if* or a free, covert morpheme when *whether*, as

in (13)a, or a *wh*-element, as in (13)b, occupies CP-spec.[4] Hence, there is no I°-to-C° movement in embedded questions in English (Haegeman & Guéron 1999:170-174; Hawkins 2001:149-151).

(12) a.
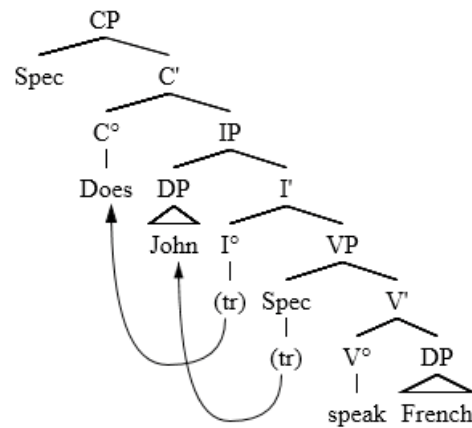
b.

---
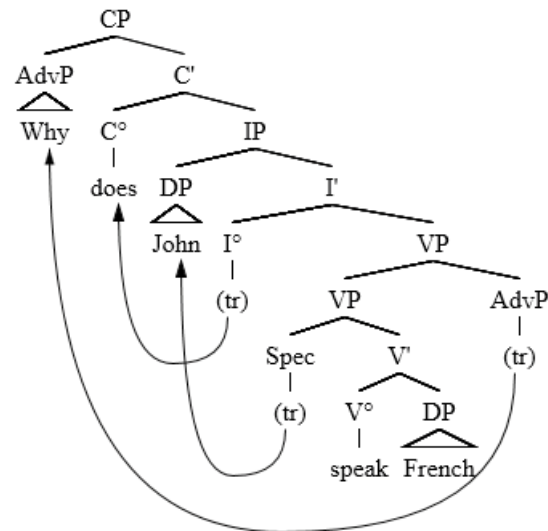
[4] See Haegeman & Guéron (1999:175-176) for the arguments behind the structural positions of *if* and *whether*.

(13) a. I wonder ...

```
                    CP
              _____/_____
          Spec              C'
           |            ____/\____
        whether   C°              IP
                          _____/_____
                        DP              I'
                       /\\          ___/\___
                     John   I°    VP
                              ____/\____
                          Spec          V'
                           |         ___/\___
                          (tr)     V°        DP
                                    |       /\\
                                 speaks   French
```

   b. I wonder ...

```
                CP
          _____/\_____
      AdvP           C'
       /\        ____/\____
     why   C°              IP
                   _____/_____
                 DP              I'
                /\\          ___/\___
              John   I°              VP
                              _____/_____
                           VP              AdvP
                        ___/\___             |
                     Spec      V'           (tr)
                      |      __/\__
                     (tr)  V°      DP
                           |      /\\
                        speaks  French
```
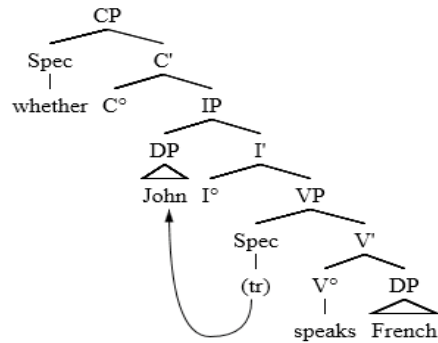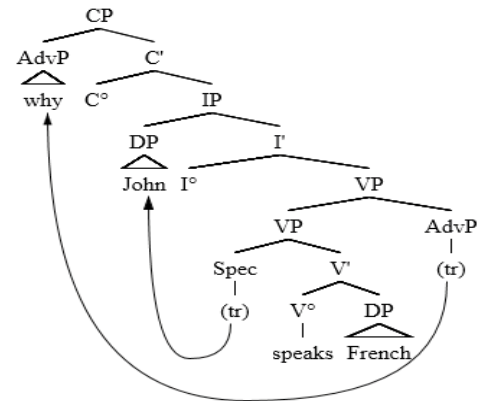
3.2. Questions in Danish

In Danish main clauses, Q is a covert morpheme that must be bound in order not to block the V°-to-I°-to-C° movement that occurs in all Danish main clauses due to V2, as illustrated in (14)a and (14)b. The finite verb thus occupies C° in both declarative and interrogative main clauses. Q is the overt, free morpheme *om* in embedded *yes-no* questions and a covert, free morpheme in embedded *wh*-questions. Thus, there is no movement to C° in embedded questions in Danish (Vikner 2007:471-474), as illustrated in (15)a and (15)b.

(14) a. Tal-er   John   fransk?
          speak-PRE   John   French
          'Does John speak French?'
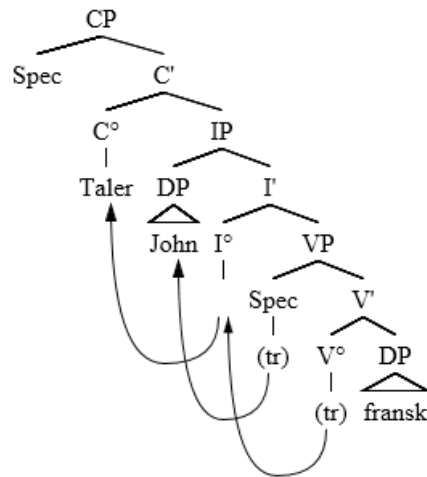
      b. Hvorfor   tal-er   John   fransk?
          why   speak-PRE   John   French
          'Why does John speak French?'
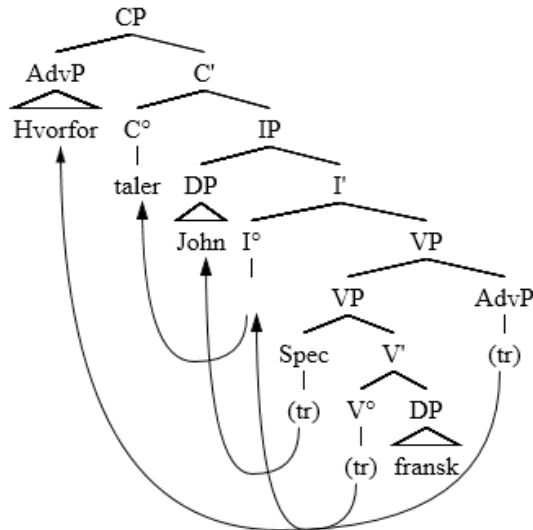
(15)   Jeg   spekuler-er   på   ...
          I   wonder-PRS   on   …

    a. om   John   tal-er   fransk.
       whether   John   speak-PRS   French
       'I wonder whether John speaks French.'
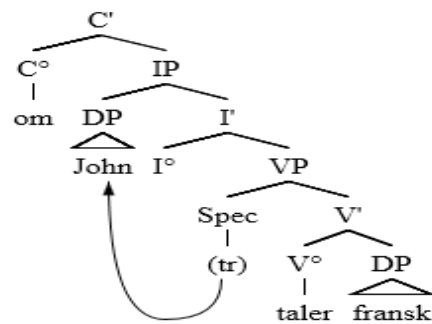
Jeg spekulerer på…

    b. hvorfor John   tal-er   fransk.
       why   John   speak-PRS   French.
       'I wonder why John speaks French'.

Jeg spekulerer på…
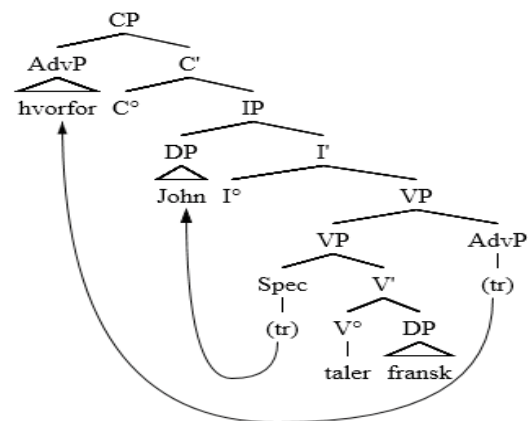
3.3. Questions in Finnish

In all Finnish *yes-no*-questions, Q is an overt, bound morpheme, *-ko/-kö*, that attaches to the finite verb.[5] Consequently, there is I°-to-C° movement, realised as subject-verb inversion, in both main clause and embedded *yes-no*-questions in Finnish, as illustrated in (16)a and (17)a respectively.[6] Reversely, in all Finnish *wh*-questions, Q is a covert, free morpheme and hence there is no I°-to-C° movement in neither main clause nor embedded *wh*-questions in Finnish, as illustrated in (16)b and (17)b, respectively. The interrogative status of Finnish *wh*-questions, both in embedded clauses and main clauses, is thus signalled by *wh*-movement only (Karlsson 1999:71-74).

(16)   a.   Puhu-Ø-u-ko   John   ranskaa?
            speak-PRE-3SG-Q John   French
            'Does John speak French?'

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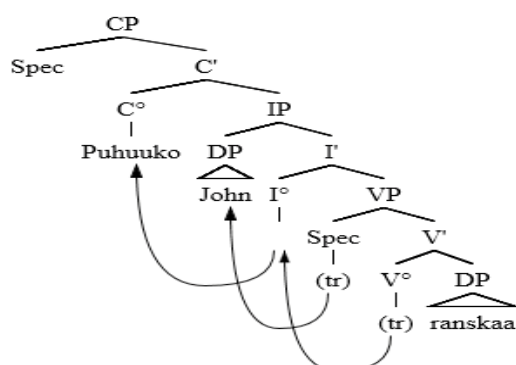
[5] *-ko* attaches to verbs with back vowels and *–kö* attaches to verbs with front vowels due to vowel harmony (Karlsson 1999:16).

[6] Note that Belfast English also has I°-to-C° movement in embedded *yes-no*-questions (Henry 1995:105).

b.   Miksi   John   puhu-Ø-u   ranskaa?
     why   John   speak-PRE-3SG   French
     'Why does John speak French?'
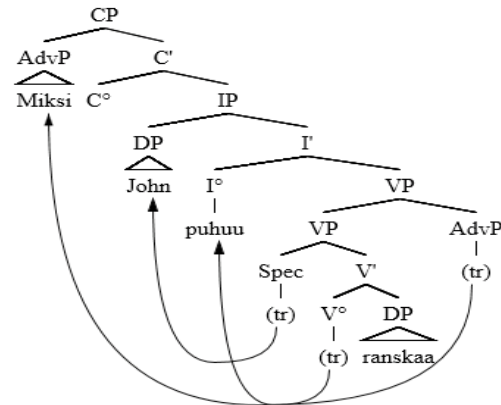
(17)   Ihmettele-Ø-n   ...
            wonder-PRE-1SG   …

   a.   puhu-Ø-u-ko   John   ranskaa
        speak-PRE-3SG-Q   John   French
        'I wonder whether John speaks French'.
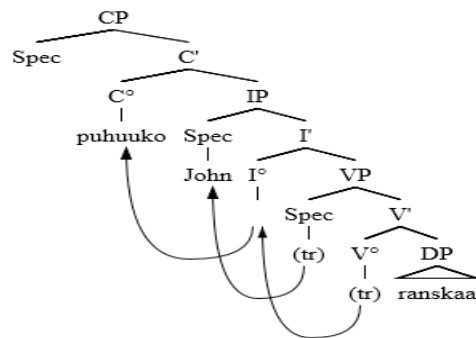
        Ihmettelen...

    b. miksi   John   puhu-Ø-u   ranskaa?
        why   John   speak-PRE-3SG   French
        'I wonder why John speaks French'.

    Ihmettelen...
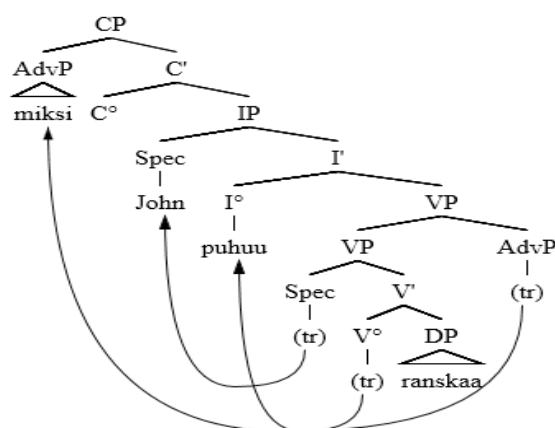
3.4. Summary of questions in English, Danish, and Finnish

(18) presents an overview over the surface structure in *wh*-questions and *yes-no*-questions in main clauses and embedded clauses in English, Danish, and Finnish. For reasons of space, only the structural positions overtly occupied are shown.

    Summing up, all three languages have *wh*-movement in both main clause and embedded *wh*-questions. The three languages, however, differ in the status of Q and thereby the circumstances under which they have I°-to-C° movement. Q is a covert, bound morpheme in English main clause questions, which consequently have I°-to-C° movement. Reversely, there is no I°-to-C° movement in embedded questions in English, since Q is either the overt free morpheme *if* or, when *whether* or a *wh*-element is in CP-spec, a covert, free morpheme. Since Danish main clauses are V2, all Danish main clauses have V°-to-I°-to-C° movement. In Danish embedded questions, Q is the overt, free morpheme *om* in embedded *yes-no* questions and a covert, free morpheme in embedded *wh*-questions. Consequently, there is no I°-to-C° movement in embedded questions in Danish. While English and Danish have I°-to-C° movement in main clause questions,

but not in embedded questions, Finnish has I°-to-C° movement in *yes-no*-questions, but not in *wh*-questions. This is so because Q is an overt, bound morpheme, *-ko/-kö*, in both main clause and embedded *yes-no*-questions, while Q is a covert, free morpheme in both main clause and embedded *wh*-questions.

(18)

		CP-spec	C°	IP-spec	I°	V°	DP
Main WH	**ENG**		*Why*	*does*	*John*		*speak*	*French?*
	DK		*Hvorfor*	*taler*	*John*			*fransk?*
	FIN		*Miksi*		*John*	*puhuu*		*ranska?*
Main Y/N	**ENG**			*Does*	*John*		*speak*	*French?*
	DK			*Taler*	*John*			*fransk?*
	FIN			*Puhuuko*	*John*			*ranska?*
Emb WH	**ENG**	*I wonder*	*why*		*John*		*speaks*	*French.*
	DK	*Jeg spekulerer på*	*hvorfor*		*John*		*taler*	*fransk.*
	FIN	*Ihmettelen*	*miksi*		*John*	*puhuu*		*ranska.*
Emb Y/N	**ENG**	*I wonder*	*whether*		*John*		*speaks*	*French.*
	DK	*Jeg spekulerer på*		*om*	*John*		*taler*	*fransk.*
	FIN	*Ihmettelen*		*puhuuko*	*John*			*ranska?*

ENG: English, DK: Danish, FIN: Finnish, Main: main clause, Emb: embedded clause, WH: *wh*-question, Y/N: *yes-no*-question

The next two sections present theoretical perspectives on how the syntactic structure of English negation and question formation may be acquired by L2 learners.

4. Modulated Structure Building

The present analysis adopts Hawkins' (2001) Modulated Structure Building model, which deals specifically with the L2 acquisition of English negation and question formation. Modulated Structure Building combines the notion of incremental structure building from the Minimal Trees model by Vainikka & Young-Scholten (1994, 1996), and the possibility for L1 transfer at all syntactic layers from the Full Transfer/Full Access model by Schwartz & Sprouse (1994, 1996). All three models are formulated within the generative approach to Universal Grammar.

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According to Modulated Structure Building, the initial stage of L2 grammar consists in principle of lexical projections only, and the initial structural features of these categories are in principle the L1 values. That is, L2 learners are assumed to transfer their native VP to the target language at the initial stage of L2 acquisition. The *in principle*-part accounts for the possibility that restructuring may be very rapid, so that it may be difficult or even impossible to detect initial transfer empirically. Functional categories are in principle established later than lexical categories, when positive evidence for their existence is encountered in the L2 input (the structure building component), but again, category establishment may be so rapid that stages before the establishment of certain functional categories may not be empirically observable. Once functional categories are established, they are subject to L1 transfer at relevant points in the development, i.e. L1 transfer occurs only when the syntactic representation is sufficiently elaborated to instantiate the property in question (the modulated component). Specification of categories is believed to proceed incrementally from local head-complement relations to non-local binding relations to purely formal specifier-head agreement relations (Hawkins 2001). Hawkins' account of empirical patterns in the L2 acquisition of English sentential negation and question formation will be applied in the present analysis.

4.1. The acquisition of sentential negation in L2 English
Hawkins draws on the systematic development that has been observed in the L2 acquisition of English negation by L1 speakers of Spanish (Cancino, Rosansky & Schuman 1978; Shapira 1976 as reported in Schumann 1976; Stauble 1984) and Japanese (Stauble 1984) and explains these data in terms of gradual establishment of the IP-layer. Based on longitudinal data of L1 Spanish learners of English, Cancino et al. propose a four-stage model of the acquisition of English negation, presented in (19) along with Hawkins' account.

(19)   **Cancino et al.'s model of**   **Modulated Structure**
             the acquisition of L2 English negation   **Building perspective**

Stg	Negative construction	Examples	
1	*no* + verb	*You no tell your mother* *But no is mine, is my brother* *I no can see*	NegP-only stage
2	*no* + verb *don't* (unanalysed) + verb	*He no like it* *He don't like it* *I don't can explain*	
3	copula/auxiliary + *no/not*	*It's not danger* *Not, he's not skinny* *Somebody is not coming in* *He can't see*	TP and AgrP are established, but not fully specified
4	*don't* (analysed) + verb (*no* + verb disappears)	*He doesn't laugh like us* *I didn't even know*	TP and AgrP become fully specified

Adapted from Hawkins (2001:84), which is based on Cancino et al. (1978:210-211).

Based on these empirical patterns and in line with Modulated Structure Building, Hawkins argues that, initially, *no* is acquired as a lexical item projecting to NegP, and NegP is proposed to take VP as its complement. The form *no* is suggested to be the result of a generalisation from anaphoric negation. AgrP and TP are assumed to be absent at initial stages of L2 acquisition of English negation, and the first two stages in Cancino et al.'s model may therefore be viewed as NegP-only stages. At these stages, *no is*, which is typical of L1 Spanish learners of English, and *don't*, which is common among L2 learners from various L1 backgrounds, may be interpreted as unanalysed forms that are interchangeable with *no*, all carrying the semantic meaning 'negator'. Hawkins claims that the negator is in Neg° at this point in development, since at this point NegP is a lexical projection stemming from the projection of its head *no*, which, at this stage, is a lexical item for the L2 learners. As the native NegP is a functional projection, NegP is not transferred from the L1. In the absence of AgrP-spec, the subject arguably moves from VP-spec to NegP-spec, resulting in the structure in (20).

(20)
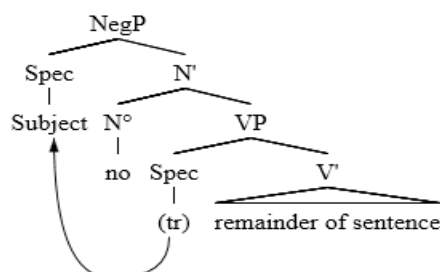
Subsequently, at stage 3, as learners acquire copula/auxiliary *be*, which undergoes V°-to-T°-to-Agr° movement, TP and AgrP are established as the movement of *be* provides positive evidence for the existence of an IP-layer. The IP-layer is assumed to facilitate the acquisition of the target form *not* and lead to an increase in the use of *don't* and *isn't*, since T° provides a structural position for base-generating auxiliary *do* and for *be* to move through, and hence both *do* and *be* can pick up *n't* under V°-to-T°-to-Agr° movement, resulting in *be+n't* and *do+n't* contractions. Since L2 learners enquire no evidence that *not* is picked up during V°-to-T°-to-Agr° movement, *not* is assumed to be in NegP-spec. As a result of this restructuring of NegP, *no* is abandoned as a sentential negator due to lack of positive evidence for *no* in either NegP-spec or Neg°.

Note that the development of L2 English negation follows the pattern of category specification predicted by Modulated Structure Building. The first part of negation to be acquired is the head-complement relation between the negator, at this point *no*, and its VP-complement, which is in line with the prediction that the head-complement relation is the first part of category specification to be acquired. Similarly, the last part of negation to be acquired is person and number agreement in AgrP, thus following the prediction that spec-head agreement is the last part of category specification to be acquired.

4.2. The acquisition of question formation in L2 English
Parallel to his account of L2 acquisition of English sentential negation, Hawkins draws on Lightbown & Spada's (1993) six-stage model of L2 acquisition of English interrogatives, presented in (21) along with Hawkins' account.

(21) **Lightbown & Spada's model of L2 acquisition** **Modulated Structure**
of English question formation **Building Perspective**

Stg	Description	Examples	
1	Rising intonation on words/ formula	*Four children?*	No CP-layer, perhaps no IP-layer
2	Rising intonation on clauses	*The boys throw the shoes?*	
3	A question word is placed at the front of the clause, but often without a copula, auxiliary etc. moving	*Is the picture has two planets on top?* *Where the little children are?* *Does in this picture there is four astronauts?*	Question marker in front of IP → establishment of CP-layer Q as a free, overt morpheme
4	Copula *be* moves to the front of *yes-no*-questions and to second position in *wh*-questions	*Is the fish in the water?* *Where is the sun?*	Q as a bound, covert morpheme → I°-to-C° movement for *be*
5	Auxiliaries, modals and *do* move to the front or second position	*Can you tell me?* *What is the boy doing?* *How do you say 'proche'?*	I°-to-C° movement for elements base-generated in I°
6	Non-movement of the copula, auxiliaries etc. in embedded questions is acquired* Question tags are acquired	*Can you tell me what the date is today?* *It's better, isn't it?*	Q as a free morpheme in embedded questions → no I°-to-C° movement in embedded questions

*Up until stage 6, L2 learners construct embedded questions
with the same structure as the one they use for main clause questions.

Adapted from Lightbown & Spada (1993:63), which is
adapted from Pienemann, Johnson & Brindley (1988).

Similar to the proposed development of negation in L2 English, Hawkins argues that L2 acquisition of English interrogatives starts without the CP-layer, perhaps even without the IP-layer. At this point in development (stages 1 and 2 in Lightbown & Spada's model), learners signal the interrogative status of an utterance by means of rising intonation only. The

trigger for the establishment of a CP-layer might be the realisation that there is an element in front of IP (stage 3 in Lightbown & Spada's model) interacting with the UG principle that IP is the complement of CP. These pre-IP elements, either a *wh*-element or a finite verb that L2 learners place in front of a declarative sentence, seem to function as 'question markers'. Specifically, these pre-IP elements are treated by L2 learners as overt, free Q morphemes. Hence, there is no I°-to-C° movement; instead there is some sort of verbal duplication in *yes-no*-questions, i.e. there is a pre-IP finite verb along with a finite verb in its declarative position, and there is *wh*-movement only in *wh*-questions. The learner analysis of English Q as a free morpheme suggests that the CP-layer is initially minimally specified; a development that is parallel to the development of the IP-layer outlined above.

At stages 4 and 5, learners realise that Q is a covert, bound morpheme, leading to gradual specification of CP. I°-to-C°-movement for copula/ auxiliary *be* is established at stage 4, and I°-to-C° movement for elements base-generated in I° (modals and auxiliary *do*) is established at stage 5. Recall that *be* was the first element to occur in I° (Agr°) in the acquisition of negation and that *do*-support was one of the last parts of negation to be acquired, so it is not surprising that *be* is likewise the first element to move to C° and that *do*-support is among the last parts of question formation to be acquired. The order of stages 4 and 5 in the question model thus parallels the order of stages 3 and 4 in the negation model. The overgeneralisation of I°-to-C° movement in embedded questions at this point in development suggests that the bound status of Q in main clause questions is assumed by L2 learners to hold for embedded questions as well. The distinction between main clause questions and embedded questions with respect to I°-to-C° movement is acquired at stage 6, suggesting that the specification of Q in embedded questions is more complex than the specification of Q in main clause questions.

Like the development of negation, the development of question formation follows predictions derived from Modulated Structure Building. Paralleling the development of negation, the first syntactic characteristic of question formation to be acquired is the head-complement relation between Q and its IP complement. Also in line with modulated Structure Building is the observation that the last part of question formation to be acquired, i.e. embedded questions, involves an extra layer of syntactic structure compared to main clause questions.

5. L1 transfer and cross-linguistic overcorrection

Modulated Structure Building identifies two sources of errors in L2 syntax; errors stemming from L1 transfer and errors stemming from under-specification of a syntactic category. Studies on L1 transfer suggest that L2 learners' intuitions about the similarity of the L1 and the L2 and about the language-specificity of constructions affect which constructions will be transferred (see Ortega 2009:33-34). Plausibly, syntactic under-specification may also be qualitatively affected by perceived L1-L2 similarities. The concept of cross-linguistic overcorrection, which is the 'tendency to overstress what is different rather than what is common' in the L1 and the L2 (Kupisch 2014:223), may illuminate this point. Specifically, Kupisch argues that L2 learners and non-dominant bilinguals may prefer a target language construction that differs notably from any native construction to a target language construction that is similar to a native construction, because they have detected that this "different" construction is specific to the target language.

In support of such cross-linguistic overcorrection, Kupisch (2014) found that German-dominant heritage speakers of Italian had a tendency to overuse Noun-Adjective constructions, which are the more frequent in Italian, compared to Adjective-Noun constructions, which are common to German and Italian but less frequent than Noun-Adjective in Italian. Interestingly, the Noun-Adjective construction is syntactically more complex, and Kupisch's study thus suggests that cross-linguistic overcorrection may lead L2 learners to prefer a syntactically more complex construction to a syntactically less complex construction if the more complex construction is target language specific.

Applying the insight from cross-linguistic overcorrection to gradual category specification as outlined in Modulated Structure Building, L2 learners may plausibly struggle to acquire a syntactic specification resulting in an L2 construction that is similar to an L1 construction if a lower degree of specification permits an L2 construction that is very different (and more complex) than the corresponding L1 construction. It is moreover plausible that learners' intuition of general L1-L2 similarity impacts cross-linguistic overcorrection, as it does L1 transfer (Ortega 2009:33-34). The generative approach offers a theoretical framework for comparing L1 and L2 constructions with respect to both similarity and complexity, and cross-linguistic overcorrection can therefore easily be incorporated into Modulated Structure Building.

The observation from Lightbown & Spada (1993) that L2 learners of English construct embedded questions in the same way as they construct main clause questions up until the last stage of acquisition may be seen as an instance of cross-linguistic overcorrection. This is so because the syntax of main clause questions in English, with its *do*-support, is English specific, while the syntax of embedded questions in English is cross-linguistically more common.

6. Hypotheses
The following five hypotheses may be derived from Modulated Structure Building and cross-linguistic overcorrection:
- **Hypothesis 1:** Since structure building is posited to develop incrementally, experienced L2 learners are expected to outperform inexperienced L2 learners, and native speakers are expected to outperform (inexperienced) L2 learners.
- **Hypothesis 2:** Since clauses with embedding, other things being equal, have more structure than clauses without embedding, performance on main clause constructions is expected to be more accurate than performance on embedded constructions.
- **Hypothesis 3:** Since negation is an IP-layer phenomenon and question formation is a CP-layer phenomenon, performance on negation is expected to be more accurate than performance on questions.
- **Hypothesis 4:** Since structure building is posited to develop incrementally, L2 experience is expected to interact with structural complexity, so that effects of L2 experience are larger for more complex constructions.
- **Hypothesis 5:** Since cross-linguistic overcorrection is posited to be more extensive for learners whose L1 differs more from the L2, and since Finnish syntax is more different from English syntax than Danish syntax is, L1 Finnish learners are expected to exhibit more cross-linguistic overcorrection errors than L1 Danish learners.

7. Methods
The above hypotheses were investigated by having experienced and inexperienced L1 Finnish and L1 Danish learners of English complete a grammaticality judgement (GJ) test on sentential negation, *wh*-questions, and *yes-no*-questions in main clauses and embedded clauses. A group of native English speakers functioned as a baseline. The GJ test was part of a larger test battery investigating different aspects of L2 performance. Only the GJ results are reported here.

7.1. Participants

Three groups of participants were tested; 41 L1 Finnish learners of English (6 m, 35 f, mean age = 25.17 years), 41 L1 Danish learners of English (8 m, 33 f, mean age = 24.71 years), and a baseline of 14 native English speakers (2 m, 12 f, mean age = 20.65 years).

The L1 Finnish learners of English were all university students living in and around Jyväskylä, Finland. The L1 Finnish participants were divided into two groups: 1) 21 experienced learners: students of English who had lived in an English speaking country for a longer period (range: 2.5 months to 3 years, mean = 10.02 months), and 2) 20 inexperienced learners: students of Finnish who had not lived in an English speaking country.

The L1 Danish learners of English all lived in and around Aarhus, Denmark. The L1 Danish participants were also divided into two groups: 1) 20 experienced learners: participants who had lived in an English speaking country for a longer period (range: 4 months to 2.17 years, mean = 10.73 months), and 2) 21 inexperienced learners: participants who had not lived in an English-speaking country. 14 of the L1 Danish experienced learners and 15 of the L1 Danish inexperienced learners were students of English at Aarhus University. The remaining participants were students of other subjects at Aarhus University or non-students.

The native English baseline group consisted of students at Bangor University, Wales, who were native speakers of standard Southern British English.

7.2. The grammaticality judgement test

The GJ test consisted of a corresponding set of 110 grammatical and 110 ungrammatical sentences, which the participants were asked to judge as grammatically *Correct* or *Incorrect*. Ungrammatical sentences were inspired by one of the source languages (transfer items) or by possible cross-linguistic overcorrection (wrong application of an English construction). Each syntactic construction was tested with one or two types of ungrammaticality, depending on the variation between source languages and target language and opportunities for cross-linguistic overcorrection. Each type of ungrammaticality was represented by 10 ungrammatical sentences. Grammatical and ungrammatical examples of each syntactic construction are presented in detail below. Across constructions, all verbs are mono-transitive thematic verbs, and all subjects are personal names, in order to avoid additional variables.

Main clause negation
All negators are full negators, i.e. *not*.

(22) a.   *Simon does not eat oranges.*

      b.   * *Simon not eats oranges.*   Preverbal negation: Transfer from
                                              Finnish

      c.   * *Simon eats not oranges.*   Postverbal negation: Transfer
                                              from Danish

Embedded negation
All negators are full negators, i.e. *not*. All embedded negations are situated
in clausal objects. Matrix verbs were chosen among English translations
of Danish verbs, listed by Vikner (1995:71-72), that allow only non-V2
clausal objects.

(23) a.   *Paul demands that Wendy*
             does not drink red wine.

      b.   * *Paul demands that Wendy*   Preverbal negation:
             not drinks red wine.   Transfer from Finnish and Danish

Main clause *yes-no*-questions

(24) a.   *Does Simon teach biology?*

      b.   * *Teaches Simon biology?*   Subject-verb inversion:
                                              Transfer from Finnish and Danish

Embedded *yes-no*-questions
All embedded *yes-no*-questions are introduced by *whether* in order to avoid
a *whether*/*if* variable. Since *if* can introduce different types of embedded
clauses, while *whether* introduces only embedded questions, *whether*
was considered more unambiguous. Matrix verbs were chosen on the
basis of a search in the British National Corpus (BNC) and the Corpus of
Contemporary American English (COCA) of verbs that typically introduce
whether-clauses.

(25) a.   *Tim wonders whether Hannah*
             dances salsa.

      b.   * *Tim wonders whether dances*   Subject-verb inversion:
             Hannah salsa.   Transfer from Finnish

      c.   * *Tim wonders whether does*   Embedded *do*-support:
             Hannah dance salsa.   Overcorrection

Main clause *wh*-questions

In order to reduce the number of variables, all *wh*-question items are *why*-questions. *Why*-questions were chosen because they are semantically compatible with a range of verbs.

(26) a.   *Why does Simon play golf?*

    b.   * *Why plays Simon golf?*   Subject-verb inversion:
                                              Transfer from Danish

    c.   * *Why Simon plays golf?*   Verb in declarative position:
                                              Transfer from Finnish

    Note that (26)c is grammatical as an echo-question.

Embedded *wh*-questions

Parallel to main clause *wh*-question items, all embedded *wh*-question items are *why*-questions. Matrix verbs were chosen on the basis of BNC and COCA searches of verbs that typically introduce embedded *why*-questions.

(27) a.   *Paul knows why Stella eats apples.*

    b.   * *Paul knows why does Stella eat apples.*   Embedded *do*-support:
                                                         Overcorrection

7.3. Statistical analyses

The data were analysed by means of logistic mixed effect models in the software program R (R Core Team 2015). Mixed effect models are regression models that model the random variation between participants and items so that this random variation does not skew the estimated predictor effects. Mixed effect models constitute an alternative to both ANOVA and ordinary regression, offering a number of advantages over these models, especially in the case of binary outcome data as in the present study (see Jaeger 2008; Cunnings 2012). All p-values are Holm corrected (Holm 1979) to avoid inflating the Type I error rate (the rate of false positives) by multiple comparisons. The R packages used were *lme4* (Bates, Maechler, Bolker & Walker 2015) and *optimx* (Nash 2014) for mixed effect models, *multcomp* (Hothorn, Bretz & Westfall 2008) for pairwise comparisons, and *ggplot2* (Wickham 2009) for graphs.

8. Results

The GJ results show a considerable ceiling effect with mean accuracy scores of 96.13% for the native speaker baseline, 95.41% for L1 Danish learners, and 95.60% for L1 Finnish learners. Logistic mixed effect models revealed no overall significant differences between the native speaker baseline and L1 Danish and L1 Finnish learners[7] or between native speakers and experienced and inexperienced L1 Danish and L1 Finnish learners.[8]

(28)
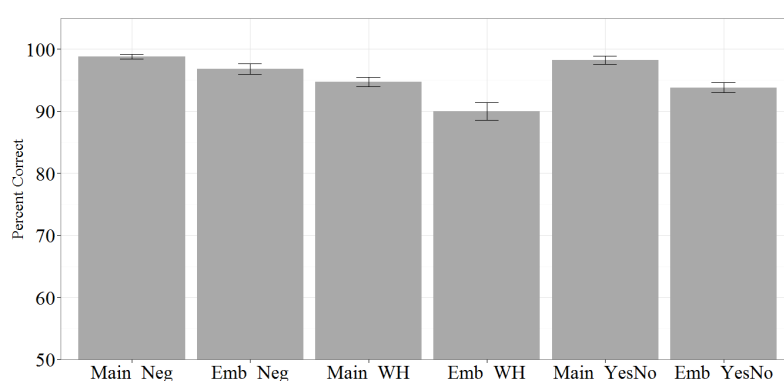
Performance on main clause negation (Main_Neg), embedded negation (Emb_Neg), main clause *wh*-questions (Main_WH), embedded *wh*-questions (Emb_WH), main clause *yes-no*-questions (Main_YesNo), and embedded *yes-no*-questions (Emb_YesNo) across L2 groups.

A logistic mixed effect model on the L2 learner data only[9] revealed that accuracy scores were significantly higher for main clause constructions than for embedded constructions across negation and both question types ($p \leq 0.0043$). However, the differences between embedded and main clause constructions are very small (see (28)), plausibly due to the ceiling effect. The model further revealed that accuracy scores were significantly higher for negation than for *wh*-questions in both main clauses ($p = 0.0000001$)

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[7] Model: glmer(Performance ~ L1 + (1|Item) + (1|Subject), family ="binomial", data = GJ)

[8] Model: glmer(Performance ~ Group + (1|Item) + (1|Subject), family ="binomial", data = GJ)

[9] Model: glmer(Performance ~ Construction + (1|Item) + (1|Subject), family ="binomial", data = GJ, subset = L1 != "English")

and embedded clauses (p = 0.000074) and significantly higher for negation compared to *yes-no*-questions in embedded clauses only (p = 0.0263). Finally, the model revealed significantly higher accuracy scores for *yes-no*-questions compared to *wh*-questions in both main clauses (p = 0.0032) and embedded clauses (p = 0.0263). Again the differences were very small (see (28)), which may again be due to the ceiling effect.

    A logistic mixed effect model on the ungrammatical L2 learner data only[10] revealed that inexperienced L1 Finnish learners performed significantly more accurately on both L1 transfer items (p = 0.000586) and items constructed by transfer from Danish (Other) (p = 0.0001) than on cross-linguistic overcorrection items (see (29)). The model further revealed that the difference in performance accuracy between L1 transfer items and items constructed by transfer from Finnish (Other) was marginally significant for both L1 Danish groups (p ≤ 0.0948) (see (29)). No other within-group differences between different types of ungrammaticality reached significance.

(29)
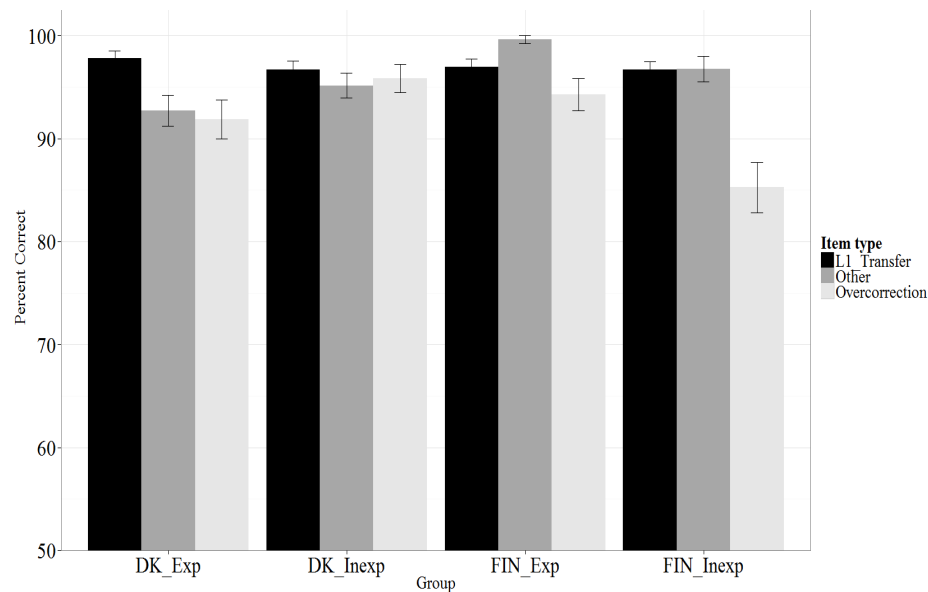
Performance on L1 Transfer items, Other items (transfer from the other source language), and Overcorrection items by experienced and inexperienced L1 Danish and L1 Finnish learners of English.

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[10] Model: glmer(Performance ~ Origin * Experience + (1|Item) + (1|Subject), family ="binomial", data = GJ, subset = CorrectAnswer == "Incorrect" & L1 != "English")

A logistic mixed effect model on the ungrammatical embedded *wh*-question items only[11] showed that no L2 group differed significantly from the native speaker baseline. However, inexperienced L1 Finnish participants scored marginally significantly lower than native speakers (p = 0.0744) (see (30)). The model further showed that the inexperienced L1 Finnish group scored significantly lower than the three other L2 groups (p ≤ 0.0125) (see (30)). No other between-group differences reached significance. Considering the general ceiling effect, the difference between native speakers and inexperienced L1 Finnish learners being only marginally significant, while the differences between inexperienced L1 Finnish learners and the other L2 groups reached significance, may be due to the fact that the native speaker baseline group was slightly smaller than the L2 groups; 14 participants compared to 20 or 21. (30) shows accuracy scores for all groups for grammatical and ungrammatical main clause and embedded *wh*-questions. Logistic mixed effect models were also run for the remaining subsets of the data, but no significant between-group differences were observed.

(30)
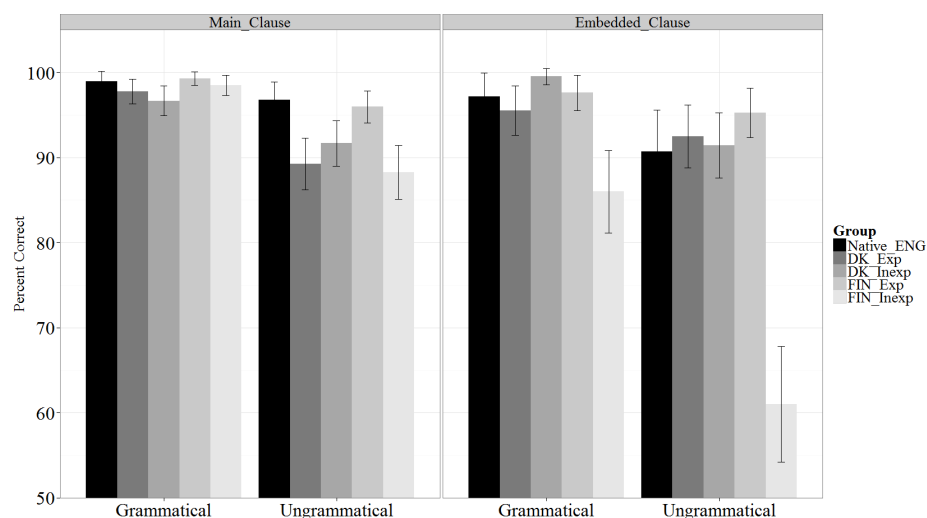
Performance on grammatical and ungrammatical main clause and embedded *wh*-questions by L1 English speakers and experienced and inexperienced L1 Danish and L1 Finnish learners of English.

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[11] Model: glmer (Performance ~ Group + (1|Item) + (1|Subject), family = "binomial", data = WH, subset = CorrectAnswer == "Incorrect" & Complexity == "Embedded")

9. Discussion

This study aimed to investigate the syntactic knowledge of English sentential negation and question formation in L1 Danish and L1 Finnish L2 learners. The study further aimed to test hypotheses on L2 performance derived from Hawkins' Modulated Structure Building model and the concept of cross-linguistic overcorrection. Syntactic knowledge was measured by having experienced and inexperienced L1 Danish and L1 Finnish learners of English and a native speaker baseline group complete a grammaticality judgement test on English negation and question constructions in main clauses and embedded clauses. In general, the results support the main notion of incremental structure building in L2 acquisition, and the data revealed an instance of cross-linguistic overcorrection. Evidence for and against the five hypotheses is presented below.

Hypothesis 1: *Since structure building is posited to develop incrementally, experienced L2 learners are expected to outperform inexperienced L2 learners, and native speakers are expected to outperform (inexperienced) L2 learners.*

Hypothesis 1 was not supported by the present data. The overall differences between experienced and inexperienced L2 learners and between L2 learner groups and the native speaker baseline did not reach significance. However, this lack of significant between-group differences may be an artefact of the strong ceiling effect observed for all groups. The ceiling effect suggests that the test was too easy for L2 learners of the investigated proficiency levels and limited the possibilities for obtaining significant differences between groups. Hypothesis 1 may be tested by applying the present GJ test to low proficiency L2 learners.

Hypothesis 2: *Since clauses with embedding, other things being equal, have more structure than clauses without embedding, performance on main clause constructions is expected to be more accurate than performance on embedded constructions.*

The GJ data support Hypothesis 2. A logistic mixed effect model revealed that accuracy scores were significantly higher for main clause constructions compared to embedded constructions across questions and negation and across L2 groups. However, the difference between embedded and main clause constructions was quite small, which is suggested to be due to the general ceiling effect in the data.

Hypothesis 3: *Since negation is an IP-layer phenomenon and question formation is a CP-layer phenomenon, performance on negation is expected to be more accurate than performance on questions.*

Hypothesis 3 was supported by the GJ data. A logistic mixed effect model revealed that negation constructions were significantly easier than main clause and embedded *wh*-questions and embedded *yes-no*-questions across L2 groups. The model further revealed significantly higher accuracy scores for *yes-no*-questions than for *wh*-questions, suggesting some difference between the two question types not accounted for in Lightbown & Spada's (1993) model. Yet, these differences were quite small, plausibly due to the general ceiling effect in the data.

Hypothesis 4: *Since structure building is posited to develop incrementally, L2 experience is expected to interact with structural complexity, so that effects of L2 experience are larger for more complex constructions.*

The study found some support for Hypothesis 4. Analyses on subsets of the data revealed between-group differences for embedded *wh*-questions only. Specifically, the difference between the native speaker baseline and one of the L2 groups approximated significance for embedded *wh*-questions, in which inexperienced L1 Finnish learners accepted *do*-support in 38% of the cases, which was significantly more often than the other L2 groups and marginally significantly more often than the native speaker baseline. This finding supports Lightbown & Spada's prediction that absence of I°-to-C° movement in embedded questions is one of the last parts of English question formation to be acquired. The fact that inexperienced but not experienced L1 Finnish learners made this error supports Hypothesis 4.

Hypothesis 5: *Since cross-linguistic overcorrection is posited to be more extensive for learners whose L1 differs more from the L2, and since Finnish syntax is more different from English syntax than Danish syntax is, L1 Finnish learners are expected to exhibit more cross-linguistic overcorrection errors than L1 Danish learners.*

The GJ data support Hypothesis 5. The finding that inexperienced L1 Finnish learners but not inexperienced L1 Danish learners accepted *do*-support in embedded *wh*-questions, which is an overcorrection error, supports the hypothesis that L1 Finnish learners exhibit more cross-linguistic overcorrection errors than L1 Danish learners.

Surprisingly, this acceptance of embedded *do*-support by inexperienced L1 Finnish learners was not observed in *yes-no*-questions, suggesting some difference between the two question types not accounted for in Lightbown & Spada's model. A possible explanation may lie in the fact that Finnish has I°-to-C° movement in both main clause and embedded *yes-no*-questions but neither in main clause nor embedded *wh*-questions. Consequently, L1 Finnish learners, having acquired the fact that English *wh*-questions have I°-to-C° movement, may be prone to overstress this difference between main clause English and Finnish *wh*-questions and overgeneralise this difference to embedded *wh*-questions, despite the fact that embedded *wh*-questions have similar structures in English and Finnish. This account is supported by the analysis of the ungrammatical L2 learner data finding that across negations and questions, inexperienced L1 Finnish learners were better at detecting ungrammaticalities stemming from transfer from Finnish or Danish than ungrammaticalities stemming from cross-linguistic overcorrection.

Future research into this area should investigate less proficient learners of English in order to test the order of acquisition of different question types. Specific research questions are: Do L1 Danish learners accept embedded *do*-support in earlier stages? Do L1 Finnish learners accept embedded *do*-support in *yes-no*-questions in earlier stages? How do L1 Finnish learners judge different types of *wh*-questions; do they also accept *do*-support in subject questions such as (31)b, and do they accept embedded subject-auxiliary inversion with modals and auxiliary *be* and *have*, as in (32)b, (33)b, and (34)b respectively?

(31) a.   Who speaks French?
      b.   * Who does speak French?

(32) a.   I wonder why John would speak French.
      b.   * I wonder why would John speak French.

(33) a.   I wonder why John is speaking French.
      b.   * I wonder why is John speaking French.

(34) a.   I wonder why does John speak French
      b.   * I wonder why has John spoken French.

The pattern observed in the development of negation and main clause questions of *be* being the first element to move to I° and C° respectively suggests that the acquisition of the right position of *be* in a given syntactic construction works as a catalyst for the acquisition of the general pattern of head movement related to that syntactic construction. Applying this pattern to the development of embedded questions, I hypothesise that non-movement of *be* will be acquired before absence of *do*-support and non-movement of modals and auxiliary *have*.

10. Conclusion

In conclusion, the study found support for the general notion of incremental structure building in the acquisition of L2 syntax. The study further suggests that the expected between-group differences, which were not observed in the present data, plausibly due to the general ceiling effect, may be obtained by investigating less proficient L2 learners of English. An investigation of less proficient L2 learners may also answer a number of research questions regarding the difference between *yes-no*-questions and *wh*-questions not accounted for in Lighbown & Spada's (1993) model. Moreover, a study of less proficient L2 learners may further enhance the understanding of the nature and development of cross-linguistic overcorrection in L2 syntax. It is argued that the phenomenon of cross-linguistic overcorrection can be incorporated into the Modulated Structure Building model. Specifically, cross-linguistic overcorrection is suggested to play a role in the gradual specification of syntactic categories posited by Modulated Structure Building. Moreover, the generative approach offers a theoretical framework for assessing cross-linguistic similarities and differences as well as relative complexity of L1 and L2 constructions and thus predict possibilities for cross-linguistic overcorrection more accurately.

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Changes in the properties of the noun in Danish – evidence from the indefinite article

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Abstract
In this paper, the properties of the noun in Old Danish and Modern Danish are examined, with the emphasis on Old Danish. The paper shows how Old Danish nouns did not need determiners in order to function as arguments and discourse referents. Based on this, it is claimed that Old Danish is typologically different from Modern Danish. It is also claimed that it is the formation of an indefinite article that signals the typological shift, and the paper provides an outline of the development of the indefinite article in Danish. The work takes its departure in a semiotic (i.e. structuralist) approach to functionalism.

1. Introduction

In this paper, I argue that the syntagmatic structure of nominals in Old Danish is fundamentally different from the one in Modern Danish. The data point to a structure in Old Danish whereby the bare noun has the potential of serving as an argument to a predicate; in fact, with respect to argument vs. non-argument, the noun itself is vague. Depending on the context, it may serve as an argument or not. In Modern Danish, this is not so; in Modern Danish, a noun needs some kind of determiner in order to serve as an argument. Based on this, I argue that a typological shift took place in Old Danish. Furthermore, I argue that the structural change is signalled by the formation of the indefinite article.

First, a brief description of what is meant by 'the properties of the noun' and how it applies to Old Danish is given (sections 2 and 3). In section 4, an inventory of the articles of Danish is provided. It is shown that Old Danish differs from Modern Danish in this respect. Then, in section 5, an outline of the development of the indefinite article is given. In sections 6-8, the structural changes of the properties of the noun and of the syntagmatic structure of nouns cum determiners are discussed. It is claimed that even though the definite article was found in Danish several hundred years before the indefinite article appears, it is the advent of the indefinite article that signals the typological shift in the structure of Danish nominals.

The approach to the question of syntagmatic structure in this paper is based on the semiotic functionalism characteristic of the research community of Danish Functional Linguistics (DFL), cf. Engberg-Pedersen et al. (1996, 2005). A major influence in this approach is found in the classical European structuralism.

2. The properties of the noun

It is not uncommon in the European structuralist-functionalist tradition to assume that the functional potential of the prototypical noun is at least twofold: One function of the noun is to carry the descriptive content for a type or a category, the other function is to point to an entity fitting the descriptive content. This stance is taken by Hewson (1991:329), who writes that it is the nature of the noun that in it there is "(a) a lexical element that *characterizes*, and there is also (b) what may be called a referent, that which is *characterized* by the lexical element of the noun" (emphasis according to original). Harder (1990:57) puts it like this: "a noun designates not just its descriptive content, but also something which *instantiates* the descriptive content" (emphasis according to original). However, it is not the case in all languages that the noun itself has the ability to 'instantiate the descriptive content'; in fact, Harder continues to say that his account holds for "nominal expressions" rather than for nouns themselves. Lyons (1977:425) very carefully distinguishes between nouns – which have denotation – and nominals – which have reference. The logical-philosophical discussion of what counts as referential will not be an issue for further debate in this paper. To the matter at hand, it will be sufficient to characterize nominals as linguistic items which have the ability to take the place of an argument to a predicate, and which may constitute discourse referents.

3. The properties of the noun in Old Danish

In Old Danish, the bare noun by itself has quite a large functional potential. It may function as subject and as object, as shown in (1):

(1)   Dræpær **thræl** frælsan **man**[1]   (SL)[2]
      kills   slave free   man
      'If a slave kills a free man'

It may be incorporated in the predication, as shown in (2):

(2)   ath hin takni hafwær thær **hembygd**   (SL)
      that the   taken have   there homeplace
      'that the apprehended person lives there'

It may also function as a subject complement,[3] cf. (3):

(3)   tho   ær han oc   **thiuf** um han stial en   pænning (SL)
      though is he also thief   if   he stole one   pænning
      'however, he is also a thief if he stole (only) one penning'

In sum, the bare noun in Old Danish functions equally well in functions as argument (1) and as part of the predication (2)-(3). In fact, due to the wide potential of nouns, in many cases, it is not absolutely clear whether a noun is one or the other. Depending on context, the noun *kunu* in (4) may be interpreted as an argument in its own right, or as an incorporated element in a complex predication. This is reflected in the two translations in (4a) and (4b):

(4)   FAR. Man **kunu**   (SL)
         gets   man   wife
a.   'If a man gets a wife'
b.   'If a man gets married'

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[1]   In all excerpts quoted from medieval manuscripts, the original orthography is preserved. This includes the punctuation and the use of small vs. capital letters.

[2]   A full list of sources is given after the list of references.

[3]   In the unmarked case, subject complements still do not contain an article in Modern Danish; this is different from Modern English. In Modern Danish, the sentence *han er en bager* 'he is a baker' with the article *en* 'a' would prompt an interpretation of subjective evaluation on the part of the speaker along the lines of: *wow, he's some baker!* (cf. Hansen 1927:52-56, 1967:170; Jensen 2012).

In Modern Danish, the use of the bare noun is restricted to the predication. In order for a noun to function as an argument, it must be accompanied by external means of determination, e.g. an article (Jensen 2007b). In (5), accompanied by the article *en*, the noun functions as an object. In (6), the bare noun is incorporated in the predication:

(5)   Hun   læser   **en historie**.
       she   reads   a   (hi)story
       'She reads a story'

(6)   Hun   læser   **historie**.
       she   reads   (hi)story
       'She studies history'/'She is a student of history'

As regards discourse functions, the bare noun also has a wider range of possibilities in Old Danish when compared to Modern Danish. In (7), the bare nouns *kunu* 'woman' and (the first mention of) *barn* 'child' both introduce new discourse referents, and the second mention of *barn* 'child' represents the continuation of the discourse referent mentioned earlier in the text:

(7)   Varthær   **kunu**   døth. oc   lifwær   **barn**   æftær. oc   (...)
       becomes woman   dead and lives   child   after. and (...)

       um   them   skil   um.   ath   **barn**   fic   cristindom   (SL)
       if   them divides about that child   got christianity
       'If **a woman** dies and **a child** survives her, and (...) there is a disagreement as to whether **the child** was christened'

This is very different from Modern Danish where nouns functioning as discourse referents are always presented with determiners, e.g. articles. If translated into Modern Danish, the nouns in this excerpt would be presented with articles, just as is the case for the translation into English. In Old Danish, the bare nouns in (7) represent the prototypical way of introducing and continuing discourse referents - no determiner is needed.[4]

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[4]   As a matter of interest, this applies to Old Norse as well, cf. Faarlund (2004:56 ff.).

4. Articles in (Modern Danish and in) Old Danish

In Modern Danish, there is a developed system of definite and indefinite articles. An inventory is given in table 1:

		singular		plural
		common	neuter	
indefinite	preposed	*en*	*et*	*(nogle)*[5]
definite	preposed[6]	*den*	*det*	*de*
	postposed	*-(e)n*	*-(e)t*	*-(e)ne*

Table 1. Inventory of articles in Modern Danish

Old Danish does not have this many articles, and Old Danish articles are not used as frequently as Modern Danish ones. Most importantly, no instance of the indefinite article is recorded in the earliest manuscripts (cf. Jensen 2006, 2009, 2011:164-167). The definite article does occur, but is not as commonly used as in Modern Danish. It always signals identifiability, and it always builds discourse referents, even if the discourse referent is of a generic[7] kind. As for the preposed article, it is likely that preposed demonstratives may already be used as articles; when this happens, it only ever occurs before an adjective (cf. note 6). An example of this is given in (8):

(8)   hafwær **thæn døtha** mothær   (SL)
        has   the   dead   mother
        'if the dead person has a mother'

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[5] For a comprehensive account, complete with examples, of *nogle* 'some' as the indefinite article in the plural, see Hansen & Heltoft (2011:472-478, 485-486ff). It should be mentioned that although this analysis was first proposed almost a century ago (cf. Hansen 1927:29-30), it is as yet not universally accepted. However, it falls outside the scope of the present paper to take up this discussion.

[6] The preposed definite article only ever occurs immediately preceding an adjective. Thus, the preposed definite article is sometimes called the 'adjective article', e.g. Møller (1974). In this respect, Danish differs from other Germanic languages such as Modern English and German.

[7] According to Faarlund (2004:58), the use of the definite article in Old Norse expresses unique and specific reference. In Old Danish, the article may also be used to express generic reference as shown in the examples.

As for the postposed definite article, sporadic instances do occur, cf. (9)-(11):[8]

(9) Vil **bryti** skilias   fran hus   bonda sinum (...)
     will bailiff separate.PASS from house man   his   (...)

     fari   **brytin**   til twiggia thinga   (SL)
     go.SBJV bailiff-DEF   to   two   things
     'If a farm bailiff wants to separate from his master the bailiff must attend two assemblies'

(10) tha   bøtær hin ær   **høfthingin** war
     then   pays   he   who   chief-DEF   was

     i   therra færth   fulla man bøtær   (SL)
     in   their   expedition full   man fines
     'Then he who was the ringleader of the expedition must compensate for the dead man in full'

(11) Thettæ ær   skial   mællæ   bondæ   mark oc
     this   is   boundary between   farmers land and

     kununglef   (...) swa at **dammæn** i   **bækkæn**
     kings-property (...) thus at pond-DEF   in   stream-DEF

     swa   nithær at **bækkæn**   i   høkis wasæ   (VJ)
     thus   down   to stream-DEF   in   høkis wasœ
     'This is the boundary between the farmers land and the kings property (...) thus at the pond in the stream, further down to the stream in Høkes Vase'

As a matter of interest, in (9) the identifiability relies on the antecedent *bryti*; in (10) the identifiability relies on inference – where there was a gang of attackers – there could be a chief (the noun *høfthing* 'chief' is not mentioned earlier in the text), and finally, the identifiability instructed by the definite articles in (11) relies on the knowledge of a landscape in the real world.[9]

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[8] The enclitic definite article is attested in a few runic inscriptions found in very different places in Scandinavia. The earliest attestations are from Uppsala in Sweden around 1040; in Denmark, the earliest attestation is from Northern Jutland around 1200, cf. Jensen (2007a:147).

[9] Himmelmann (1997:243) suggests that the definite article does not stem from anaphoric use of demonstratives, but of what he calls the recognitial use, i.e. a use based on mutual knowledge, not just identifiability.

However, examples of nouns with enclitic articles like (9)-(11) are few and far between (cf. Jensen 2006, 2011:164-167).

From this account, we can make an inventory of articles in the singular in Old Danish as in table 2:

postposed definite article   (*bryti*)-*n*
preposed definite article   *thæn* (*døtha*)
(NB. no indefinite article!)

Table 2. Inventory of articles in Old Danish

The preceding account also serves as the background for a summary of the properties of the noun in Old Danish. The main property of the noun in Old Danish is to carry the descriptive content of the noun. In addition to this, the noun has yet another property, namely the potential of forming discourse referents. This may be depicted as in table 3:

	noun	**article**
property	descriptive content (+ referential potential)	referential
	barn	
	bryti	*-n*
	høfthing	*-in*

Table 3. Properties of the noun in Old Danish

This amounts to saying that the noun itself without the aid of some external means, e.g. an article, has the potential of functioning as an argument (a nominal, cf. section 2 and Lyons 1977:425). Even though, as in (9)-(11), the noun does occur with the addition of the enclitic definite article, this is not the prototypical way of presenting discourse referents, and the presence of the article is not required from a structural point of view. It could be said that as the noun is vague regarding the potential as a discourse referent, by the addition of the article, the vagueness of the noun is dissolved.

5. The development of the indefinite article in Old Danish

The definite article existed in Danish a long time before the indefinite article. As shown in the previous section, its main purpose was to dissolve the vagueness of the noun in favor of a function as an argument and a discourse

referent. However, the definite article was by no means obligatory in that stage in Old Danish. At some point the indefinite article was developed in Danish, and this signals a typological shift (cf. section 6).

It is commonly agreed that the indefinite article in many languages stems either from the numeral 'one' or from the indefinite pronoun '(some) one', cf. Terner (1922:32 on Swedish); Behaghel (1923:415 on German); Mylord-Møller (1923 on Danish); Hansen (1927:24-25, 171 on Danish); Leijström (1934:127 on Swedish); Christophersen (1939:98 on English); Brøndum-Nielsen (1962:168-175, 1965:413-417 on Danish); Givón (1981 on several non-Germanic languages); Traugott (1982 on English); Hopper & Martin (1987 on English); Askedal (2012 on several Germanic languages).

In the manuscripts of Old Danish, there are many clear cases of *en* 'one' as a numeral, cf. (12), and there are also many cases of *en* '(some) one' as an indefinite pronoun, cf. (13):

(12) oc   scal   sweriæ   for   døthæn   man   mæth   thre
      and   must   swear   for   dead   man   with   three

      tyltæ.   oc   for   sar   mæth
      dozen.of.supportive.witnesses   and   for   wounds   with

      en   tylt   (EL)
      one   dozen.of.supportive.witnesses
      'and must swear for the dead man with three dozen 'supporters' and for wound(s) with **one** dozen'

(13) dull   man   ænti   liutæ   ællær   sar.   tha   a   han
      denies man   either   damage   or   wounds   then   has   he

      fore **et** theræ   ecki   meræ   at sæliæ   æn   ene   næfnd
      for one they.GEN.PL nothing more   to give   than one   jury

      oc   sithæn foræ the   annær   sár   laghfastæ   man eth (EL)
      and   since for   the   second   wound   lawapproved   men oath
      'If a man denies to be guilty of damage or wound(s), then he is only obliged to present a jury regarding **one** of them, as for the other wounds, the oath of 'law-approved' men will suffice'

There is some dispute as to whether the article originated from the numeral or from the indefinite pronoun, and even whether the article originated

from the numeral or vice versa, e.g. Behaghel (1923), Leijström (1934), Christophersen (1939), von Mengden (2008); in this paper, however, these particular disputes will not be addressed.

The earliest attested occurrences of the indefinite article are found in manuscripts dating back to around 1300.[10] At this time, occurrences are still sporadic, the bare noun representing the prototypical way of presenting nominals, but in some manuscripts the word spelled *en/een/eet* could be seen as tokens of the article 'a', cf. (14)-(16):

(14)   Swa   com   **en**   **røst**   af   himæn   (SC)
        so   came   a   voice   of   heaven
        'Then came **a voice** from Heaven'

(15)   E   uar   han   sum   **eet**   **lamb** (Lam)
        always   was   he   like   a   lamb
        'Always he was like **a lamb**'

Both (14) and (15) are excerpted from narratives from the 14th century, and by the 15th century the use of (definite and) indefinite articles is very much as it is in Modern Danish in this text type (Jensen 2007b). However, (16) is taken from a rather large collection of medical recipes:

(16)   oc   giør   th*æt*   warmt   innen   **een**   **pannæ**   (BM)
        and   make   that   warm   within   a   skillet
        'and make it warm in **a skillet**'

In this particular text (Book of Medicine) the indefinite article is used in many of the recipes, and in contexts where it cannot be confused with the numeral 'one'. This is interesting because medical recipes resemble legislative text types much more than narratives do, and therefore it might have been expected that the distribution of the indefinite article in the Book of Medicine had resembled that of the legislative text. The fact that the indefinite article is regularly used in this text suggests that it is on its way to become a standard feature in Danish at this time.

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[10] In the manuscript Codex Runicus, perhaps the earliest example of the indefinite article is found. In between other texts, a single line from a song, complete with an early version of musical notes, appears. This line reads: "drømde mik en drøm i nat um silki ok ærlik pæl" – lit.: 'dreamed me a dream last night of silk and valuable cloth' (Song).

In order to give an account of the diachronic process leading to the development of the indefinite article, ideally, it is necessary to consult sources from an earlier stage of the language. This is possible in the manuscript AM 455,12° containing the legislative text called *Eriks sjællandske Lov*. Based on palaeographic evidence, the manuscript is dated to around 1300. However, as regards the age of the language (rather than the age of the manuscript itself), this is likely to be of a much earlier stage than the language represented in (14)-(16), cf. Brøndum-Nielsen (1918); Wellejus (1972); Jensen (2006, 2011:83-89).

At this stage of Old Danish, the bare noun still represents the prototypical way of introducing discourse referents, cf. (17):

(17) Dræpær **man** anner   a   **tørghi**. tha a   han   at bøtæ
     kills   man (an)other at square then has he   to pay

     furtiughæ marc frændær til manbøtær. oc   swa **kunung** (EL)
     40   marc relatives to manfines   and so   king
     'If a man kills another in the square, then he must pay a fine of 40 marc to the relatives in addition to the compensation for the lost life, and the king as well'

But we also see a number of cases where one entity is singled out in the context of some plurality; this might be paraphrased as 'one of several'. This is the case in (18)-(20):

(18) warthær swa at **en   man** sæctær **annæn** um   sar (EL)
     becomes so   that one man sues   another about wound(s)
     'if so happens that **one man** sues **another** about wound(s)'

(19) Mælær **en   man** with **annær** (...) at sæliæ hanum iord (EL)
     talks one man with another (...) to sell   him   land
     'If **one man** talks to **another** about selling him land'

(20) Gør   thet oc **en   lot** af byn   (EL)
     does it   also one part of town
     'If also **one part** of the town does it'

In many of these instances, the noun, in fact, represents a new discourse referent, and examples like these may very well constitute the bridging

contexts (Heine 2002) for the reanalysis (in the sense of Andersen 1973) of 'one' as an indefinite article used by the introduction of new discourse referents.

6. The changes in the properties of the noun

It seems that in all languages which have nouns, the noun may have the ability to carry the descriptive content of a type or a category. But only in some languages may the noun itself have the potential to serve as an argument. In languages such as Modern French (Hewson 1991:333; Herslund 2003), Modern English (Christophersen 1939:83; Lyons 1977:392-393, 430, 452; Harder 1990), Modern German (Admoni 1970:127), and Modern Danish (Thomsen 1991; Herslund 1995; Heltoft 1996), this potential appears to be missing - at least in the singular.

In languages like Latin (Blatt 1946:31, 105; Hewson 1991:334), Modern Finnish (Chesterman 1991:90f), Modern Russian (Christensen 1992:19; Nørgård-Sørensen 1992:90), Old Norse (Faarlund 2004), Old English (Wood 2007), and Old Danish, the noun itself does have this ability, i.e. to serve as an argument to the predicate and thus as a nominal. The difference between the functional potential of the noun in Old Danish and Modern Danish may be sketched as in table 4:

	The properties of the noun	The functional potential of the noun to build nominals
Old Danish	descriptive content (+ referential potential)	*noun ± determiner (e.g. article)*
Modern Danish	descriptive content	*noun + determiner (e.g. article)**
		* NB. bare noun ≠ nominal

Table 4. The properties of the noun

This fundamental difference between the two chronolects may once again be illustrated by (4), here repeated as (21):

(21)   FAR. Man   **kunu**   (SL)
          gets   man   wife
a.   'If a man gets a wife'
b.   'If a man gets married'

In Old Danish, the noun may or may not take the place of an argument to a predicate, cf. the noun *kunu* 'wife' in (21). In (21), the noun *kunu* 'wife' may either be interpreted as the object argument to the predicate *far* 'gets', or it may be interpreted as incorporated in a predication *far kunu* 'gets married'. The noun itself is vague in this respect, as it has the potential to function either way. In Modern Danish, this is not so. If the excerpt in (21) were to be translated into Modern Danish, it would be necessary for the translator to make an assessment from the (perhaps extra-linguistic) context in order to choose one of the two options conveyed in the English translations of (a) and (b).

Hewson makes the observation that in the Modern French nominal there is a division of labour between the article that "carries all the grammar" and the noun which in turn is left as "a simple lexeme", and that in this respect we see "a typological shift from Latin, where the noun combined within itself both grammatical and lexical elements" (Hewson 1991:333-334). The same could be said for Danish: From Old Danish to Modern Danish there was a typological shift, where the noun itself lost the grammatical potential of functioning as argument, and now only regains this ability by external means in the form of determiners such as articles, pronouns etc.

7. The structural change of Danish nominals

In the examples (18)-(20) from Old Danish, we saw phrases consisting of the word *en* '(some)one' and a noun. To the speaker of Modern Danish (and English) this probably does not look very unfamiliar, but the internal structure within the phrase in these examples is in fact fundamentally different from the one seen in Modern Danish. In Modern Danish the noun is dependent on the article to serve as an argument, whereas in the examples (18)-(20) from Old Danish, the word *en* '(some)one' simply co-occurs with the noun.

This may be explained in the terms offered by Himmelmann (1997), who makes the distinction between what might be called 'phrasal structure' and 'group structure'. Himmelmannn describes the two ways of organizing the nominal (or indeed any syntagm) as follows:

> "eine *phrasale Gestalt* ist ein Syntagma, in dem syntaktisch selbständige Elemente in Konstruktion mit mindestens einem syntaktisch unselbständigen Element (einem Grammem) stehen. Die Konstituenten bilden notwendigerweise eine sequentielle Einheit

> [...], wobei für die Abfolge der Konstituenten typischerweise feste Regeln gelten." (Himmelmann 1997:137; emphasis according to the original)
>
> 'a phrasal construction is a syntagm, where syntactically independent elements occur with at least one syntactically dependent element (a grammeme). The construction must form a sequential unity, typically with a strict word order.'

> "eine *Gruppe* ist ein Syntagma, in dem syntaktisch selbständige und gleichrangige Elemente juxtaponiert sind. Die Elemente können eine sequentielle und prosodische Einheit bilden, müssen es aber nicht." (Himmelmann 1997:137; emphasis according to the original)
>
> 'a group is a syntagm, where syntactically independent and equal elements are juxtaposed. The elements may form a sequential and prosodic unity, but they do not have to.'

The syntagmatic structure characteristic of "phrasale Gestalten" is the one we are familiar with in most of the Modern Germanic languages. In this structure, at least one element is syntactically dependent on another. Further characteristics of phrasal structure are a formal unity and a strict sequential ordering. Different from this is the syntagmatic structure seen in a so called "word group". Within a word group several words may co-occur alongside each other, but they remain independent units in their own right: the occurrence of one is not dependent on another.[11] A word group may – but does not have to – appear as a sequential and prosodic unity. Following this description, the syntagmatic structure in the two chronolects may be sketched in a crude notation as in table 5:

> Old Danish   'group structure'   *en man* 'one man' [one][man]
> Modern Danish 'phrasal structure' *en mand* 'a man'   [a man]
>
> Table 5. The internal organization of group structure and phrasal structure

In support of this claim, the following observation is put forth - in many of the Medieval texts that have been written down more than once and therefore exist in more than one manuscript, e.g. legislative text, in some

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[11] However, when they do co-occur, they will show agreement as regards relevant morphological categories, such as gender, number and case in Old Danish nominals.

manuscripts the noun may be accompanied by the word *en* (be it a fully
developed article, a numeral or a pronoun) in others it may not: (22)-(23)
are excerpted from two different manuscripts containing the legislative
text called *Arvebog & Orbodemål*.

(22) a. hittir **en man** at særæ   fæm sar   **en annan man**
                                                                 (AO1)
          finds one man to wound five wounds one (an)other man

      b. Gør **mand en anden   mandt** fem   saar   (AO3)
          does man   one (an)other man   five   wounds
          'If a man wounds another man with five wounds'

(23) a. En warthir at **en man** vetir   **andrum manni**
          but becomes that one man contributes another   man

          fæmtan saar   (AO1)
          15   wounds

      b. Skeer   dett saa att **en mandt** gør **en anden mandt**
          happens it   so   that one man   does one another man

          femtan saar   (AO3)
          fifteen   wounds
          'If it so happens that a man wounds another man with fifteen
          wounds'

(22)-(23) show two different excerpts from the text, each from two different
manuscripts. Apparently, syntactic function is not a decisive factor of the
distribution of *en*. As it is shown, in the first set (22a,b), it is the subject of
the sentence that may or may not appear with the word *en*. In the second set
(23a,b), it is the object. Another interesting fact is that the use of the word
en seemingly is not restricted or even preferred to one manuscript over the
other. This apparent lack of preference could be even more widespread
than shown in (22)-(23). Included in the published edition of *Arvebog &
Orbodemål* is a critical apparatus of the deviations of other manuscripts.
This apparatus reveals that the word *en* is included sometimes in some
manuscripts and not in others, without any apparent system. This suggests
that the word is indeed not obligatory in order to make the noun function
as an argument, but may be taken along or left out if the scribe so decides.

8. Summary of the changes

What is characteristic of the changes described in this paper is that they are interrelated, but also that they are without a direct causal link. It cannot be said that the development of the indefinite article caused the new syntagmatic structure, nor did it cause the changes of the properties of the noun or vice versa. Rather, the changes slowly happened through a process named 'regrammation' by Andersen (2006). According to Andersen, a regrammation is "a change by which a grammatical expression through reanalysis is ascribed different grammatical content (change within and among grammatical paradigms)" (Andersen 2006:233; cf. also Nørgård-Sørensen, Heltoft & Schøsler 2011; Lucas 2012). Regrammations take place "within and among grammatical paradigms", and, in fact the two changes could be depicted as in tables 6 and 7 below. As regards the properties of the noun in the two different stages of Danish, the contents of the sketches set up in tables 3 and 4 constitute the basis for such paradigms. The first paradigm in question is the opposition of a bare noun vs. a noun cum article. In table 6, this paradigm and the change therein are depicted:

bare noun	descriptive content, reference (optional)
noun cum article	descriptive content, reference
	↓
bare noun	descriptive content
noun cum article	descriptive content, reference (optional)

Table 6. The change in the properties of the noun

The change shown in table 6 concerns the content of the expression, not the expression itself. The same goes for the changes concerning the syntagmatic structure of the nominal depicted in table 7:

group structure	[*en*] [*man*]	reference + referential potential	discourse referent
	[*man*]	referential potential	discourse referent / part of predication
↓			
phrasal structure	[*en mand*]	referential potential	discourse referent
	[*mand*]	not referential potential	part of predication / abstract meaning

Table 7. The change in the syntagmatic structure of the nominal

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In both cases, the change takes place in the content of the expression, and as a result of this, many more instances of nouns accompanied by determiners appear on the expression side, i.e. in the spoken and written discourse in Danish.

As always, actualization is preceded by reanalysis, cf. Timberlake (1977), Andersen (2001). The reanalysis takes place in the internal grammars of individual language users, and the reanalyzed structure remains internally within the mind of these language users until they themselves make use of the new structure (Andersen 1973). The new structure is thus invisible up to the point where it is used ('actualized'). This entails a period of time where different grammatical structures coexist within the speech community, typically without causing any communicative trouble in everyday use of language.

9. Conclusion

In this paper, I have presented a functionalist take on nominal structure in Old and Modern Danish. The aim has been to show how different changes in a language are interrelated, and that the change of the internal structure of the nominal is closely interconnected with other changes of structural kind, e.g. the changes of the properties of the noun. As a part of this, the development of the indefinite article is interesting in that it turns out to be a signal of a major typological shift taking place in Danish.

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Doubling left syntactic positions in Danish

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Abstract

This paper deals with the doubling of certain positions on the left edge of Danish clauses. Such doublings consist of a referential element (an NP or a clause) followed by an anaphoric element (an unstressed personal pronoun or an unstressed resumptive adverb). In main clauses, doubling applies to the CP-spec position, whereas in subordinate clauses, it applies to the subject position. This construction is found all over Mainland Scandinavia, cf. Johannessen (2014). In present-day Danish, its main domain is spoken language, but it is also frequently found in poetry. Unless there is a clear contrast, the construction is optional, as shown in the analysis of a broadcast public speech (section 5). In earlier versions of Danish, as shown in section 4, the construction was more frequent in writing and it also seems to have been almost obligatory.

1. Introduction

In Danish, the semantic content of CP-spec (or 'fundamentfeltet' in the Danish syntactic tradition, cf. Bjerre et al. 2008) often appears in a double form: an anaphoric element (unstressed pronoun or adverb) preceded by a content element, ranging from a deictic pronoun up to full semantic representations:[1]

(1)   Ham der, <u>han</u> er komplet tosset.
        Him there, he is completely mad
        'The person over there is completely mad'

---

[1]   The anaphoric element is <u>underlined</u> .

(2)   Hunden, <u>den</u> har mavepine.
       Dog-the, it has stomach-pain
       'The dog has pains in the stomach'

(3)   I torsdags, <u>der</u> var vi på Moesgård.
       On Thursday, there we were at Moesgård
       'On Thursday we went to Moesgård'

(4)   Hvis du ikke stopper nu, <u>så</u> ringer jeg til politiet!
       If you not stop now, then call I to police-the
       'If you do not stop now, I'll call the police'

The construction is also found in subordinate clauses; here, the subject (which in modern Danish is in an IP-spec-position) doubles:

(5)   Jeg fortalte ham at mester <u>han</u> sikkert bliver helt stiktosset hvis han
       sagde sådan.
       *I told him that boss-the he certainly becomes completely mad if he
       said so*
       'I told him that the boss will be completely mad if he said so'

(6)   De mure som mester <u>han</u> forlangte revet ned igen, var ikke så dårlige
       igen.
       *The walls that boss-the he demanded torn down again were not so
       bad for-that-matter*
       'The walls that the boss wanted to have torn down again, were not
       so bad for that matter'

(7)   Når mester <u>han</u> forlangte noget lavet om, så skulle det ske her og nu.
       *When boss he demanded something done again, then should it
       happen here and now*
       'When the boss wanted something remade, it should be carried out
       right away'

Much of this sounds very colloquial to native ears, but the construction is also found in certain types of high style as well, cf. this quote from a much-used church hymn:

(8)   Det kendes på os som lysets børn / at natten <u>hun</u> er nu omme.
        It be-known on us as light's children that night-the she is now over
        'Let it be known by us as children of the light that the night is now over'

                                                        (N.F.S. Grundtvig, ca. 1826)

The construction is also found in the other Mainland Scandinavian languages, Norwegian and Swedish, cf. Johannessen (2014). Johannessen (2014) offers a full overview of the distribution of both the main clause structure and the subordinate cluse structure, showing that the construction is present within the whole Mainland Scandinavian area.

Since much grammar writing has a strong written language bias, such constructions with evidently synonymous elements juxtaposed are normally written off as 'bad style' or 'merely spoken language', cf. Hansen (1983). Indeed, the construction is spoken language, but as I shall try to argue, it holds an interesting key to the syntax of spoken Danish, being able to shed light both on the prosodic features of modern Danish (synchronically) and on the development of the functional syntax (historically). The line of the argument follows John Du Bois' concept of Preferred Argument Structure (Du Bois 2003), extended with the observation that adverb phrases alternate with noun phrases in CP-spec in Danish.

In the absence of a suitable term I shall use the term 'doubling' to refer to such constructions below. Johannessen (2014) uses the term 'left dislocation' for this construction; but since this term is often connected with contrastive meaning, an implication which many of my Danish examples do not fulfill, I have preferred the term 'doubling'. The doubling itself consists of two elements: a referential part and an anaphoric part, and they will also be referred to in these terms.

2. The construction in Danish grammar
The fact that pronouns (resuming NP's) and single adverbs (resuming adverbial clauses or phrases) may be inserted after a heavy introductory element, is discussed at length in Falk & Torp (1900:275-277) with a wealth of examples from the literature. The first reference grammar of Danish syntax, Mikkelsen (1911) [1975], mentions the construction only briefly under the heading of "Pleonasms" (Mikkelsen 1911 [1975]:744, 747). Many interesting stylistic observations are found in Albeck (1939: 162), who finds the origins both in emphatic expressions and in improvising orality. Paul Diderichsen (1941:50-58) argues that the (pro-)nominal and

adverbial element occupy the same position in the syntax, i.e. what we now call 'fundamentfelt', aka CP-spec. In his modern Danish syntax (Diderichsen 1962), the construction is mentioned briefly (p. 178 & 194-5) without much further ado. The most recent reference grammar of Danish, Hansen & Heltoft (2011), deals with the construction in many details under the heading of 'extraposition'. After an account of the formal aspects (Hansen & Heltoft 2011:1827-1836), they give an account of semantics and style (Hansen & Heltoft 2011:1836-1840), where they emphasize the connection to topic and focus.

In general, the construction is supposedly frowned upon in writing, but the problem is not serious enough to worry the traditional guides to improved written form (e.g. Oxenvad 1951, Hansen 1965, Jacobsen & Jørgensen 1988, 1995).

3. The details of the construction

Basically all kinds of constructions that are possible in a CP-spec may also appear in the doubling. Danish allows all nominal constructions - subjects, objects and predicates - to appear here. Furthermore, most adverb types with the exception of negations and other operators may have their place here as well. The infinite verb element (the VP node) may also be found here, normally accompanied by all its sister constructions. Other possibilities are clauses and small clauses, cf. Jørgensen (2000:81-83), Lundskær-Nielsen et al. (2011:207-8). There is a strong consensus that the CP-spec position is filled with the preferred argument, cf. Du Bois (2003). In the case of Danish (and probably many other languages as well), we also have to take a whole range of circumstantial adverb phrases into consideration for the CP-spec of the main clause.

The anaphoric element shows concord with the referential part. The anaphor is a personal pronoun (unstressed) when the referential part is an NP (including the infinite VP, the nominal clause and the small clause, all referred to with *det*), whereas the equally unstressed adverbs *så* and *da* are used when the referential part is an adverb phrase or an adverbial clause. It is crucial that these elements are all unstressed, a fact pointing to their purely anaphoric status.

In nominal reference, the pronouns follow the modern distribution:

Reference	Expression
to person	♀: *hun* (oblique: *hende*); ♂: *han* (oblique: *ham*)
to non-person	common gender: *den*; neuter: *det*
to nominal clause	*det*

In older variants of Danish, where three genders (masculine, feminine, neuter) were still maintained, another distribution was used. In this version, which corresponds to the descriptions in the two earliest grammars of Danish, Kock 1660 and Pontoppidan 1668[2], animateness is not taken into account:

Reference	Expression
to masculine gender	*han*, obl. *ham/hannem*
to feminine gender	*hun*, obl. *hende*
to neuter gender	*det*
to nominal clause	*det*

The construction seems from the begining to be reserved for statements; we never find it in e.g. constituent questions:

(9)   *Hvorfor, <u>så</u> har du ikke taget bogen med?
       Why then have you not brought book-the with?
       'Why didn't you bring the book?'

It also is remarkable that doubling in the subject construction proper in main clauses does not occur; only the CP-spec may double:

(10)   *Så må detektiven <u>han</u> have fundet ud af at slette sine egne spor.
       So must detective-the he have found out of to remove his own traces
       'So the detective must have found out how to remove his own traces'

This fact may be a clue to the use of the construction. The constituent in

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[2] Reprinted in Berthelsen (1915) 1979

CP-spec in a statement in Danish has to be an anaphorical element. If for some discursive reason you need a non-anaphoric element in this function, it must be doubled, calling the attention to the (stressed) referential point of departure in the mind of the listener before we enter the sentence proper with the (unstressed) anaphoric element; but as I have mentioned, there is no evident need to see this as contrastive meaning. Thus, spoken Danish tends to display a topic-focus structure quite neatly and relate it to a prosodic pattern departing from an unstressed element and moving towards stressed elements. By associating the topic with anaphorical meaning (and lack of stress), the split between the contextual functions is clearly spelled out.

In clauses the doubling only occurs with the subject, unless the whole sentence switches to declarative (= main clause) word order (Hansen & Heltoft 2011:1675-1708):

(11)   Jeg sagde til dig at den bog <u>den</u> har jeg smidt ud
       I told to you that that book that have I thrown out
       'I told you that I threw that book out'

The doubling of the subject is probably best understood in the light of Barry Blake's statement that the subject is a grammaticalisation of the topic (Blake 1994:31-32), a statement in agreement with the theory of Preferred Argument Structure.

Interestingly enough, the doubling has entered the multiethnolect of Aarhus, where even deictic pronouns may allow doubling:

(12)   Ham <u>han</u> vil ikke hjælpe dig
       Him he will not help you

In this context this aspect will not be pursued any further. In her master's thesis Ditte Zachariassen (2012) has made a thorough analysis of her findings from this field.

As I shall demonstrate in the following sections, the concept of Preferredness may vary, both historically and pragmatically. The limit between what is considered well enough prepared to go without doubling varies to a fairly high extent in my data, both in a synchronic dimension and in a pragmatic dimension.

4. The historical dimension

The construction is found quite frequently in Medieval Danish. Here are some early examples from a religious text, the Legend of Saint Christina from the Cambridge fragment (presumably high style):

(13)   Fyr æn sancta cristina toc thæt brøth <u>tha</u> bath hun til war hærræ (...)
       Before than saint cristina took that bread, then prayed she to our lord
       'Before Saint Christina took the bread, she prayed to the lord'
                    (Uldaler & Wellejus 1968:283, slightly simplified[3])

(14)   Annæn dagh thær æftær <u>tha</u> com hænnæ fathær oc wildæ hethræ
       sinæ guthæ (...)
       Second day there after then came her father and would honour his gods
       'On the second day after this, her father came and would honour his gods'
                    (Uldaler & Wellejus 1968:283, slightly simplified)

(15)   Hærræ thin dottær. war frughæ <u>hun</u> skændæ thæm allæ i syndær oc
       castath them ut i gatæ.
       Master, your daughter, our lady she scolded them all to pieces and threw them out in street
       'Master, your daughter, our lady, destroyed them all completely and threw them into the street'
                    (Uldaler & Wellejus 1968:284, slightly simplified)

In this case we find an adverbial clause, an adverbial phrase and a subject as referential elements, that is, the same range of elements as in Modern Danish. The *tha* adverb inserted to resume the sentence, has an interesting semantic content. It does not belong to any traditional class of adverb, its meaning being illocutionary, according to Hansen & Heltoft (2011:1840).

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[3]   In all quotations from Uldaler & Wellejus (1968) the indicators of philological restitution have been omitted; otherwise the book is quoted literally.

Certain late Medieval sources use the doubling so frequently that a closer analysis of the system is possible. A quantitative analysis of the occurrences of different doubling situations in one source, "Jesu Barndoms Bog" printed by Gotfred af Ghemen 1508[4], gives the following figures:

Non-anaphoric CP-spec with doubling	31
Non-anaphoric CP-spec without doubling	28
Anaphoric CP-spec	80

Most of the non-anaphoric CP-spec's with doubling are initial adverbial clauses:

(16)   then tid herodes oc iøderne hørde thet <u>tha</u> wore the sorgfulle (...)
       the time Herod and jews-the heard it, then became they sorry
       'When Herod and the Jews heard this, they began to worry'
                    (Uldaler & Wellejus 1968:383, slightly simplified)

- but a few are NP's:

(17)   (...) oc elizabeth thin fæncke <u>hon</u> scal fødhe een søn i sin allerdom (...)
       and Elizabeth your female-relative she shall give-birth-to a son in her old-age
                    (Uldaler & Wellejus 1968:379, slightly simplified)

The vast majority of the non-doubled non-anaphoric CP-spec's are single nouns and proper names (the end of CP-spec is marked by a |):

(18)   Josep | spurde om hon wiste hwat thet betyde
       'Joseph asked if she knew what it meant'
                    (Uldaler & Wellejus 1968:380, slightly simplified)

Only twice is a more heavy construction found without doubling:

(19)   (..) paa hemmelin | sage mange menniske iij skøne soler (...)
       on heaven-the saw many people three beautiful suns
       'In heaven many people saw three beautiful suns'
                    (Uldaler & Wellejus 1968:382, slightly simplified)

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[4]   Quoted from Uldaler & Wellejus (1968:379-83).

(20)   Ther guts søn føder wor | thedis een skøn ny stierne for alle menniske
       When God's son born was appeared a beautiful new star to all
       people
       'When God's son was born, a beautiful new star appeared to all
       people'
                                   (Uldaler & Wellejus 1968:382, slightly simplified)

Since proper names and simple NP's may be seen as closely related to
the speech situation (Togeby 1997, 2003), we may conclude that doubling
occurs when the material for the CP-spec is preferred, but still not too well
bound by the context. Note that doubling does not occur in (19) and (20),
both of these referring to matters that are very topical in the context. Thus
it seems as if the doubling is an obligatory device for situating remote CP-
spec material in the discourse.
      Jesu Barndoms Bog also contains a rare specimen of doubling in an
embedded clause (the below), incidentally alongside doubling in the main
clause (tha):

(21)   Som the helige iij konighe the komme til byen tha slo the theris
       pawlun op oc rede them til (...)
       As the holy three kings they came to town-the then put they their tent
       up and made themselves ready (...)
       'When the holy three king came to the town, they put up their tent
       and prepared themselves (...)'
                                   (Uldaler & Wellejus 1968:383, slightly simplified)

The picture we find in the late medieval sources seems to be that doubling
took place quite frequently, probably along the same patterns as in modern
spoken Danish. Whenever a potential topic was not sufficiently well situated
in the discourse, it was doubled so that the sentence could start from an
unstressed anaphoric element. At the time of the Reformation (after 1525),
when printing evolved, the doubling was used more cautiously in purely
written sources. Doubling is found in prose when the referential element
is very long, like this (admittedly somewhat excessive) quote from Hans
Thomissøn's short history of psalm singing in his hymn book from 1569
representing an adverb phrase:

(22)   For det andet / effterdi at mange omgaaes saa met Guds Ord / at de
       enten icke forstaa det / men læse eller siunge det uflitteligen met

en forfængelig mundklammer: (lige som hine Papistiske Prester /
Muncke oc Nunner fremsnurre deris Læsning oc sang / den de icke
forstaa) heller oc vanbruge det til nogen Ketterj oc falsk Lærdom at
bestyrcke / som Papisterne / Gendøbere / Sacramenterer / Antinomi
oc andre Sophister oc Suermere giøre: <u>Da</u> vil Paulus at wi icke
saaledis / men i all Visdom skulle Christi ord anamme oc beholde
(...)

*For the second, since that many deal thus with God's word that they
either not understand it, but read or sing it undiligently with a vain
mouth-use: (like as those popish priests, monks and nuns forward-
roll their lecture and song which they not understand) else or abuse
it to some heresy and false doctrine to reinforce like the catholics,
anabaptists, sacramentarians, antinomists and other sophists and
fanatics do: then will Paul that we not thus, but in all wisdom should
Christ's word appreciate and keep (...)*

'Secondly, because many deal with the word of God in such a way
that they either do not understand it, but read and sing it carelessly,
in a vain use of the mouth (like those popish priests, monks and nuns
that recite their reading and song, which they do not understand) or
else abuse it for the purpose to reinforce heresy and false doctrine,
like catholics, anabaptists, sacramentarians, antinomists and other
sophists and fanatics do, Saint Paul wants us not to do like this, but
to appreciate and preserve the word of Christ in all wisdom (...)'

(Thomissøn 1569:c[viii], v)

Likewise after a nominal element:

(23)   Thi huo som vaar en Arrianer oc nectede Christi Guddom / <u>hand</u>
       enten tagde stille / naar disse ord bleffue siungen / eller oc han sang
       / Ære være Gud Fader ved Sønnen (...)
       *Since who that was an Arian and denied Christ's divinity, he[5] either
       kept silent, when these words were sung, or else he sang, Glory be
       God Father through son-the (...)*
       'Since whoever was a follower of Arius and denied that Christ was
       divine, he would either keep silent at these words, or he would sing
       'Glory to God the Father through the son (...)'

(Thomissøn 1569:d[i], v)

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[5]   The original text spells *hand*, corresponding to modern *han* 'he'.

- but Thomissøn also uses quite long referents without doubling (the end of
    CP-spec is marked by a |):

(24)   (...) oc effterdi ieg da bleff fororsaget / til at underuise Ungdommen
    ocsaa om danske Psalmer ret at siunge udi Kirckerne / oc der
    fattedis icke alleniste Noder til mange Psalmer / men ocsaa mange
    skøne Psalmer som Lutheri sidste tydske Psalmebog dog indeholdt
    |: begynte ieg da at beflitte mig her om (...)
    ... and since I then was caused to teach youth-the also about Danish
    psalms right to sing in churches-the, and there was-a-lack-of not
    only notes to many psalms but also many beautiful psalms that
    Luther's last German hymnbook indeed contained, began I therefore
    to occupy myself here about ...
    '... and since I at that time had to teach the youth how to sing Danish
    psalms in the churches in the right way, and notes were lacking, not
    only for many psalms, but also for the beautiful German psalms by
    Luther in his last hymnbook, I had to work on the matter.'
                                          (Thomissøn 1569:dii, v - diii, r)

This tendency has prevailed in prose texts up to the present day.

    Although proper prose style thus tried to do without it, the doubling
construction found an interesting loophole in poetry. The unstressed
syllable did good service to the regulated kind of verse prosody that had
developed in the early 17th century, delivering an extra weak syllable when
needed, but the doubling was found already in the unregulated verses of the
previous centuries. An example from 'Rimkrøniken' (late 15th century):

(25)   Alle the som trodhe poo christ / <u>them</u> wille ieg altidh forhettæ.
    All they that believed in Christ / them would I always persecute
    'I would always persecute those people that believed in Christ'
                                          (Uldaler & Wellejus 1968:190, Ericsberg fragment,
                                          slightly simplified)

- from the folk ballad manuscripts of the 16th century:

(26)   Syffuert <u>hand</u> haffuer en fuolle.
        Sivert he has a fole
        'Sivert has a fole'

                                            (DgF 3 version A v. 1)

(27)   Møtte udi denn grønne lundt / <u>ther</u> stannder minn iomffrues gaardt.
        Middle in the green wood, there stands my mistress's house
        'In the middle of the green wood stands the house of my mistress'
                                            (DgF 70 version B v. 26)

- from the early Lutheran psalm books (here Thomissøn 1569):

(28)   Den lille Fuel <u>hand</u> fluer saa høyt / Oc Værit bær under hans Vinge
        The little bird he flies so high / and weather-the supports under his wing
        'The little bird flies so high and the weather carries his flight'
                                            (Thomissøn 1569:317)

(29)   Naar wi skulle til vort Fæderne Land / Oc skillies ved dette ælende; / <u>Da</u> befaler ieg GUd min Siel i Haand (...)
        When we shall [go] to our fathers' land / and depart from this misery / then command I God my soul in hand
        'When we shall go to the land of our fathers / and leave this misery / I will put my trust in God.'
                                            (Thomissøn 1569:317-8)

The metrical poetry of the baroque period (here Thomas Kingo, 1634-1703) maintained the use of the construction, as I mentioned:

(30)   Vort Time-glas <u>det</u> alt nedrinder, (...)
        Our hour-glass it already runs-out
        'Our hour-glass is running out.'
                                            (Kingo 1939-74 vol. III p. 101)

(31)   O Gud, mit Hierte <u>det</u> er rede / Med Tak at bryde himlens Slot, (...)
        Oh God, my heart it is ready / with thank to break heaven's castle
        'Oh God, my heart is ready to enter the castle of heaven with gratefulness'
                                            (Kingo 1939-74 vol. III p. 101)

(32)   Ja, denne Dag, som nu mod Natten qvelder, / <u>Hand</u> skyder mig i hu, / Hvor nær mit Hoved nu / Mod Graven helder.
Yes, this day that now towards night-the moves / he pushes me in mind / how near my head now / against grave-the leans
'Yea, this day which is turning into night reminds me how close my head is to be leaning against the grave.'

<div align="right">(Kingo 1939-74 vol. III p. 89)</div>

- and all the way up to modern times it may be found in Danish versification:

(33)   Men i vor Lade, paa vor Lo, / <u>*der*</u> har vi nu Guds Gaver (...)
But in our barn, on our threshing-room / there have we now God's gifts
'But in barns and in threshing-rooms we now have the gifts of God.'

<div align="right">(N.F.S. Grundtvig, 1783-1872,
quoted from Billeskov-Jansen 1967 vol. II:127)</div>

(34)   Når din hals er en halv meter nedløbsrør / og din tunge er som en galosche / når din drøvel er stor som en briosche /<u>så</u>'r det oganet, der er løvet tør (...)
When you throat is a half meter [of] drainpipe / and your tongue is like a boot / when your uvula is big as a brioche / then-is it organ-the that is run dry
'When your throat is like half a meter of drainpipe, and your tongue is like a boot, when your uvula is like a big bun, then it is the organ that has run dry.'

<div align="right">(Poul Henningsen, 1894-1967,
quoted from Billeskov-Jansen 1966:171)</div>

5. Modern spoken language usage

In Modern Danish main clauses the construction is only found in statements, and not in constituent questions. It is very frequent also in more formal spoken style, cf. the following quotes from the resignation of former prime minister Helle Thorning-Schmidt on the night after the June 2015 parliamentary elections in Denmark.[6] Ms. Thorning-Schmidt uses the construction quite frequently, both after initial (adverbial) clauses:

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[6]   A video of the resignation speech is found at this web address: <*www.politiko.dk/ nyheder/se-thornings-afskedstale*>

(35)   Som I ved - kære venner - <u>så</u> er Socialdemokratiet ikke et parti med
        de nemme løsninger.
        *As you know - dear friends - then is Socialdemocratic-party-the not
        a party with the easy solutions*
        'As you know, dear friends, the Socialdemocratic Party is not a party
        with easy solutions.'

(36)   Var der en lygtepæl, <u>så</u> var der en plakat.
        Were there a lamppost, then was there a poster
        'In every lamp post there was a poster.'
- after initial adverbials:

(37)   Men kære allesammen, i aften, <u>så</u> rakte vores fælles indsats ikke så
        langt som vi håbede.
        *But dear everybody, in (this) evening, then reached our joint effort
        not so far as we hoped*
        'But dear all, tonight, our joint efforts did not reach as far as we
        hoped.'

(38)   ... men hver eneste dag <u>så</u> har ansvaret været mit.
        ... but each single day then has responsibility-the been mine
        '... but each single day, the responsibility has been mine and mine
        alone.'

- after full NP's:

(39)   Vores venner hos det Radikale Venstre, <u>de</u> har ikke fået det valg som
        jeg synes de fortjener.
        *Our friends at the "Radikale Venstre", they have not had the election
        that I thought they deserve*
        'Our friends from the "Radikale Venstre" [the other party in the
        outgoing government coalition] have not had the election they
        deserved.'

-and in a clause:

(40)   Vi må erkende i aften at de partier der peger på Lars Løkke <u>de</u> har et
        flertal.

We must admit in (this) evening that the parties that point to Lars Løkke they have a majority
'We have to admit that the parties that prefer Lars Løkke [leader of the Danish opposition] have won the majority.'

But doubling is not applied consistently; you find several examples without doubling, e.g. an initial heavy adverb (end of CP-spec marked with |; in brackets my suggestion as to what could have been added):

(41)   og til alle Danmarks store piger og unge kvinder | vil jeg sige direkte
       (og til alle Danmarks store piger og unge kvinder <u>der</u> vil jeg sige
       direkte)
       And to all Denmarks big girls and young women will I say directly
       'And to all big girls and young women in Denmark I will say directly
       ...'

- a full NP:

(42)   resultaterne | taler for sig selv
       (resultaterne <u>de</u> taler for sig selv)
       results-the speak for themselves
       'The results speak for themselves.'

- an adverb and a non-doubled subordinate clause:

(43)   Imorgen | vil jeg gå til dronningen og erklære at regeringen | træder
       af.
       (Imorgen <u>der</u> vil jeg gå til dronningen og erklære at regeringen <u>den</u>
       træder af)
       *Tomorrow will I go to queen-the and declare that government-the
       steps down*
       'Tomorrow I will go to the queen and declare that the government
       resigns.'

In oral style, one may use the doubling more frequently than ms. Thorning-Schmidt does, but obviously the construction is not considered to be

improper *per se* in this speech. The doubling is used quite inconsistently throughout the speech, sometimes present, as in (35)-(40), sometimes not, as in (41)-(43), dependent on style rather than grammar. As may be seen from the video, ms. Thorning-Schmidt has a manuscript, but treats it rather freely in the situation; we have a contrast between a pronounced oral style (where many doublings will be acceptable) and a formal style leaning on the formulations from a manuscript (presumably without doublings). Hence the penduling between these two points is a natural consequence.

6. Conclusion

The importance of the construction is the emphasis on the anaphoric element in the sentence construction, cf. John Du Bois. In main clauses this anaphoric element may be almost anything in the CP-spec position. In clauses, this restriction does not hold. The subject of a clause is in a normal subject position, and yet it may double if the necessary content does not meet the demand for an anaphoric element.

The device seems to be a simple functional one: The sentence needs a topic which is well situated in the context on which the content of the focus may be developed. Such a topic must be anaphoric and hence unstressed. If this topic is not well enough situated, it may be given in a full referential (stressed) form at the beginning of the sentence, but with a resumptive element right before the topic domain is finished. Different varieties of Danish follow this simple pattern; but to varying degrees. The stronghold of the doubling construction is clearly the spoken language. For various reasons, the written language has tried to find other ways than the doubling, but also here you may find clear traces of the procedure. An interesting theme in the development is the borderline between what is sufficiently topical to avoid doubling. The comparison between Jesu Barndomsbog and the speech by the resigning prime minister demonstrates that the actual delimitation of what needs doubling in order to appear closely enough bound by the situation may vary considerably, although all the time maintaining a boundary between what is supposed to be topical in the given situation, and what is not.

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Individual differences in foreign language learning success: a psycholinguistic experiment

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Abstract
This article describes a psycholinguistic protocol designed to elicit individual differences in performance regarding phonological and lexical aspects of learning Italian as a foreign language. Thirty native speakers of Danish participated in two experiments which examined their discrimination ability for a novel Italian consonant contrast (Experiment 1) and their ability to memorize novel vocabulary items (Experiment 2). The experiments revealed a wide range among participants regarding the number of novel vocabulary items memorized as well as a minor spread regarding the discrimination of a novel Italian consonant contrast. No correlation could be revealed between learning success in vocabulary acquisition and phonological discrimination. We conclude that the two types of tasks can be used as instruments for quantifying aspects of learning Italian as a foreign language. This study is the first half of a larger study, where the second half is an EEG study (to be presented separately elsewhere) aiming at mapping the possible neurophysiological correlates of more or less successful foreign vocabulary memorization and sound distinction.

1. Foreign language learning success
Successful foreign language learning depends on a wide variety of factors, which can be grouped according to whether they are subject external factors or subject internal factors. Subject external factors include *type of contact*

with the language to be learned and – if the process is guided – teaching setting aspects such as *classroom setting* and the *pedagogical approach, materials,* and *processes*. However, even if external factors are controlled experimentally, learners still show important differences in their learning success. These individual differences (ID) are described by ID psychology, which is an approach that, instead of describing the typically shared features of human behavior, focuses on its varieties. Among the individual factors influencing foreign language learning, ID psychology investigates *personality, motivation, learning styles, learning strategi*es and *language learning aptitude* (Dörnyei 2006:42; 46; 48ff). The latter factor has been measured by various *language aptitude tests* (see e.g. the contribution to Dogil 2009 and Dörnyei 2006:46ff. or Grigorenko 2000:390-392 for discussion). Carroll (1981:105) described foreign language aptitude as consisting of the following components: *phonetic coding ability* ("ability to identify distinct sounds, to form associations between these sounds and the symbols representing them, and to retain these associations"), *grammatical sensitivity* ("ability to recognize the grammatical functions of words (or other linguistic entities) in sentence structures"), *rote learning ability* ("ability to learn associations between sounds and meaning rapidly and efficiently, and to retain these associations") and *inductive language learning ability* ("ability to infer or induce the rules governing a set of language materials, given samples of language materials that permit such inferences"). More recent research has focused on the context dependence and on the interrelation of these ID factors. According to Dörnyei (2006), one of the most promising directions in language aptitude studies is the investigation of the relationship between foreign language learning and the cognitive function of *working memory* which "may be one (if not the) central component of this language aptitude" (Miyake & Friedman 1998:339). *Working Memory*, as described by Baddeley & Hitch (1974), is a complex loop system with different functional modules constantly interacting with one another and controlled by a supervisory *attention* component. The *attention* system controls *a visuo-spatial short term memory (STM) function* (dealing with visual and spatial material) as well as a *phonological STM function* (holding verbally coded information). *Phonological short term memory* reflects itself in the ability (impaired in e.g. dyslexic individuals) to repeat phonological sequences (words, numbers, non-words) which in turn predicts a learner's ability to acquire vocabulary in first, second, and foreign language learning. As for *attention*, this concept "is necessary in order to understand virtually every aspect of second language acquisition

(SLA), including […] the role of individual differences such as motivation, aptitude and learning strategies in L2 learning […]" (Schmidt 2001:3). Furthermore, this author points out that *"attention"* covers a variety of mechanisms such as *alertness, orientation, pre-conscious registration* (detection without awareness), *selection* (detection with awareness within selective attention), *facilitation,* and *inhibition*. In the field of attention research, there is much debate as to whether learning is possible without attention ("incidental learning"). While some studies, e.g. on visual perception, seem to give a positive answer to that question (DeSchepper &Treisman, 1996), Schmidt (2001:28) has doubts about the relevance of these findings for foreign language learning, given the very different nature of its input. For Schmidt (2001:29), "learning in the sense of establishing new and modified knowledge, memory, skills, and routines is […] largely, and perhaps exclusively, a side effect of attended processing." Furthermore, as DeSchepper and Treisman (1996) have shown, previously ignored (suppressed) information is more difficult to access (as can be seen by a delay in response time in subsequent tasks that involve this information) than completely new information, so "we might have an explanation, not for development in language learning, but for non-learning through habituation of the self-instruction to ignore something" (Schmidt 2001:28). Thus, if attention is seen as an important prerequisite of learning in general and foreign language learning in particular, an individual deficit with regard to this cognitive mechanism is likely to lead to less efficient acquisition processes.

More recently, it has been suggested that working memory also contains a component referred to as *semantic STM*. According to Haarmann et al. (2003:322), "semantic STM stores lexical-semantic item representations (i.e., word meanings) that are actively maintained until they can be integrated into a meaning relation with words that occur later in the sentence" and individual differences in the capacity of semantic STM seem to predict complex language tasks, such as single-sentence and text comprehension.

Neurolinguistic research seems to have been able to map correlations between semantic working memory and particular patterns of neurological activity for quite some time (e.g., Klimesch 1999; Haarmann 2005). It was therefore our aim to develop a test that could make individual differences in foreign language learning success emerge, while at the same time being suitable for mapping their potential neurophysiological correlates by a follow-up EEG study.

The assumptions presented above on working memory and the central role of its phonemic and semantic components regarding foreign language learning, together with its consequences for individual differences in learning success, provided the motivation to design a foreign language learning test containing both a task on word memorizing as well as a task on sound discrimination.

The following sections present a test of this type together with the results of an experiment, conducted at the Italian Department at Aarhus University with 30 native Danish speaking participants without any prior knowledge of Italian.

2. Foreign language learning capacity: the experiment
2.1 Participants

36 monolingual[1] native Danish speakers (20 female, 16 male) aged 19 to 33 (mean: 25.5 years) without any previous knowledge of Italian volunteered as participants. The participants were current or former university students, recruited by analog and digital advertisements as well as personal contacts. After the experiment, the participants completed a questionnaire about their socio-cultural background, including questions about their knowledge of other foreign languages and their personal evaluation of own abilities and desire to learn a foreign language. The participants received a cinema voucher worth 75 Danish kroner (10 Euro) in compensation for their participation.

The sound discrimination task yielded a complete data set from 36 participants. However, results from the word learning task from six participants (3 m, 3 f) had to be excluded from analysis because of an equipment malfunction. Therefore, the comparison of the data between the vocabulary learning and the sound discrimination tasks is based on the results from the 30 participants for whom complete data sets for both tasks exist.

2.2 Method
2.2.1 Consonant discrimination
2.2.1.1 Stimuli and procedure

The ability to discriminate Italian speech sounds was examined using a categorical AXB task. Each trial in this task consists of a triplet of physically distinct speech sounds. The task of the listener is to determine

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[1] I.e. with exclusively Danish as their native language (all Danes learn English as an L2 at school, many also German as an L3).

whether the sound in the middle ("X") is "more like" or "equivalent to" the sound presented first ("A") or the sound presented last ("B").

The present experiment examined the discriminability of the Italian /ʎ/-/l/ contrast.[2] Italian /l/ is realized just like Danish /l/, i.e., as an alveolar lateral approximant. Italian /ʎ/, which is a palatal lateral approximant, does not exist as a separate phoneme in Danish (but Danish has [ʎ] as a medial allophone of /l/ before /j/). To obtain the stimuli, a female native speaker of Italian read twenty tokens of /ʎi/ and of /li/, as well as several other Italian monosyllables, from randomized lists. The recordings were made with high-quality digital recording equipment in a sound-attenuated environment. The target syllables were segmented from the original recordings, and each syllable was normalized for peak intensity. From this corpus, six tokens each of /ʎi/ and of /li/ were selected for the perception experiment as optimally representative exemplars by the first author.

Using the speech perception module in Praat (Boersma & Weenink 2001), participants were presented with AXB triplets and had to decide whether the second syllable in each triplet was categorically identical to the first or the last syllable in the triplet. Tokens of /li/ or of /ʎi/ could appear in the A or the B position, and the medial X tokens were categorically, but never physically, identical to either /li/ or or /ʎi/ (possible combinations: $[li]_A$-$[ʎi]_X$-$[ʎi]_B$, $[ʎi]_A$-$[ʎi]_X$-$[li]_B$, $[ʎi]_A$-$[li]_X$-$[li]_B$ e $[li]_A$-$[li]_X$-$[ʎi]_B$).

After familiarization with the AXB task (using /pu/ and /bu/ tokens), participants were presented with 96 randomly arranged triplets. Participants responded after each trial by clicking with a mouse on a computer display which presented as response alternatives either "1" (corresponding to the first token in each triplet) or "3" (corresponding to the third token in each triplet). Completion of the discrimination task took approximately 12 minutes.

2.2.2 Vocabulary memorization

To examine vocabulary memorization success, we used the method of paired associates (Mårtensson/Löwdén 2011), combining Danish words with Italian pseudowords which conformed to the phonotactic rules for Italian, but were void of semantic content (e.g. *svaccia*, *loddo*, *ubbo*).

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[2] We conducted a series of pilot experiments to determine which Italian consonant contrast would be difficult to discriminate for native Danish listeners. Based on the first author's 13 years of experience as an Italian teacher in Denmark and knowledge of Danish learners' production problems, we examined the discrimination of Italian contrasts /tsɛ/ - /dzɛ/, /tʃɛ/- /dʒɛ/, /dʒɛ/ - /dzɛ/, /li/ - /ʎi/, /ni/ - /ɲi/, and /ʎi/ - /ɲi/. Danish listeners performed at or near ceiling for the discrimination of all contrasts except /li/ - /ʎi/.

The pseudoword method was chosen to avoid compromising the data by participants' unpredictable individual (beforehand) vocabulary knowledge. Even if the criterion for participation in the study was to have no prior knowledge of Italian, knowledge of single (existing) words by some of the subjects could not be excluded. In order to avoid potential association patterns between Danish words and Italian pseudowords that might be the same for many particpipants and thus skew the results, the two word lists were associated with each other in a new, randomized way for each individual participant, with the expectation that single individual associations would even each other out at group level.

2.2.2.1 Stimuli Presentation

We employed auditory stimuli to avoid potential confounding effects due to participants' different reading ability. All instructions prior to every test round were presented auditorily from recordings by a male Danish speaker, while all stimuli (Danish words and Italian pseudowords) were presented auditorily from recordings by a female Danish speaker and a female Italian speaker, respectively.

2.2.2.2 Vocabulary memorization: General design

The experiment consisted of three stages with the same internal structure, which permitted the repetition of the individual task types and the identification of a possible learning curve from stage to stage for each participant. Each stage consisted of a memorization part, a recognition task, and a production task. All tasks were based on one of two lists of 40 Danish words and 40 Italian pseudowords each[3].

The memorization part consisted of the auditory presentation of 40 word pairs, with randomized attribution of Danish words to Italian pseudowords, different for each participant, in randomized order, varying from stage to stage.

The recognition task included the auditory presentation of 80 word pairs, consisting of a Danish word and an Italian pseudoword, in random order. Of these 80 word pairs, the participant had already heard 40 of them during the memorization part ("correct" pairs), whereas in the other 40 pairs, the Danish words and Italian pseudowords were combined differently than during the memorization part ("incorrect" pairs). Responses were logged

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[3]　The two lists were distributed between participants according to even and odd participant numbers respectively.

using a button box, and the participants were instructed to press a button for "correct" and another button for "incorrect" according to their own ratings of the respective pairings. Additionally, on the computer screen, the buttons from the button box were represented in an iconic manner according to their respective colors and placement, along with the words "correct" and "incorrect". The participants had 2 seconds to respond, after which a new word pair was presented. For responses made within a 2 second time window, response type and response time were logged. Both delayed and absent responses were logged as empty.

The production task consisted of an auditory presentation of the 40 Danish words individually, along with instructions to produce the corresponding Italian pseudoword from memory after a signal tone. The answers were digitally recorded. It took the participants a little less than an hour to complete the three stages.

Prior to the beginning of the experiment, the three different task types as well as the button box were presented to the participants. In order to avoid doubts in the participants regarding the authenticity of the "Italian" words and thus a possible drop in their learning motivation, it was explained that the words came from an Italian dialect and that the words had no etymological roots in common with standard Italian. The participants were informed about the artificial nature of the words about six months later, after an additional experiment, which examined the long term consolidation of the memorized words. The results of this last experiment will not be presented in the present study.

2.2.2.3 Stimuli
2.2.2.3.1 Danish stimuli
We selected 85 Danish nouns from a list of the most frequent monosyllabic concrete Danish count nouns as presented by Asmussen et al. (2002). Homonyms (*kort*, 'short' and 'map'), homophones (*hjul* ('wheel')/*jul* ('Christmas')), words indicating occupations (*kok*, 'chef') and social roles (*mor*, 'mother') were not used, along with some words which were found to be acoustically ambiguous in a pre-test with Danish speakers (see below).

To obtain the stimuli, a female native Danish speaker read three tokens each of 85 Danish words from randomized lists. The recordings were made with high-quality digital recording equipment in a sound-attenuated environment. The target words were segmented from the original recordings, and each word was normalized for peak intensity.

From this corpus, one token of each of the 80 Danish words was selected for the vocabulary memorization experiment as an optimally representative exemplar, as determined by the first author.

The naturalness and intelligibility[4] of the recorded words were verified by having 3 native Danish speakers transcribe the tokens in standard Danish orthography. Five words were removed from the preliminary list because of being acoustically ambiguous, for example *torv* ('town square'), which was repeatedly misheard as either *tåre* ('(a) tear') or *tov* ('rope').

2.2.2.3.2 Pseudo-Italian stimuli

The pseudowords were constructed in a way to respect both linguistic and – in view of their use in a subsequent neuro-linguistic experiment – neurological requirements, that latter of which will be discussed elsewhere.

From a foreign language learning point of view, Italian has several consonants which are known to cause problems for native Danish speakers, at least regarding production, but not necessarily regarding perception. Notoriously challenging sounds in this context are voiced stops (/b/, /d/, /g/), affricates (voiceless: /ts/, /tʃ/ and voiced: /dz/ and /dʒ/) as well as voiced and voiceless geminate stops and geminate affricates /pː/, /tː/, /kː/, /bː/, /dː/, /gː/, /tsː/, /dzː/, /tʃː/, /dʒː/, which are not part of the Danish phonological system.[5]

All stimuli were constructed around a medial geminate consonant. The first 30 of the 40 stimulus words on each list consisted of a set of 15 first syllables (e.g. *fò-*, *cri-*, *cró-*, *pa-*, *fa-*) each of which were combined with two different second syllables[6] (*cró-ccio*, *cró-ggia*) taken from a set of 10 second syllables (e.g. *-ccio*, *-ggia*) which were combined with three different first syllables (*fò-ccio*, *cri-ccio*, *cró-ccio*; *pa-ggia*, *fa-ggia*, *cró-ggia*).

The last 10 stimuli on each list were constructed from five first syllables (e.g. *qué-*) in combination with two second syllables, the latter always a minimal pair with a voiceless/voiced geminate consonant (*-ccio*, *-ggio*), thus creating minimal word pairs (*qué-ccio*, *qué-ggio*).

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[4]   "intelligible" here understood as "heard as intended by the speaker".

[5]   The integration of phonetic challenges in the vocabulary to be memorized opens up the possibility of studing the interaction between the two linguistic levels. The relevant data has yet to be analyzed, however.

[6]   "Syllable" is here not used in the phonemic sense, as the geminate consonant cannot acoustically be divided in the cutting process. In Italian phonology, the geminate consonant is considered to be ambisyllabic.

The words which matched this pattern had previously been chosen from among pseudowords generated by a computer algorithm developed by Keuleers (see Keuleers & Brysbaert 2010). This algorithm is capable of generating pseudowords using a digital syllabified and frequency ranked encyclopedia for the target language. The algorithm was adapted to Italian by feeding it with the syllabified Italian encyclopedia by Goslin et al. (2013), which again is based on *Corpus e Lessico di Frequenza dell'Italiano Scritto* (CoLFIS) by Bertinetto et al. (2005).

The lists with the pseudowords were subsequently recorded following the same criteria and procedures used in preparing the Danish stimuli lists (see 2.2.2.3.1).

The acoustic naturalness and intelligibility of the words created in this way were then verified by having four native Italian speakers transcribe and at the same time note the degree of opening of the vowels "e" and "o" along with the voiced or voiceless character of "z".

2.2.2.4 Assessment criteria for the vocabulary production data

Given the participants' possible problems with correctly pronouncing the memorized words, it was necessary to establish clear and rigorous criteria for distinguishing objectively between incorrectly memorized words on one hand and well-memorized, but incorrectly produced words on the other. This concerned especially the plus/minus voicing of the words' central geminate consonants. Based on the assumption that the participants were able to identify a central voiced stop (e.g. /d/) in a target word, a Danish-like unvoiced and aspirated t-sound [tˢ] was considered to be an error ("voiceless"[7] stops in Danish being aspirated and affricated in initial word position), while the articulation of a voiceless, unaspirated stop was considered correct (as "voiced" Danish stops differ from "voiceless" by lack of, or very short, aspiration). On the other hand, the recognition of an Italian voiceless stop (/t/) was not automatically considered unproblematic (as the Italian pronunciation of the grapheme "t" in many cases corresponds to the non-fricativized pronunciation of initial Danish /d/), and therefore both unaspirated pronunciations (corresponding to the "voiced" Danish speech sounds) and aspirated pronunciations (corresponding to "voiceless" Danish speech sounds) were considered successful. Regarding the geminate

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[7] The terms "voiced" and "voiceless" are in quotation marks here, as they refer to the Danish stops represented by the graphemes "t" and "d", even though both are voiceless, the difference being one of no or very short aspiration for Danish /d/ and of long aspiration for Danish /t/.

nature of the central consonant in the Italian pseudowords, neither the non-realization of an extended closure before the stop or affricate[8], nor the realization of the preceding vowel as long[9] were considered errors. The extended closure does not exist in Danish and its recognition did not seem to be a reasonable learning target for beginners. Vowels preceding geminate consonants in orthography are equally short in Danish, however, short vowels do not only appear in these positions and are therefore not automatically linked to geminate consonants in orthography by Danish speakers (a fact well documented by spelling errors). As these problems or inaccuracies also occur in more advanced students of Italian, it did not seem justified to consider them errors for absolute beginners.

　　　　Along with the words which were considered to be successfully memorized, the participants also produced *almost correct* words (e.g. *staggia* instead of *staggio*), *similar* words (e.g. *svazza* instead of *staggio*) and completely *incorrect* words (e.g. *trutto* instead of *staggio*). These error types will be further investigated in a future study.

3. Results and discussion

The results for each participant in each task are presented below in terms of percent correct responses. Table 1 shows the percent correct scores for the consonant discrimination task ("AXB"), for the word recognition task ("R1", "R2", and "R3" for the three stages), together with those of the word production task ("P1", "P2", and "P3" for the three stages). As mentioned previously, the first six participants provided usable data only for the AXB task.

Participant	AXB	R1	R2	R3	P1	P2	P3
1	84						
2	86						
3	80						
4	88						
5	66						
6	82						
7	91	51	68	69	13	13	20

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[8]　Which marks their gemination in Italian.

[9]　Vowels are always short before geminates in Italian.

8	95	61	76	79	13	38	48
9	94	49	54	66	0	5	15
10	94	45	62	70	0	3	20
11	91	28	31	50	0	3	13
12	97	56	61	90	0	5	8
13	89	51	76	88	3	13	20
14	91	69	86	91	5	18	33
15	86	64	75	91	3	20	30
16	99	56	81	90	8	33	48
17	100	59	73	81	5	18	40
18	96	58	70	93	3	28	33
19	90	62	86	90	15	23	30
20	92	49	65	78	5	18	63
21	96	44	62	56	3	5	5
22	82	49	59	81	8	28	38
23	96	49	71	89	0	8	20
24	99	56	71	73	0	15	25
25	91	45	69	83	8	28	33
26	90	51	62	74	3	28	43
27	96	64	66	86	3	28	43
28	83	68	85	95	10	18	23
29	95	46	79	95	8	28	43
30	98	39	65	69	3	10	15
31	85	48	65	76	3	8	20
32	94	50	60	69	0	0	5
33	99	58	66	81	5	13	20
34	96	39	65	78	0	3	0
35	95	35	58	80	5	5	5
36	99	62	66	83	3	30	38

Table 1: Results for all participants for all tasks: Percent correct responses

This table shows clearly that the different tasks differed in degree of difficulty for the participant group as a whole. The discrimination task, with percent correct scores ranging between 66% (participant 5) and 100% (participant 17), was easier overall than the word recognition task, with percent correct scores between 50% (participant 11) and 95% (the participants 28 and 29) in the third stage. Not surprisingly, the most difficult task was the production task, in which the percent correct scores ranged from 0% (participant 34) to 63% (participant 20) in the third stage.

3.1 Consonant discrimination (AXB)

The percent correct scores in the consonant discrimination experiment were remarkably high. As shown in Table 1, the result of 66% by participant 5 is an outlier. The remaing participants discriminated the /li/ - /ʎi/ contrast near ceiling, with scores ranging between 80% and 100%. Recall that this contrast was the only one that indicated discriminability problems in the pilot experiments (see footnote 2). Given that native Danish students of Italian usually have pronunciation problems with /ʎ/, it is striking that these problems apparently do not manifest themselves in a discrimination task, but only in production. This represents a challenge for teachers who wish to improve the pronunciation of their students. Studies have shown that the speech perception ability of foreign language learners can be trained through systematic exposure to the language in question, leading to a significant improvement of the pronunciation of such learners (e.g. Sereno & Wang 2007). It seems less obvious how to improve language production not based on perception difficulties without the use of methods that require technically advanced tools normally not present in a classroom – for instance palatography or glossometry (e.g., Flege & Bohn: 1989).[10]

Regardless of this fact, a two-tailed t-test revealed that discrimination of the /ʎ/ -/l/ contrast was significantly more accurate when /l/ occurred in medial position in the AXB trials (95.1 % correct, SD = 5.8) than when /ʎ/ occurred in medial position (89.4% correct, SD = 8.6), t(70) = -3.344, p > .01. (See Figure 1).

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[10] Palatography is a technique which shows the parts of the speech organs that are involved in the production of particular speech sounds. The sounds in questions are pronounced by a subject, whose oral cavity has been supplied with a substance that leaves a mark on contact surfaces, e.g. between the tongue and the palate, which then can be photographically documented. Glossometry is a technique using an optical-electric instrument creating pictures of the tongue's position during the articulation of particular speech sounds.
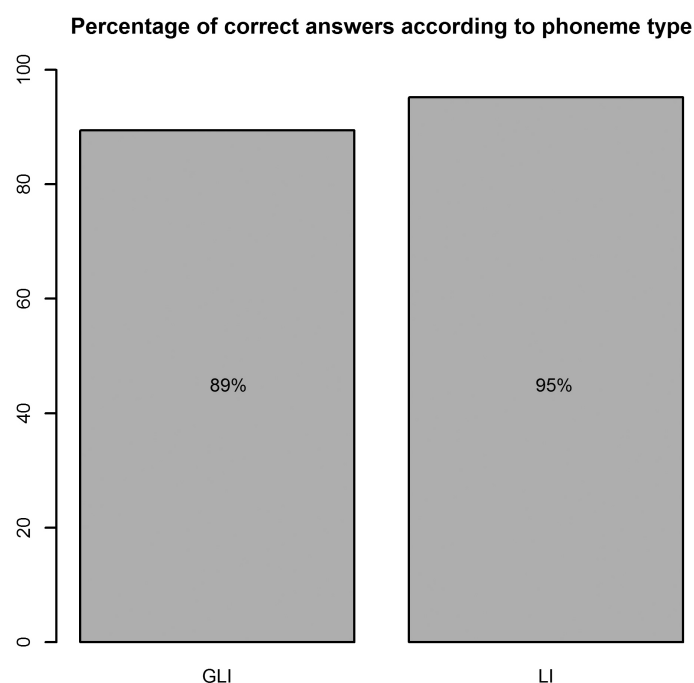
Percentage of correct answers according to phoneme type

Figure 1: Percentage of correct answers (participants 1-36) for /ʎi/ and /li/ in position X in the AXB task.

This result shows that discrimination, not surprisingly, was slightly more difficult if the token which A and B had to be compared to was the unfamiliar, non-native syllable (/ʎi/).

3.2 Vocabulary recognition

As mentioned above, the vocabulary recognition task (classification of pairs of Danish words and Italian pseudowords as "associated correctly" or "associated incorrectly") turned out to be clearly more difficult than the sound discrimination task. However, it should be noticed that the type of task itself (with two possible answers: "correct" or "incorrect") involves a chance level of 50% correct answers, which limits the variability of the results. The task therefore seems less suitable for clearly distinguishing individual differences based on success rates, at least at first sight. However, as shown below, the comparison of these data with the data from the production task confirms the reliability of this type of task for the purpose in question.

Figure 2 shows the learning curves (from the first across the second to the third stage) for all participants. A general increase from stage to stage is observable, and the resulting curves are more or less parallel. There is only one participant (number 21), whose results decreased in the last stage (from 62% in the second to 56% in the third stage), which can probably be attributed to fatigue. The results of participant 11 are visible as an isolated curve in the bottom of the figure. As mentioned above, the percent correct results in the third stage range between 50% (participant 11) and 95% (participants 28 and 29).

Learning curves for recognition data

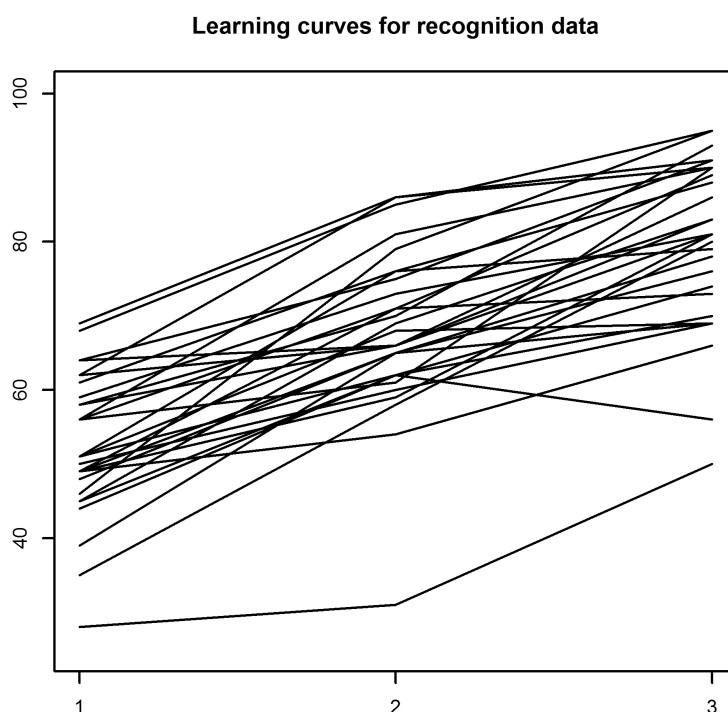Figure 2: Learning curves for all participants (7-36) in the three stages of the word recognition task

3.3 Vocabulary production

The vocabulary production task was the most difficult – with results ranging from 0% (participant 34) to 63% (participant 20) in the third stage, and it also most clearly revealed individual differences, as shown by the dispersion of the individual learning curves in Figure 3.

The curves in Figure 3 also show that a relative success in the third stage depended, in general, on a substantial two-step progress (both between the first and the second and between the second and the third round, e.g. participants 16 and 26). Participants who did not substantially improve their results either between the first and the second (participant 10) or between the second and third stage (participant 15), remained at an intermediate level. Participants who did not make any progress between the rounds remained at a low level of performance (e.g. participants 12 and 21).

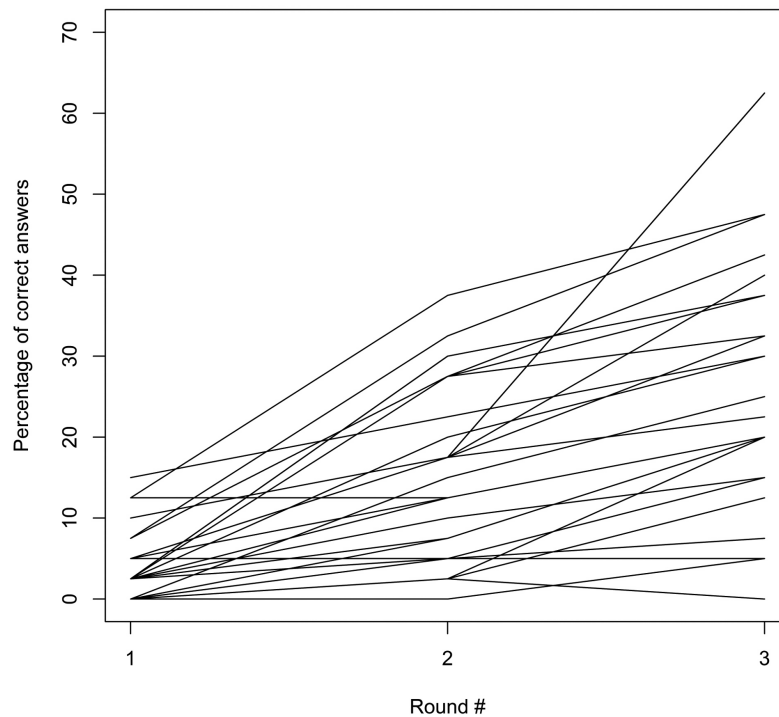**Learning curves for production data**

Figure 3: Learning curves for all participants (7-36) in the three rounds of the word production task

The only exception from this tendency was participant 20, whose increase in performance from the first to the second stage was only minor, but who then showed a large increase between the second and the third stage, with the best final performance of all participants.

3.4 Correlation between vocabulary recognition and vocabulary production

Even though the final learning results for each subject were not distributed in exactly the same way for the two different tasks, a Pearson product-moment correlation revealed a significant correlation (r = .402, p= .028). Figure 4 shows the raw data (percent correct responses in the third stage for each of the 30 participants (number 7 to 36) for vocabulary recognition (on top) and vocabulary production (at the bottom) which yielded the significant correlation.
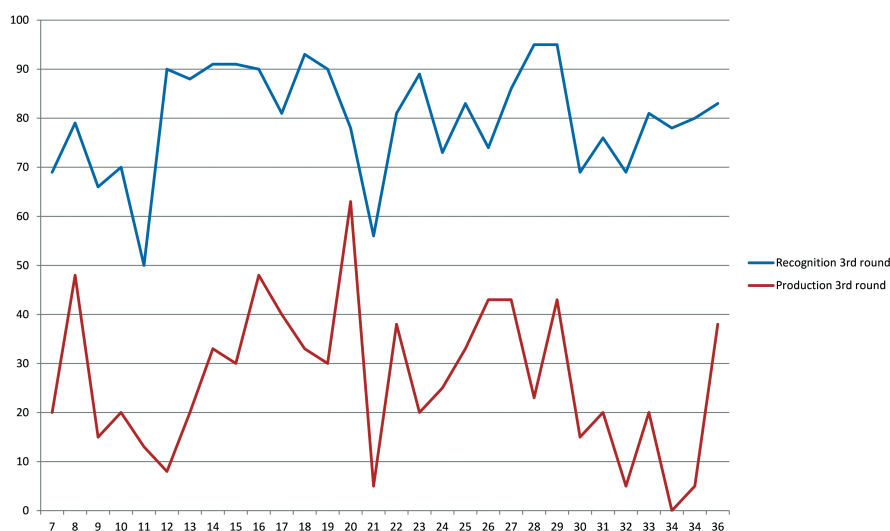
Figure 4: Correlations between the results in the third stage: recognition (upper graph) and production (lower graph) for the whole group (7-36)

3.5 Correlation between consonant discrimination and vocabulary memorization: Recognition and production

The discriminability of the /ʎ/-/l/ contrast was not related to the success at learning foreign vocabulary in our study. The correlations (Pearson product-moment) were non-significant for both the relation between percent correct scores in the consonant discrimination task and vocabulary recognition (r = -0.1019324, p = 0.592), and for the relation between percent correct scores in the consonant discrimination task and vocabulary production (r = -0.05080971, p = 0.7897).

It should be mentioned, however, that the speech sound which was not familiar to the participants (/ʎ/), did not figure in the (pseudo)words to be memorized, all of which were based on a central geminate stop or affricate (voiced or unvoiced).

We can conclude that in order to obtain more accurate and significant data regarding the correlation between successful foreign sound distinction and successful foreign vocabulary learning, studies with a more rigorous and more specifically tailored design are needed.

4. Conclusions

This chapter presented a study which examined vocabulary learning success and consonant discrimination in native Danish learners of Italian. The thirty participants varied considerably in their performance on both the vocabulary production task and, to a lesser degree, the vocabulary recognition task. Performance on these two tasks was moderately correlated. Performance on the consonant discrimination task, which also revealed individual differences but was high throughout, was not correlated with the vocabulary learning tasks. We conclude that the two types of tasks are suitable for quantifying individual performance differences on tasks related to learning Italian as a foreign language (vocabulary memorization, consonant discrimination). The study is the first half of a larger study, where the second half (to be presented separately elsewhere) is aimed at verifying whether any correlations exist between quantifiable behavioral success at the above described foreign language learning tasks and electrophysiological correlates measured by EEG.

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Extremist discourse and internationalization

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Abstract
Working within the framework of Social Representation Theory, this contribution focuses on the Facebook activities of a specific extreme right-wing group – the Danish Defence League – in order to examine the impact of international dimensions on its categorizations of self and other. Analyses reveal the importance of strategic intertextual practices in relation to the DDL's replicated discourse from the English Defence League and its use of posts and hyperlinks. Generally, the international is used to enhance the threat of an often generalized Muslim and immigrant other as well as the threat to democracy posed by the establishment. Hence, the need for an active defence is both motivated and emphasized.

1. Introduction

This contribution reports preliminary research on far right extremist discourse and focuses on how the international is exploited by extreme right-wing groups as a resource in identity construction. For present purposes, the extreme right will be understood "to refer to those groups that exhibit in their common ideological cores the characteristics of nationalism, xenophobia (ethno-nationalist xenophobia), antiestablishment critiques and socio-cultural authoritarianism (law and order, family values)" (Caiani & della Porta 2011:181). The importance of spatial perspectives in understanding the dynamics of right-wing extremism, or indeed any form of extremism, has been acknowledged, where differing levels of analysis can reveal the significance of, and interrelationship across, the local, national and transnational (Mammone et al. 2012). In this respect, the role

of technology in creating spaces in which right-wing extremist groups can operate and interact cannot be overlooked. The internet, in particular Web 2.0, has afforded greater opportunities for relationship-building, identity construction, transnational connectedness and information sharing (Ramalingam 2012; Turner-Graham 2013). According to Rogers & Digital Methods Initiative Amsterdam (2013:52), right-wing parties and groups in Denmark are "well-represented in the online space", but their use of social media is generally limited to Facebook. This chapter will take as its focus the Facebook activities of a specific right-wing group, the Danish Defence League (DDL), formed in 2010 as an offshoot of the English Defence League (EDL). Such groups are part of a global counter-Jihad movement, which, Goodwin (2013) argues, has been relatively overlooked in discussions about right-wing extremism. According to Goodwin (2013:3),

> The counter-Jihad scene is comprised of movements that are more confrontational, chaotic and unpredictable than traditional anti-immigrant and ethnic nationalist movements in Western democracies. Within an amorphous network of think-tanks, bloggers and activists, the counter-Jihad scene incorporates the 'defence leagues' in Australia, Denmark, England, Finland, Norway, Poland, Scotland, Serbia and Sweden, groups such as Pro-Cologne and the Citizens' Movement Pax Europa in Germany, Generation Identity in France, the 'Stop the Islamization' networks in Europe and the United States, the American Freedom Defense Initiative and the International Civil Liberties Alliance. Whether formally or informally, such groups often align themselves to an international counter-Jihad network, united by their belief that Islam and Muslims are posing a fundamental threat to the resources, identities and even survival of Western states.

Jackson & Feldman (2011), in a report on the English Defence League, classify it as a new social movement, i.e. united around a cause, with some degree of centralized organizational structure that provides a framework for a network of supporters, but which also depends on other networks of grass-roots activists. Acknowledging the EDL's not unsuccessful tactic of internationalization, the authors doubt that the European defence leagues have been able to adopt the social movement organizational structure of the EDL. Certainly, the DDL has had internal organizational problems from the outset and it is far from certain that a recent change in leadership will

be able to galvanize what is a small organization (SFI 2014). There are no precise numbers of members available; however, media reports suggest that the fatal attacks on a restaurant and synagogue in Copenhagen in February 2015 have provoked increased interest in more extreme movements, such as the DDL.[1] Facebook 'likes' in September 2015 number 7,352, but these do not necessarily reflect membership. My interest in the DDL derives from the fact that it is a product of an internationalization strategy of a larger and more dynamic group. Hence, it is an obvious starting point to study how international dimensions impact on right-wing discourse. Under scrutiny here are the categorization processes used by the DDL to construct the identity of the 'other' and in so doing their own identity as a group. As cyberspace affords various multimodal means of identity-making, two types of behaviour will be considered: the DDL's verbal rhetoric and their use of posts and hyperlinks on their Facebook timeline. Following Beaulieu & Simakova (2006:2), I assume that hyperlinks can be used "to explore the diversity of ways relations between websites (whether they be textual, functional or symbolic) are meaningful". From the perspective of verbal rhetoric, researchers have noted that extreme right-wing discourse is changing. Jamin (2013:49), for example, suggests that there is a trend among extreme-right political parties in Europe to abandon "open racist rhetoric to embrace an ambiguous progressive and secular speech against 'totalitaria' Islam". Wodak (2015) argues that there has been a normalization of xenophobic and racist rhetoric in the political sphere, allowing more peripheral parties to move to the political centre. Jackson & Feldman (2011) refer to the front-stage rhetoric of the EDL, which is more guarded than that of the backstage as revealed in some of its blog sites. It is, thus, to be expected that the DDL shows similar tendencies.

2. Theoretical and Methodological Considerations

The framework that I adopt here is that of social representation theory, a social psychological approach which conceptualizes the individual as a social entity in a mutual, interdependent relationship with society (Augoustinos et al. 2014; Moscovici 1984). It deals with the construction of social or common sense knowledge where the primary aim is to "systematize how material that lies in people's taken-for-granted thoughts comes to be there, the specific form it takes, and its consequences for the way they understand their social environment" (Joffe & Staerklé 2007:402). Social

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[1] See for example <*www.euroman.dk/artikler/nyheder/mange-kontakter-os-og-fortaller-at-nu-har-de-faet-nok*>.

representations deal with the content of social thinking and can be defined as "a set of concepts, statements and explanations originating in daily life in the course of inter-individual communications" (Moscovici 1981:181). They are shared by a group and serve as reference points for that group, but are dynamic structures that can be subject to change, challenge and contestation. While shared, social representations have to be triggered by some form of problematization of a phenomenon, as has been the case with issues of health and illness, climate, technology, food, gender, race, ageing etc. Moreover, social representation is not restricted to linguistic communication, but can be constructed through visual means as well as actual behaviours. For example in a study of the social representation of mental illness in a French rural community, Jodelet (1991) found that villagers who housed people suffering from mental illnesses had distinct practices whereby they kept separate dishes for their lodgers and washed their clothes separately as there was a shared social representation of mental illness as contagious.

Social representations involve both product and process: they are "the products of social thinking, structuring beliefs, and knowledge about phenomena considered significant for a given community" and the "processes by which we construct our reality" (Philogène & Deaux 2001: 5). One of these processes is anchoring, which involves classification or categorization as well as naming or labelling, where meaning is derived from existing knowledge, experience and values (Clémence 2001; Deaux & Wiley 2007). Anchoring has been conceptualized in terms of making the unfamiliar familiar, but it can also serve to maintain the unfamiliar or introduce strangeness and create difference (Kalampalikis & Haas 2008). If we take the example of HIV/AIDS in the 1980's, this unknown disease was classified or categorized in familiar terms as a 'plague' that was due to the immoral behaviours of specific others, particularly homosexual men, and indeed was initially named or labelled as the gay plague or gay cancer (Joffe 1995). Through such anchoring, particular outgroups were stigmatized and successfully othered.

Of relevance to this chapter is the relationship between social representations and social identity. The performance of social identity, or identities, necessitates a positioning in relation to the 'other', or more accurately those represented as the 'other', given the relational nature of identity. Howarth (2007:133) argues that social representations and social identity are "two sides of the same coin" since "by positioning ourselves in relation to others – that is, in asserting, performing, or

doing identity – we reveal our perspective on the world and our ways of seeing and constructing the world, or our social representations". So, for example, in her study of racism in a predominantly white English primary school, Howarth (2007) found that the children operated with three main representations of race: race as real (visible characteristics), race as imposed (by teachers, parents, other children) and race as contested (by the children themselves). Within this representational context, the children had to negotiate their own personal and group identities. An important aspect of social identity construction is othering, which serves to differentiate between groups (ingroup vs. outgroup), often through stigmatization (Staerklé 2014). Bauman (2004) views othering as the affirmation of the difference of another or their alterity. He proposes that othering can be understood through a structural model of three 'grammars', i.e. regular, patterned systems: orientalism, following Said's (1978) concept of the oriental 'other'; segmentation, acknowledging that identities are tiered and contextual; and encompassment, allowing for the partial inclusion of some 'others'. I will return to this notion of grammars in the discussion. Similarly, Philogène (2007:33) views alterity as a "systematic and comprehensive crystallization of difference between classes of people" involving generalized categories of otherness. Alterity, she argues, can be interpreted as both unfamiliarity and exclusion, the former sense allowing for a development from the unfamiliar to the familiar, while the latter sense maintains a permanent sense of not belonging.

The data to be considered here come from the DDL's Facebook pages[2] and are of two types. Firstly, there are the texts given under the link 'about us', which follows a standard Facebook template of 'page info', and includes sections on 'short description', 'long description', 'general information' and 'mission'. These texts derive in part from the mission statement to be found on the group's website.[3] Secondly, there are the posts and hyperlinks presented, often with a comment from the DDL, for users to follow, like, share and comment on. Through the lens of social representation theory, I would argue that these posts and hyperlinks can reveal further dimensions of the DDL's categorization processes and identity construction. However, therein lies a challenge as posts and hyperlinks are unstable entities and can simply disappear; consequently, they can be an ephemeral means of identity construction. The textual

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[2]   *<https://da-dk.facebook.com/pages/The-Danish-Defence-League/223250204422741>*

[3]   *<http://danishdefenceleague.com>*

data will be qualitatively analysed in terms of the interface between the national and the international in the identity construction of the group and the 'other'. Since the DDL exploits the discourse of the EDL, this analysis will involve a comparison of the Danish and English texts, although in this contribution I will not deal with the nuances of translation. What will be addressed is the issue of intertextuality, which involves the processes of entextualization (a stretch of discourse is made into a bounded textual object that affords its removal from its context), decontextualization (the detaching of text from context) and recontextualization (the text is inserted into new contexts) (Bauman & Briggs 1990; Trester 2012). The posts and hyperlinks have been analyzed for a 3-month period (January-March 2015) in terms of what is posted, who or what is being linked to and how these materials relate to the categorizations apparent in the descriptions and mission of the organization itself. These practices, too, evidence intertextuality. The data will be given here as it appears on the Facebook pages, i.e. with typos, omissions etc.

3. Group Presentation

The DDL's Facebook presentation begins with the section 'short description' where the organization, Danish Defence League™, is briefly summarized as a "Netværks-organisation baseret på aktiv forsvar af dansk tradition og sædvane" (Network organization based on the active defence of Danish tradition and customs). The ™ indicates an unregistered trademark and its use, which is not legislated in Denmark, can be viewed as a form of anchoring; this symbol is a labelling which allows the DDL to categorize itself as an acknowledged, legitimate 'organization' and in so doing it is promoting an organizational identity for actual and potential members. This seems to relate to its Facebook page only; the trademark symbol does not appear on its website or logo. The focus of the single sentence of description is on the national, what is being defended, and not on what is being fought; this contrasts to the EDL, which on its Facebook page describes itself as "Leading the Counter-Jihad fight. Peacefully protesting against militant Islam". Yet, the DDL does rely heavily on the discourse of the EDL in the subsequent sections, parts of which are simply lifted from the DDL mission statement, itself a largely equivalent translation of that of the English organization. This replication of the original English text would seem to have been a conscious decision taken by the Danish movement rather than any form of policy on the part of the EDL; while the 'defence league' label or brand does require an adherence to a common

'memorandum of understanding', other defence leagues, for instance the Swedish and Norwegian, have not opted to follow the original English language documents, but have composed their own. The DDL's Facebook presentation exemplifies the intertextual practices that are so prevalent in digital media (Deumert 2014; Leppänen et al. 2013). These can be seen in the 'long description' on its Facebook page, which begins with a paragraph taken from the second aim of the mission statement; this aim is translated from the English as 'Demokrati og Retsstat: Forsvar for demokrati og retsstat via modstand mod Sharia' (Democracy and the Rule of Law: Promoting democracy and the rule of law by opposing Sharia). Hence, this particular piece of text has been recontextualized as a description of the movement, and not its mission. Extract 1 gives the translated Danish text followed by the original EDL text.

Extract 1

Den Europæiske Menneskeretsdomstol har fastslået, at sharia er uforenelig med grundlæggende demokratiske principper. På trods af dette er der stadig mange, der er villige til at tilpasse sig sharias normer, og som tror at sharia kan fungere parallelt med vores egne traditioner og skikke. Realiteten er, at sharia ikke kan være andet end et komplet alternativ til vores nuværende lovmæssige, politiske og sociale systemer. Sharia er en revolution som vores land ikke ønsker og må afvise. Sharia er en klar trussel mod vores demokrati.

The European Court of Human Rights has declared that 'sharia is incompatible with the fundamental principles of democracy'. Despite this, there are still those who are more than willing to accommodate sharia norms, and who believe that sharia can operate in partnership with our existing traditions and customs. In reality, sharia cannot operate fully as anything other than a complete alternative to our existing legal, political, and social systems. It is a revolution that this country does not want, and one that it must resist. Sharia is most definitely a threat to our democracy.

Several clear oppositions and categorizations are established in the EDL text and taken over in the Danish: firstly, Sharia is contrasted as mutually exclusive with democracy and national traditions and categorized as a revolution and threat; secondly, followers of Sharia (the 'mange' (many) in the Danish text and 'those' in the English) are contrasted with a notion

of 'us' as expressed through the possessive pronoun 'our'. The pronominal reference is ambiguous (except when used with the noun 'country' in the Danish text) as it could refer to a supranational European 'us' since the section begins with a quotation from the European Court of Human Rights. The threat established, the DDL proceeds to focus on defence and its role as shown in Extract 2. In this original Danish text (the English translation is my own), the DDL associates itself with active protection of peace and freedom, open debate, national history and traditions as well as the Danish constitution and what they term "genuine" democracy.

Extract 2

Danish Defence League™ imødegår denne trusel på flere måder og fra forskellige vinkler. Vi forsøger gennem aktivt forsvar, at sikre fred og friheder i vores lokalområder. Ved synlighed håber vi på, at bidrage konstruktivt til debatten folk imellem samt at påvirke bla. systempressen og politikerne i ønskede retning. En retning funderet i vores fantastiske nations historie og kulturtradition, regeret i overensstemmelse med vores ukrænkelige grundlov og konkretiseret af et oprigtigt demokrati med folkestyre.

Danish Defence League™ is responding to this threat in several ways and from different angles. We seek through active defence to ensure peace and freedoms in our local areas. Through exposure we hope to contribute constructively to the debate among the public and at the same time to influence amongst other things the establishment press and politicians in the desired direction. A direction grounded in our fantastic nation's history and cultural tradition, governed in accordance with our inviolable constitution and concretised by a genuine democracy with rule of the people

The DDL is clearly anchoring itself as a national, democratic movement with concerns for the local and the people. It does so through a focus on Sharia and its many followers, which are 'othered' as an irreconcilable threat. However, there is a hint of a further 'other', namely the establishment press and politicians, who are not working in the "desired" direction, the implication being that an undesired direction is being pursued. This 'othering' is also apparent in the section entitled 'mission', which is lifted from the third aim of their mission statement. The establishment is associated with the interests of policy-makers and not the

public (see Extract 5 below), and the government, in pursuing "destructive" policies, has become the "propaganda arm of the Muslim Brotherhood". This anti-establishment rhetoric is typical of populism and, according to Rydgren (2007:246), is a strategy that "makes it possible for the new radical right-wing parties to present themselves as the real champions of true democracy". In this sense the DDL and EDL share characteristics with the political party segment of the radical and extremist right.

It is first in the section 'general information' that the DDL uses explicit religious group labels and undertakes a categorization of Muslims. Again the text is taken from the DDL's mission statement (from the first aim concerning protection of human rights), and hence is a translation from the English. As can be seen in Extract 3, an opposition is created between 'muslimer'/'danske muslimer' (Muslims/Danish Muslims) and more radical groups, as well as the religion itself, radical Islam. A few points should be noted in relation to the Danish and English versions: the Danish Facebook text has removed the reference to women in burquas, although this remains in the DDL's mission statement; there would seem to be an editing error in the Danish text where the adjective 'britiske' (British) modifies 'moskeer' (mosques), although in the mission statement the expression is 'danske moskeer' (Danish mosques).

Extract 3

Vi mener, at fortalerne for radikal islam har magten over de danske muslimer. De radikale dominerer muslimske organisationer, er nøglepersoner i britiske moskeer, og øger stadig deres indflydelse. Radikal islam holder danske muslimer isoleret i frygt. De radikale elementer misrepræsenterer muslimernes synspunkter, nægter ytringsfriheden og fremmer indoktrinering af egne børn, mens de løbende diskrediterer muslimer, der ønsker fredelig sameksistens med andre danskere.

(From EDL mission statement) We believe that the proponents of radical Islam have a stranglehold on British Muslims. The radicals dominate Muslim organisations, remain key figures in British mosques, and are steadily increasing their influence. Radical Islam keeps British Muslims fearful and isolated, (especially the women that it encases in the Burqa). It misrepresents their views, stifles freedom of expression, and indoctrinates their children, whilst

continually doing a discredit to those who do wish to peacefully co-exist with their fellow Britons.

The explicit category of Muslim is anchored in the national through labelling, be this the use of an explicit adjective of national belonging, Danish Muslims, or an expression of inclusion, i.e. 'sameksistens med andre danskere' ('co-existence with other Danes', what in the original English is expressed through the phrase 'fellow Britons'). Such discursive inclusion is strategic from an ingroup perspective given that right-wing extremist organizations are well-aware of criticisms made against them, as is apparent in the mission statements of the DDL and the EDL (Extract 4):

Extract 4

Dæmonisering af muslimer eller af islamkritikere bidrager ikke konstruktivt til debatten. Vi tror på at en grundig undersøgelse af alle fakta er nødvendig for at samfundet kan styres på en effektiv og human måde. Hvis der findes aspekter i den muslimske tradition der fremmer radikale islamister og kriminelle, er det nødvendigt at imødegå dem uden at skulle frygte beskyldninger om 'racisme', 'xenofobi', eller det vildledende begreb 'Islamofobi'.

Demonisation of Muslims, or of Islam's critics, adds nothing to the debate. We believe that only by looking at all the facts can society be most effectively and humanly governed. If there are aspects of Muslim tradition that encourage the activities of Islamic radicals and criminals then these need to be properly addressed without fear of accusations of racism, xenophobia, or the even the disingenuous term 'Islamophobia'.

A dialogical response which counters the negative categorization of those who criticize Islam is that of constructing and including a category of "acceptable" Muslims, which is opposed to the unacceptable category of fundamentalist Islamic individuals and groups, i.e. Islamists. The contents of both these categories, however, are primarily negative: one is cast in the role of victim, characterized by powerlessness, fear and passivity in the face of the radical other which, in contrast, is influential and dominant, exercising strong agency. In this way, the DDL, following the EDL, can present itself in a more positive, humane light as concerned not only for society in general, but the suppressed national subgroup of

Muslims. Bear in mind that both organizations identify themselves with the protection and promotion of human rights, most particularly those of groups seen as targets of radical Islam, i.e. women, and the LGBT and Jewish communities. Indeed, the EDL has separate divisions for all these groups, although the Jewish group has developed into an independent movement, the Jewish Defence League UK. The DDL does not have the organizational structure or critical mass to imitate the EDL in this regard; the Swedish defence league, however, does have a women's (the so-called Angels) division. This human rights discourse of the defence leagues, then, creates a common enemy, radical Islam, for diverse groups. In this way, the discourse of the defence leagues draws on what Laclau & Mouffe (1985) term the logic of equivalence, which "attempts to create specific forms of unity among different interests by relating them to a common project and by establishing a frontier to define the forces to be opposed, the 'enemy'" (Mouffe 1993:50).

There is, however, some slippage in the categories constructed as revealed in the use of the very term 'Islam'. While modified with the adjective 'radical' when creating an opposition between radicals and Danish Muslims, it is generalized in the context of the DDL's Facebook description of its mission, which promotes the education of the public about "Islam" as seen in Extract 5.

Extract 5

Hvordan man sikrer offentligheden et balanceret billede af islam! Offentlig uddannelse er et centralt punkt i Danish Defence League™'s mission. Den danske politiske og medie etablering har længe arbejdet for at fremvise et fejlagtigt billede af islam som harmløs, hvilket kun er i beslutningstagernes interesse, ikke befolkningens.

PUBLIC EDUCATION: Ensuring That The Public Get A Balanced Picture Of Islam
A central part of the EDL's mission is public education. The British political and media establishment have, for a long time, been presenting a very sanitised and therefore inaccurate view of Islam, shaped by the needs of policy-makers rather than the needs of the public.

It is a generic notion of Islam that is viewed as being misrepresented in the public domain, where the balance needs to be redressed so that ideas of Islam as 'harmløs' ('harmless') can be countered. This usage allows for a generalized categorization of Islam as potentially dangerous, thus contrasting with the more nuanced subcategorizations noted above. Such generalization also occurs with the category of 'Muslim' which is contrasted with that of 'non-Muslim' in DDL's mission statement on their website (following the EDL). It is first claimed that this categorization is that of Sharia law and is to be resisted as a form of "apartheid", a loaded term that simultaneously identifies Sharia as racist and the DDL (and EDL) as non-racist (cf. Jackson & Feldman 2011). Yet the category non-Muslim is subsequently used by the DDL and contrasted to Islam:

> ### Extract 6
> DDL arbejder for at fremme forståelsen af islam og følgerne for ikke-muslimer, der er tvunget til at leve i dets nærhed.
>
> The EDL promotes the understanding of Islam and the implications for non-Muslims forced to live alongside it.

These broad-sweeping, mutually exclusive categories contradict the more inclusive rhetoric witnessed elsewhere in the Facebook and website texts. As observed by Jackson & Feldman (2011:12), EDL discourse "connects inclusivity and exclusion in an almost seamless fashion" and is "continually slipping". The same applies to that of the DDL.

4. Posts and Hyperlinks

In the 3-month period from January to March 2015, there were 89 posts on the DDL's Facebook timeline, most of which contained hyperlinks. The international dimensions of these posts can be seen in terms of the geographical location of the events reported as well as the languages used. Links were given to stories from 12 countries: Denmark, Sweden, Finland, Germany, the Netherlands, Belgium, France, UK, USA, Iraq, Myanmar and Pakistan. Three languages make an appearance: Danish, English and Swedish. In some cases, news stories from foreign language sources have been translated into Danish. For example, one hyperlink to the Danish, alternative online newspaper, *Den Korte Avis*, deals with a story taken from the British tabloid the *Daily Mail* about Oxford University Press forbidding pictures of, and reference to, pigs, sausages etc. in their children's books

so as not to offend Muslims and Jews. Embedded within this Danish text is the link to the *Daily Mail* story (although that link has since gone dead).

The sources for the hyperlinks range across online versions of traditional media, such as tabloid and quality press, and TV channels, as well as online, alternative newspapers, blogs, websites, Facebook groups and YouTube. Most of these sources are national, but some originate from the UK, USA, Sweden and Israel; for instance, an American site, the Council of Conservative American Citizens (http://conservative-headlines. com), is linked to on two occasions (although one of these posts with hyperlink has since disappeared).

The contents of many of the posts and links reflect the categorizations constructed in the verbal rhetoric of the DDL, but greater generalization is apparent. There are news stories of criminality carried out by youths of "middle Eastern" appearance in Denmark, of terrorism (in Paris and Copenhagen) and videos about violent pro-Islam demonstrations in the UK and the continued rise of the Muslim population in the UK. Through such posts and links, a generalized Muslim other is being solidly anchored as threat and danger, not just in Denmark but wider afield. Other links deal with stories of "establishment" subservience to Islam, be this the police in the Netherlands allowing policing of local areas by Muslim groups, Facebook censorship of pictures of the prophet Mohammed, Swedish transport authorities forbidding a number plate containing the numeral 786, which is said to be the numerical equivalent of the opening phrase of the Quran. Such links serve to enhance the general threat to democracy by perceived wrong-headed approaches and, hence, the need for an active democratic movement, such as the DDL.

Some posts and links deal with topics that are not in focus in the DDL's Facebook presentation, particularly immigration and diversity more generally. These reveal the DDL's dis-identification with immigration and diversity through, for instance, stories of ungrateful asylum seekers in Sweden and Denmark and invasion of Europe by immigrants from sub-Saharan Africa. What also is apparent is sympathy for white supremacism.

I will focus on two posts with international dimensions to illustrate the intertextual practices of the DDL and their function in identity construction. The first example links to a story from *Den Korte Avis* about vandalism in Toulouse, France, where a court building was deliberately flooded and graffiti, stating that "the prophet will judge you", was painted on the walls (Figure 1). This event is claimed to have received very little media coverage in France.

Figure 1 DDL post on vandalism in France with hyperlink

The DDL introduce the link primarily by quoting from the news article in *Den Korte Avis*, but they give their own 'headline': Kaotiske tilstande i Frankrig – Tavse massemedier (Chaotic conditions in France

– Silent mass media). This highlighting of the lack of media coverage follows the headline of the French online newspaper *Atlantico.fr*, which is one of the sources of the story and which frames it as "L'étrange blackout sur le saccage du…" (The strange blackout of the devastation of the..). I have already noted the DDL's othering of establishment media and public authorities as one-sided and subservient to Islam. This post has similar functions, while simultaneously serving to anchor "islamister" (Islamists) as criminals, albeit quoting the hedged language of *Den Korte Avis*: The nature of the slogans on the walls "could indicate that the attackers were Islamists". It should be noted that none of the French sources from which the story derives explicitly mention Islamic groups.

The second example has also connections to France but relates to race (Figure 2) and displays a white genocide poster comparing photographs of the French national soccer teams in 1960 and 2015. Although no hyperlink is given, this poster is from Europa Rising, which describes itself as a political party on its Facebook page, but seems to be the product of a lone blogger. The poster is one of a series of generic posters where different past and present images are inserted into the same textual format along with the Europa Rising logo (a phoenix). The text includes part of a propaganda tool, known as the 'Mantra', which was written by American white nationalist and former Reagan advisor Bob Whitaker. The Mantra ends with the phrase 'anti-racist is a code word for anti-white'. This slogan has been picked up by supporters of the idea of white genocide and is to be found in varied, worldwide contexts online. Together, the use and textual framing of this poster by the DDL suggests an alignment with white nationalist ideology, which is anti-immigration, anti-multiculturalism and anti-intermarriage. The poster is presented by the DDL with a question: "Why support France in 2015 if you are French, when you can support Nigeria instead". Such a rhetorical question racializes both international soccer and citizenship and conflicts with the DDL's official position of being open, inclusive and non-racist. In contention, of course, is the very notion of racism itself and hence categorizations such as racist vs. non-racist. I will not, however, delve into the complexities of this particular discussion here.

Figure 2 DDL post on white genocide (no hyperlink)

5. Discussion

The aim of this contribution is to consider the impact of the international in the categorization processes of the DDL on their Facebook pages. Examining their group presentation reveals a close adherence to the identity construction strategies of the EDL, but intertextual practices permit a differing emphasis on certain issues, such as the preservation of the national and threats to democracy by the establishment. Choices of posts and hyperlinks are independent of the EDL and both support the othering processes apparent in the official presentation, and widen the field to include the more generalized immigrant and non-white. There is evidence of both meanings of alterity (unfamiliarity and exclusion, cf. Philogène 2007 above): A national anchoring of a subcategory of Muslims as 'Danish Muslims' is a means of making this group more familiar while radical groups are excluded. Yet, there is slippage in these categories and the activities of the DDL on its Facebook timeline would suggest that the sense

of alterity that predominates is that of not belonging, be this in Denmark, Europe or USA. The rhetoric of inclusion, then, is best understood from the perspective of the 'self', i.e. the DDL, who use it to construct an identity that is open and democratic.

Sjørslev (2004) argues that Danish society is particularly liable to exclusion paradoxically because of its emphasis on inclusion. Adopting Baumann's (2004) structural model of alterity (see above), she suggests that a widespread grammar of othering in Denmark is that of encompassment. This grammar is hierarchical and is inclusive of the 'some' who are seen at a general level to be part of the ingroup by that ingroup; in other words the power to include rests with the ingroup itself. However, this "prevalent grammar of encompassment implies that all forms of alterity that cannot be encompassed are regarded as a threat" and, hence, since inclusion is interpreted through the cultural lens of consensus and sameness, diversity by default can be an excluding factor (Sjørslev 2004:90). As a 'defence' organization, the DDL needs to sustain the idea of threat and, in the Danish context, an emphasis on the irreconcilable difference of the (radical) Muslim, or more generalized immigrant, 'other' will serve the purpose of permanent non-encompassment or non-belonging. Through their multimodal discourse, the DDL creates an impermeable barrier between 'us' and 'them', an "antagonistic frontier" in the sense of Laclau & Mouffe (1985) where "signifiers inside the discourse" are established as "equivalent in regard to their common opposition to the common enemy, represented by the excluded chain of signifiers" (Renner & Spencer 2013:480). In other words, DDL construct their identity as democratic, humane, tolerant, civilized etc., signifiers (i.e. words, symbols, images) which are not found in their discourse about especially the Islamic 'other'.

The need for defence is also predicated on an 'othering' of the establishment in terms of its misguided policies and doubtful legitimacy as the voice of the people. As I have already noted, this anti-elitism is characteristic of populism and one of its functions, according to Betz (2005:76), is to "undermine and discredit issues and projects generally identified with the cultural and political establishment, such as immigration, multiculturalism, affirmative action and 'political correctness' in general". The DDL heightens the threat of the Muslim/immigrant 'other' through a focus on the inadequacies of the establishment in this regard, not just in Denmark but elsewhere in Europe. Again the othering is strategic, creating strangeness around the values of the establishment so as to emphasize the need for a defence of the 'real' values of the people.

It is worth considering the relationship of the DDL's categorization processes and anchoring of the 'other' to affective factors. Given the context of threat and defence, a prevalent emotion seems to be fear. Certainly, cultural nativism, which is argued to underlie the stance of many on the extreme right in Europe, deals with the perceived dangers to national and European identity from Islam (Betz 2005; Mudde 2012). The DDL's use of international events likewise plays on fear and insecurity by enhancing the extent of the threat. There are also other emotions in play; for instance, there is a degree of contempt for the 'other' as evidenced by the post dealing with white genocide, and there is also mistrust of the establishment in Denmark and elsewhere. Of course, the DDL does not present itself as fearful or insecure; its social identity is anchored in the familiar notion of an active resistance movement where determination, confidence, pride, courage and aggression are required. The logo of the organization encapsulates these emotions: two soaring birds of prey against the background of the Danish flag and the Latin adage 'si vis pacem para bellum', the motto of a range of military entities, including the British Royal Navy. In a study of extra-parliamentary extreme right-wing groups in Denmark and Sweden (not including the defence leagues), Askanius & Mylonas (2015:67) comment on affective dimensions, observing that such groups have used the political and economic crises in Europe as an "opportunity for preying on sentiments of instability and insecurity in the population" while simultaneously exploiting the idea of crisis as a means of inspiration and hope for their own projects.

A final point to highlight is the role of multilingualism in the DDL's identity construction processes. Receptive skills in English and Swedish are assumed in relation to posts and hyperlinks and someone, from the organization or with sympathies towards it, has translated the original EDL documents to Danish. The availability of automatic translation on Facebook also supports the use of languages other than Danish. Clearly, in Denmark, multilingual skills are an asset if international sources are to be exploited, particularly in relation to hyperlinks. The embedded nature of hyperlinks also allows the interested user to access the original sources, as in the case of the news story from Toulouse. That multilingualism is not a predominant feature of the Facebook timeline of the EDL is of little surprise in the British context.

6. Conclusion

As this is preliminary research, only very limited conclusions can be drawn. The DDL clearly uses social media to advance its cause through strategic anchoring of itself and its primary 'others', partly through a recontextualized translation of the discourse of the EDL and an appeal to the international in its posts and hyperlinks. Transnational space offers opportunities for the DDL to cherry-pick the information to be disseminated on its Facebook timeline and to establish symbolic connections with a range of national and international online media and groups. Not all of these can be classified as extremist and/or right-wing. The DDL happily weaves hyperlinks to the *Washington Post* or the BBC together with links to the Council of Conservative American Citizens or Bare Naked Islam, all for the purposes of propaganda-making. This is not an organization that is unskilled in communication or indeed languages. There is little evidence to suggest that the DDL sees the transnational or the international as an integral element in its own group identity; rather it anchors itself firmly in the national and the nationalist. A European Defence League does exist on Facebook, describing itself as a 'fan page' for all the European defence leagues and a 'news and information hub'.[4] This is administered by the EDL, but is not a transnational organization in structural terms, at least as yet.

Extreme right-wing, non-parliamentary groups are on the rise in Europe and their habitat is primarily cyberspace. While their support base varies and in some cases is quite limited, I would nonetheless agree with Askanius & Mylonas (2015:68) that it "is crucial to uncover and draw attention to what is going on in these obscure corners of the Internet".

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[4]   *<www.facebook.com/EuropeanDefenceLeague>*

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The history of *so that* and the CP cycle

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Abstract

A basic assumption in this study is that the historical development of the purpose subordinator *so that* is not divorced from the development of three other purpose subordinators, namely *þæt þe, þæt/that*, and *so.* It is shown that all these forms are best viewed as related in that they are different stages resulting from the operation of the CP cycle. Data are presented indicating that, following the rise of *þæt þe,* the other three subordinators come into use consecutively later, which is crucial to the CP cycle claim. Also I address conceptual affinity between RESULT and PURPOSE as a factor facilitating the grammaticalization path from RESULT to PURPOSE and thus prompting the use of purposive *so that*, thereby prompting one of the stages in the CP cycle.

1. Introduction

A purpose clause is traditionally classified as a type of adverbial clause. In explaining how a purpose clause is semantically situated relative to its main clause, Cristofaro (2003:157) writes that '[p]urpose relations link two SoAs [states of affairs] one of which (the main one) is performed with the goal of obtaining the realization of another one (the dependent one).' The main state of affairs in this view is to be associated with what is syntactically a main clause while the dependent state of affairs is expressed through what is syntactically a dependent clause, i.e. an adverbial clause of purpose. A clause of purpose in English, if finite, has always called for the use of a purpose subordinator. This paper offers an analysis of four purpose subordinators, the cumulative use of which stretches over the history of English from the beginnings of the language to the present day.

The title of this article singles out the subordinator *so that*, mostly on account of it being either explicitly pointed at or only alluded to as a main and most frequent purpose subordinator in PDE.[1] While I address some of the literature where the role of *so that* as a primary purpose subordinator is highlighted at the beginning of section 2, what I mean by allusions to *so that* is that the literature frequently lists examples of clauses introduced by *so that* when dealing with finite clauses of purpose in PDE in general. This is the case, for example, with Schmidtke-Bode (2009:30), who illustrates her discussion of English purpose clauses with (1).

(1) We went to the concert early **so that** we would get good seats.

A basic premise in this study is that the historical development of the purpose subordinator *so that* is not divorced from the development of three other purpose subordinators, namely *þæt þe, þæt/that*, and *so*. I aim to argue that the CP cycle, a series of cyclical changes affecting the CP layer of the clause as discussed by van Gelderen (2009, 2011), is to be held accountable for the successive development and use of the four subordinators. All these forms are best viewed as related in that they are different stages resulting from the operation of the CP cycle. In this sense the present study diverges from the accounts of the history of the prepositional subordinators of purpose such as *to the intent that, to the end that, to the effect that,* and *in order that* and in Nykiel & Łęcki (2013), Łęcki & Nykiel (2014), and Łęcki & Nykiel (forthcoming). There every subordinator is treated as a separate instance of grammaticalization or analogy.

This study has three objectives. The first objective is to collect all the forms, beginning with OE and ending with PDE, which can be related to the development of *so that* and then establish their chronology (section 2). Then I proceed to show how the grammaticalization path RESULT-to-PURPOSE accounts for the rise of *so that* (section 3). Finally I aim to argue for the CP cycle being involved in the development of *þæt þe, þæt/that*, *so that,* and *so* (section 4). It should also be added that in this study I work with both grammaticalization theory present in functionalist studies and van Gelderen's (2004, 2011) generative notion of grammaticalization with a view to achieving a wider picture of the grammaticalization cycle of the purpose subordinators.

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[1]   The following acronyms are used throughout the paper to refer to the periods in the history of English: OE for Old English (c. 450 – c. 1100), ME for Middle English (c. 1100 – 1500), EModE for Early Modern English (1500 – 1710), ModE for Modern English (1710 – present), and PDE for Present-day English (c. 1900 – present).

2. The diachrony of the four purpose subordinators

I begin this section with a glance at what grammar books of PDE list as purpose subordinators in finite clauses. A similar foray follows into grammars books of OE. Also I present data which testify to a chronology of the relevant purpose subordinators extending over the history of English from OE onwards.

    So that, as exemplified in (2), is mentioned by Huddleston & Pullum (2002:727) as one of two subordinators, alongside less frequent *in order that*, capable of introducing finite clauses of purpose in PDE.

(2) *Please phone everybody before the meeting **so that** we can be sure of the quorum.*
    (Huddleston & Pullum 2002:727)

It is also noted that *that* is readily omissible after *so,* which adds a third option to the array of subordinators (Huddleston & Pullum 2002:727). Quirk et al.'s (1985:1107-1108) account of the PDE purpose subordinators differs only to the extent that it links the distribution of the three forms, i.e. *so that*, *so*, and *in order that* to the levels of formality. Accordingly, *so* is the most informal option while *in order that* is the most formal. It is safe to say that the present-day situation raises no controversy in that *so that* is pointed to as the usual purpose subordinator in finite clauses.

    So that goes back to OE, yet the situation is less clear-cut in that period. There are a few purpose subordinators available at the time. Shearin (1903:57-63) provides a list and a discussion of the OE subordinators which, as I intend to argue, can be seen as earlier variants of *so that* namely *þæt, þæt þe*, and *þætte (þæt+þe)*.[2] *So that* itself is absent from that list but it is included by Mitchell (1985:§2814) as *swa þæt(te)*. All these options are illustrated in examples (3).

(3) a. ðæt ic   wille gescadwislicor   gesecgean **ðæt** hit mon
     that I   will more-clearly   say   that it   man

     gearnor   ongietan   mæge
     more-eagerly understand may
     'I will say that more clearly so that people may understand it more eagerly'
     Or 60.8 (DOEC)

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[2] It is generally agreed that *þætte* results from *þæt* and *þe* merging together as one element, see, for example, Hosaka (2010:67)

b.   bio ðu me in God   gescildend and stowe getrymede
      be   you me   in God protector and place strengthened

      ðæt de   halne mec gedo
      that that safe me   make
      'Be for me God, a protector, a place of strength,
      so that you may make me safe'
      Vesp.Ps. 70.3 (in Shearin 1909:60)

c.   Ðæt tacnað ðæt ðæt geðyld   sceal gehealdan ðara gecorenra
      that means that that patience shall   hold   those chosen

      monna mod, **þætte**   hit ne astyrige se   wind þære ungeðylde
      men   minds that-that it not agitate that wind that impatience
      'It means that patience has to restrain the minds of the chosen so that
      the wind of impatience will not agitate them'
      CP 33.219.6 (DOEC)

d.   Orsorh   and blissigende ic cume   to ðe, **swa þæt** ðu
      free-from-care and rejoicing   I come   to you so   that   you

      me blissigende underfo.
      me rejoicing   receive
      'I come to you peaceful and rejoicing so that you will receive me
      rejoicing'
      ÆCHom I. 38 517.300 (DOEC)

In the remaining part of this section, I bring together the existing views
on the use and frequency of the above mentioned OE subordinators and
provide my own data on the competition of *that* and *so that* in the later
periods of the development of English.

    Shearin (1903), Mitchell (1985:§2814, §2825), Traugott (1992:250),
and Los (2007:37) agree that the most common subordinator of finite
purpose clauses in every OE period is simply *þæt*. At the same time
Mitchell (1985:§2831) says that *þæt þe* and its later development *þætte*
are the oldest options. In Shearin's (1903:61) view *þætte* introduces more
emphatic purpose clauses than *þæt*, yet Mitchell (1985:§2833) disagrees
and assigns no credibility to that assessment. According to him *þætte*
is simply older, which is reflected in it missing from the late OE prose
(see Mitchell 1985:§2831). *Swa þæt* is present throughout OE but is less
frequent than *þæt* and it may be a later variant. It is nevertheless difficult

to find evidence for it as *swa þæt* probably arose already in pre-historic OE. In order to see whether these tendencies hold true toward the end of OE and the beginning of ME, I have compared the frequency of *þæt*, i.e. the most frequent purpose subordinator in OE according to the literature, and *swa þæt,* which is arguably a later OE development and which is crucial from the PDE perspective, in two manuscripts of the Anglo-Saxon Chronicle. The two manuscripts are Manuscript A, the so called The Parker Chronicle, and Manuscript E, i.e. the Peterborough Chronicle. As noted by Garmonsway (1953:xxxiv), Manuscript A was copied by thirteen hands, the first of which, most probably the earliest scribe, copied entries up till the year 892. That is why I split the Manuscript A data into those taken from before 892 and those taken from after 892. Table 1 shows the number of the occurrences of *þæt* and *so þæt* in the two parts of the Parker Chronicle, which contain 8788 and 5806 words respectively, and the Peterborough Chronicle, which contains 47970 words total.

	Chron A <892	Chron A >892	Chron E
þæt+clause	6 = 100%	3 = 60%	20 = 74%
swa þæt+clause	0	2 = 40%	7 = 26%
Total	6 = 100%	5 = 100%	27 = 100%

Table 1. Purpose clauses introduced by *þæt* and *swa þæt* in the Anglo-Saxon Chronicle

In the entries till 892 there is no case of purposive *swa þæt* while there are six instances of the purposive subordinator *þæt*. After 892, despite a smaller total number of words, we have two cases of *swa þæt* against three cases of *þæt*. In Manuscript E, copied later, namely in the twelfth century, there are 27 finite clauses of purpose, 20 introduced by *þæt* and 7 by *swa þæt*. Altogether, the data from the chronicles confirm the observations found in the literature. Finite purpose clauses are not frequent in the chronicles on the whole, and typically, such a clause will be found with the subordinator *þæt*. *Swa þæt*, as expected, is a less frequent variant, but it also gains ground in late OE and early ME. Admittedly, *swa þæt* is also absent from the earliest part of the chronicles. Exactly how significant this absence is can only be assessed after earlier OE texts are examined, but this is beyond the scope of this study. In order to make the picture complete, I also conducted a search of the subordinators *þæt þe* and *þætte* in the chronicles which turned up no hits. This finding is consistent with the observation that these two subordinators are the earliest options, not available in late OE.

With the view to tracing the competition between *that* and *so that* as purpose subordinators toward the end of ME, EModE and in ModE, I have collected and counted the instances of each subordinator in three corpus samples, namely Caxton's edition of Malory's works as available in the Corpus of Middle English Prose and Verse (CMPEV), the last sub-period of EModE as singled out by The Penn-Helsinki Parsed Corpus of Early Modern English (PPCEME), and the last sub-period of Modern British English as distinguished by the Penn-Helsinki Parsed Corpus of Modern British English (PPCMBE). The obtained data are collated in Table 2. What is clearly noticeable in the data is that the role of *that* as the more frequent purpose subordinator of the two remains intact up till at least the second decade of the twentieth century. The long lasting dominance of purposive *that* over *so that* is as a matter of fact surprising in light of Schmidtke-Bode's (2009:195) statement that *that* is too bleached to serve as an adverbial subordinator without any additional reinforcement. The changes whereby *so that* takes over and ousts *that* from singlehandedly introducing purpose clauses are very recent and must have taken place after the first two decades of the twentieth century. This trajectory of change could be expected given the PDE situation in which it is *so that* that is a predominant purpose subordinator according to Huddleston & Pullum (2002), as already noted in this section. Interestingly, what might be an indication of those changes being imminent is the fact that 42 out of the 65 instances of purpose clauses introduced by *that* in the Modern British English part of my data, i.e. the data shown in the last column in Table 2, come from the conservative language of the 1881 translation of the Bible by Thomas Ellicott which is based on the Authorized Version of the Bible from 1611.

	Caxton's Malory (1485)	PENNEME3 (1640-1710)	PENNMBE3 (1840-1914)
that+clause	120 = 81%	182 = 84%	65 = 85%
so that+clause	28 = 19%	34 = 16%	11 = 15%
Total	148 = 100%	216 = 100%	76 = 100%

Table 2. Purpose clauses introduced by *that* and *so that* in various periods in the history of English

The latest addition to the array of purpose subordinators clearly related to *so that* is *so* when it alone introduces a purpose clause. The earliest example of that type given by the OED comes from 1851.

(4) Take your leg off from the crown of the anchor here, though, **so** I can
pass the rope.
1851 H.Melville Moby Dick cxxi 564 (OED)

Ultimately two firm observations emerge when the analysis of the
historical data and of the insights from Huddleston & Pullum (2002) and
Quirk et al. (1985) concerning PDE are put together. Firstly, there is a clear
chronology behind the emergence and use of each purpose subordinator
and this chronology could be reconstructed as in (5). What the figure in
(5) reflects is that the subordinator to the right of the > symbol arose later
than the subordinator to the left of that symbol. Hence *þæt þe* (*þætte*) is
the earliest purpose subordinator attested while *so* surfaces later than all
the rest. At the same time the figure makes no assumptions as to when or
whether each subordinator goes out of use, an obvious implication being
that at a given point in time two subordinators, or more, can be used side by
side while one is made use of more frequently than the other(s).

(5) *þæt þe / þætte > þæt > swa þæt / so that*[3] *> so*

Secondly, there is a degree of relatedness in the forms of all the subordinators.
Each of them contains the complementizer *that*, either on its own or paired
with another element. The notable exception to this structure is plain *so*,
which, however, visibly overlaps with *so that* in form. I use this relatedness
to argue in section 4 that (5) is also a reflection of a cyclical development
which can be construed as an instance of the CP cycle. In this sense all
the forms in (5) are also related as they represent different stages in the
development of one cycle.

In this section I compiled and looked into all the subordinators in
the history of English which are relevant to the history of *so that*. Also
an attempt was made to show the chronology of those subordinators. The
main focus of the next section is shifted precisely to a discussion of the
reasons why the juxtaposition of *so* and *that* came to function as a purpose
subordinator.

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[3] The distinction between *swa þæt* and *so that* in this study is meant to only signify the
difference in how the form was spelt in OE (primarily *swa þæt*) and in the later periods
(primarily *so that*). Admittedly, this distinction obscures the fact that in OE there were
other spelling variants of the subordinator as well as the fact that there were alternative
spelling variants of *so that* in ME and even beyond (see OED: *s.v. so*). The transition
from *swa þæt* to *so that* does not imply any change in the function of the subordinator.

3. PURPOSE vs. RESULT

In this section I highlight the rise of *swa þæt/so that* as a purpose subordinator, with the syntactic facets of the process receiving due attention in the next section. The reasons why I single out this form are twofold. Firstly, *so that,* as the most frequent finite purpose subordinator nowadays, is conspicuous from a PDE point of view. Secondly, as a form present throughout the history of English, *so that* lends itself to a diachronic investigation.

The function of PURPOSE in *so that* has been shown in the literature to be intertwined with the function of RESULT. In this respect *so that* is at the same time similar to and different from *that* with which it has competed since OE as a purpose subordinator, as shown in section 2. A similarity between the two is that *þæt* by itself is known to have been a multifunctional subordinator already in OE as it was employed in complement clauses and many types of adverbial clauses, e.g. cause (see Molencki 2012:67), RESULT, PURPOSE. *Swa þæt* on the other hand is primarily reserved for only two types of adverbial clauses, namely those of result and purpose. Both Shearin (1903) and Mitchell (1985) agree that this is the case in OE. Huddleston & Pullum (2002:733) point out that *so that* in PDE still has these two functions. Łęcki (2013) looks into instances of *so that* in the texts of the Katherine group from the early thirteenth century, and he finds that in most cases we have to do with result rather than purpose. Looking for a further confirmation of this observation, I conducted a similar analysis of the *so that* clauses in Manuscript A and E of the Anglo-Saxon Chronicle (14594 and 47970 words respectively) and in Caxton's Malory (c. 345000 words). It turns out that my data pattern in the same way. In each text I investigated, the number of result clauses with *so that* outnumbers that of purpose clauses with this subordinator, even if this conclusion can only be tentative for Manuscript A, where a very small overall number of relevant examples can be found. The general tendency is presented in Table 3, which shows that result clauses account for around 70 percent of the *so that* clauses. Given this imbalance, it could be argued that RESULT is a primary, and possibly earlier, function of *so that*.

	Chron A	Chron E	Caxton's Malory
Purpose	2 = 29%	7 = 19%	28 = 26%
Result	5 = 71%	27 = 73%	71 = 67%
Other/ambiguous	0	3 = 8%	7 = 7%
Total	7 = 100%	37 = 100%	106 = 100%

Table 3. Functions of *swa þæt* (*so that*) in the OE and ME data.

While clauses of both result and purpose can take the same subordinator, namely *swa þæt/so that,* there is a difference between the two types of clauses in that purposes clauses are marked for modality unlike result clauses. In my data this difference can be seen in that a purpose clause contains a subjunctive (SUB) verb form, as in (6a), or a modal verb, as in (6b), while a clause of result has an indicative (IND) verb form, as shown in (6c) and (6d).

(6) a Ðas landes ic gife Sancte Peter eal swa freolice swa ic seolf
these lands I give Saint Peter all as freely as I self

hit ahte, 7 **swa þet** nan min æftergengles þær nan þing
it had and so that no my successor there no thing

of ne nime.
of not take:3P-SUB
'I give these lands to Saint Peter with the same freedom as when I held them so that none of my successors will take them from there.'
?a1160 *Peterb.Chron.*(LdMisc 636) an.675 (CMEPV)

b. And thus at euery cours that he rode to and fro he chaunged his colour **so that** ther myghte neyther kynge nor knyghte haue redy congnyssaunce of hym
'thus each time he rode back and forth he changed his color so that neither the king nor any knight might easily recognize him.'
1485(a1470) Malory *Wks.*(Caxton :Vinaver) 260/2 (CMEPV)

c. Hæfde se cyning his fierd on tu tonumen, **swa þæt** hie
had that king his army on two divided so that they

wæron simle healfe æt ham, healfe ute,
were:3P-Pl-IND always half at home, half out
'The king had divided his army into two sections so that there was always half at home and half out,'
ChronA 893.14 (DOEC)

d. and Galahad smote hym **soo that** hys spere wente thorou his sholder /
'and sir Galahad struck him so that his spear went:3P-IND through his shoulder'
1485(a1470) Malory *Wks.*(Caxton :Vinaver) 630/17 (CMEPV)

As shown by Mitchell (1985:§2803), this distinction is far from watertight, as for example 'many OE verb forms are ambiguous for mood,' which is one of the reasons why there are instances ambiguous between result and purpose in Table 3. Modality marked in purpose clauses indicates that purpose clauses are 'non-factual, i.e. [they] describe an event that is considered to be unreal from the perspective of the temporal reference point of the main clause' (Hengeveld 1998:350). In (6a), for example, there is no guarantee that none of the successors got some of the lands given to the church of Saint Peter. In a result clause on the other hand the content is factual, which implies that in (6d) the spear did go through the knight's shoulder.

Verstraete (2008) shows that this difference between purpose and result clauses, i.e. the fact that the former contain a modality marker while the latter clauses do not, cuts much deeper. He argues that purpose clauses, unlike result clauses, are to be positioned somewhere between adverbial clauses and complement clauses instead of being lumped together with adverbial clauses, which is a usual practice. Two arguments that he gives in support of this claim are semantic. The first argument for purpose clauses being complement clause-like is that a purpose clause conveys the mental state of the agent of the main clause rather than that of the speaker. The mental state is the agent's intention to bring about the proposition in the purpose clause. The modality marker in a purpose clause is a formal sign of the purpose clause being semantically dependent on the main clause. The second argument made by Verstraete (2008) is that purpose clauses, much like complement clauses yet unlike many types of adverbial clauses, are not presupposed. The content of a purpose clause can be for example denied or questioned without disrupting the logic and meaning of the main clause. Schmidtke-Bode (2009) offers data that support this argumentation on morphosyntactic grounds. Working on a cross-linguistic sample of 80 languages, she discovers that in 62 (77.5 percent) of these languages 'at least one purpose clause construction shares some of its morphosyntactic properties with (certain kinds of) sentential complements, up to being completely identical with them' (Schmidtke-Bode 2009:158). She shows, for example, that a purpose subordinator can be at the same time used as a complementizer, as in Tzutujil, a Mayan language, or that purpose clauses and complement clauses can take identical verb forms, which is the case in, e.g. Yagua, a Peba-Yaguan language. Such arguments are in line with Lehmann's (1988), Bickel's (2010), Gast & Diessel's (2012) abandonment of strict dividing lines between subordinate clause types and

acknowledgement of gradience in clause linkage. Gradience allows graded membership, so accordingly purpose clauses, on account of sharing the above mentioned properties with complement clauses, cluster with them to some extent. Result clauses on the other hand display semantic properties of adverbial clauses in that they are not linked to the main clause agent by means of any special mental relation and they are presupposed, as shown by Verstraete (2008).

These arguments bear upon the syntactic status of a purpose clause in relation to the main clause. A purpose clause is more integrated into its main clause than a clause of result. Lehmann (1988:183) introduces a parameter called hierarchical downgrading which helps measure the degree of integration of a subordinate clause into the main clause. Hierarchical downgrading, as shown in (7) is a continuum extending between two poles, namely totally unintegrated paratactic clauses on one pole of the continuum and maximally integrated complement clauses on the other. If a purpose clause shows semantic and morphosyntactic affinity with a complement clause and a complement clause has the highest degree of integration, or is the most downgraded according to Lehmann (1988:185-186), then it follows that a purpose clause is more downgraded than a result clause.

(7) Hierarchical Downgrading

minimally integrated	⟵————————————⟶	maximally integrated
paratactic clauses	result clauses purpose clauses	complement clauses
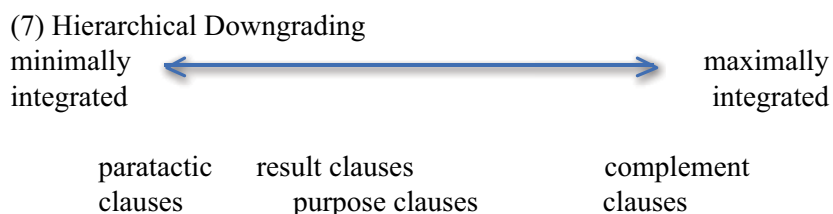
Earlier in this section, I tentatively concluded that the RESULT function of *so that* is diachronically earlier than PURPOSE as the former is the dominant function of *so that* in the OE and ME data. Together with the switch from RESULT to PURPOSE, *so that* comes to introduce purpose clauses, i.e. more hierarchically downgraded clauses. In this sense *so that* becomes more grammaticalized. Schmidtke-Bode (2009:178, 197) puts forward a trajectory of development from RESULT to PURPOSE (and from PURPOSE to RESULT), which, as she argues, results from the observation that there are PURPOSE markers cross-linguistically directly derived from former RESULT markers, e.g. in Sanumá, a language from the Yanomam family. Łęcki & Nykiel (2012) and Nykiel (2014) find more

data that tilt in favor of the postulation of the grammaticalization path from RESULT to PURPOSE. *So that,* since it arose as a RESULT marker but later came to function as a PURPOSE marker, is yet another instantiation of a development along this path, which at the same time serves to reaffirm the validity of the grammaticalization path itself.

This section has argued that the fact that *so that* has been a subordinator of result and of purpose is a consequence of grammaticalization down the RESULT-to-PURPOSE path. In the next section, I zoom out from the particular focus on *so that* and gather all the subordinators discussed in sections 2 and 3 with a view to showing how they all fit together in the development of the CP cycle.

4. The CP cycle

While *so that* extends to PURPOSE following the RESULT-to-PURPOSE grammaticalization path, in order to account for the development of the purpose subordinators from OE to PDE shown in (5), and repeated here as (8) for the sake of convenience, I make use of the idea of the CP cycle as elaborated on by van Gelderen (2011). At the same time, the analysis of the cyclical changes presented in this section has many parallels with the analysis proposed for negation in English and the Scandinavian languages in Christensen (2005:185-202).

(8) *þæt þe / þætte > þæt > swa þæt /so that > so*

The CP cycle is an example of a linguistic cycle, a notion that has been frequently used in grammaticalization studies, both functionalist, e.g. Givón (1979:209, 232), Heine & Reh (1984:68ff.), and generative by van Gelderen (2008, 2009, 2011). A cycle or a cyclical change is understood as involving lexical material which becomes more grammatical before it turns to zero, at which point the same function can be renewed through another piece of lexical material being employed to serve this function. A claim associated with a linguistic cycle is that language change is unidirectional.

The CP cycle refers to changes in the CP layer of the clause. Following van Gelderen (2009:136), I assume that the CP layer serves to connect a clause 'to a higher clause or a speech event'. CP has been shown by Rizzi (1997) and Cinque (1999) to have an expanded structure in many languages but for my purposes it is enough to say that CP has the basic structure as in (9) where C is the head of CP and there is room for a specifier.

(9)

```
      CP
     ╱╲
   ...  C'
        ╱╲
       C  TP
```
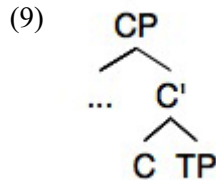
Van Gelderen (2011:259-261) gives an example of the CP cycle relevant to this study, namely the development of *that* from a demonstrative pronoun to the head of CP. As a demonstrative pronoun *that* has interpretable phi-features and locative features. Phi-features are a bundle of features responsible for person and number agreement in English (van Gelderen 1997:13) and locative features enable a demonstrative to be used deictically (van Gelderen 2011:200). Since both types of features are interpretable, i.e. crucial to the interpretation of the sentence, as argued by Chomsky (1995:277), a demonstrative can stand on its own. As the phi-features and the locative features are reanalyzed as uninterpretable Tense features, *that* turns into a complementizer. The uninterpretable Tense features of the complementizer have to be checked by a corresponding instance of interpretable features further down the clause. The development from a demonstrative to a complementizer is shown in (10).

(10) demonstrative > complementizer
     [i-phi] [i-loc]   [u-T]

Van Gelderen (2011:261) further argues that *that* is at first reanalyzed as the specifier of CP and only later, in Late ME, as the head of CP. Evidence for *that* functioning as a specifier comes most of all from such OE examples as (3b), repeated here as (11a), where *þæt* precedes the OE complementizer *þe,* and, perhaps less certainly, from (3c) and (11b), where *þæt* and *þe* merge into one form, *þætte*.[4]

---

[4] As noted by an anonymous reviewer, merged *þætte* can be argued to be a case of a complex head rather than that of a specifier preceding the head.

(11) a. bio ðu me in God gescildend   and stowe getrymede   ðæt
          be you   me in God protector and   place strengthened   that

          de halne mec gedo
          that safe me make
          'Be for me God, a protector, a place of strength, so that you may
          make me safe'
          Vesp.Ps. 70.3 (in Shearin 1909:60)

   b.   ac Romane mid hiora   cristnan cyninge Gode
            but Romans with their   Christian king   God

            <þeowiende> wæron, þætte he him for þæm   ægþres geuþe,
            serving   were   that he them for those   both   grant
            'but Romans with their Christian king were devoted to God so that
            he may grant them both…'
            Or 2 1.38.17 (DOEC)

Once the complementizer *þe* falls out of use, which happens by
late OE, *þæt* can be reanalyzed as the head of CP due to the economy
principle called the Head Preference Principle (HPP) (van Gelderen 2004).
According to HPP, speakers tend to reinterpret the specifier of a phrase,
i.e. a phrasal constituent, as the head. Van Gelderen (2011:261) points out
that the reanalysis of *that* as the head does not take place until late ME
when *that* becomes optional in a complement clause. The appearance of a
structure such as *swa þæt* in OE indicates however that *þæt* can in fact be
the head earlier. *Swa* is the specifier, as shown in (12), which means that
þæt is in the head position in CP.

(12)
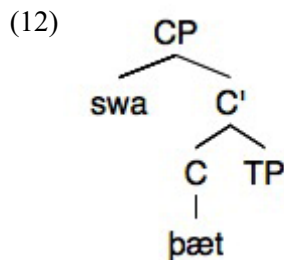
A question which arises at this point is how *swa* was reanalyzed
as the specifier in CP. Huddleston & Pullum (2002:969) maintain that *so*
in *so that* is a preposition although this seems quite unlikely. Neither the

OED nor B&T classify *swa/so* as a preposition. If *so* was a preposition, one would expect to find *swa* followed by a demonstrative pronoun. Often OE prepositions occur in SpecC as the head of a full PP before they are reanalyzed and occur alone in SpecC. This was the case for example with *after*, which occurred as *efter þan þet* (van Gelderen 2009:173), and with *to* which occured as *to þam þæt* (Nykiel 2014). This is not attested with *swa þæt*. It seems that an actual source of reanalysis of *swa* as a specifier of CP is an earlier reanalysis of *swa* as a specifier of CP in result clauses. As was shown in the previous section, *swa þæt* introduces clauses of result in OE all along, and *swa þæt* with this function has a stronger frequency than purposive *swa þæt* in both OE and *so that* in ME. It is argued by Schmidtke-Bode (2009) that PURPOSE is RESULT paired with the intention to achieve it. In Nykiel (2014:8), I argued that intention can arise as a pragmatic inference in the context of RESULT, giving rise to the meaning of PURPOSE. As a consequence of RESULT and PURPOSE being inferentially intertwined, I take it that *swa* gets reanalyzed in SpecC in purpose clauses in OE due to being earlier used as SpecC in clauses of result.

The last stage in the cyclical development of *so that* shown in (8) above is when *so* alone introduces a purpose clause. *So* as a sole subordinator of purpose is illustrated in (4). At this point, with the complementizer *that* gone, there are two options. The first option is that *so* is still in SpecC with interpretable features while the other option is that *so* has been reanalyzed as C with uninterpretable features whose exact nature has yet to be determined. The latter option is shown in (13). This reanalysis again follows the HPP, where a specifier is reanalyzed as a head, a development that we have seen affecting *that* in OE.

(13)
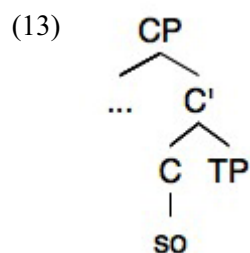
This stage completes the whole *so that* cycle as of now, as shown in (14). At the first state of the cycle, i.e. (14a), the purpose subordinator is composed of the head of CP *þe* and the specifier *þæt*. This stage is attested

in the early OE data. With the complementizer þe falling out of use, þæt comes to be reanalyzed as the head of CP as in (14b). Whether it happens in OE or ME is still debatable. Van Gelderen (1993:59ff.) offers compelling evidence from the acceptance of the optionality of complementizer *that* and from *that*-trace-effects suggestive of a ME reanalysis but given the stage in (14c) *that* must have been a head in OE. (14c) comes as the next stage in the cycle where the specifier is renewed through *swa* while þæt is a head. This development originates in OE and has continued up till PDE. Finally, as shown in (14d), the disappearance of the complementizer *that* paves the way for the specifier *so* to be reanalyzed as the head of CP. This change sets in in the nineteenth century.

(14) The cycle of finite PURPOSE *so that*

a. (early OE)   b. (early OE   c. (early OE   d. (19th c.
                          to 20th c.)   - to the present)   - to the present)
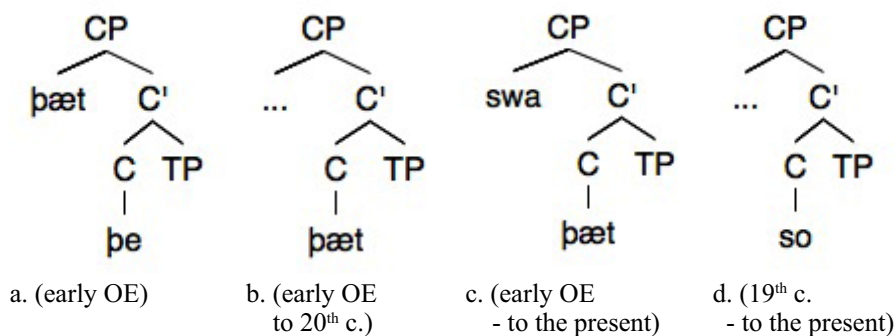
Incidentally it is worth noting that no similar development has affected *so that* of result clauses. Huddleston & Pullum (2002:733, 1540) maintain that if *that* is omitted from a clause of result, *so* is not a complementizer but an adverb or a coordinator and the clause that follows is a coordinated clause.

5. Final remarks

I have shown in this paper that four English purpose subordinators, namely *þæt þe* (*þætte*), *þæt*, *swa þæt* (*so that*), and *so* should not be perceived as independent developments. Rather there are good reasons to argue that they are all products of one cyclical set of changes, namely the CP cycle.

I have presented data that help establish the diachrony of the four subordinators, and the order in which they are arranged in (8) above is meant to reflect the chronological order. They are all consecutive developments

with overlapping stages. Two of these subordinators, i.e. *that* and *so that* have competed frequency-wise from OE till the early twentieth century with the latter prevailing only from the early twentieth century onwards. Due to this long lasting competition between the two subordinators, much of my attention in this study has been devoted to them. I have further argued that due to PURPOSE and RESULT being inferentially intertwined, *so that* took on the function of a purpose subordinator after initially it only introduced clauses of result. At the same time, this development bears the features of grammaticalization, as a purpose clause is grammaticalized to the extent that it shows a degree of integration into the main clause, much as complement clauses do, and unlike clauses of result, which are typical adverbial clauses. As for the CP cycle, it serves to remove focus from *that* and *so that* and take a bird's eye view of the successive emergence of the four subordinators. Much of the change happening is driven by the HPP, i.e. specifier-to-head reanalysis. Accordingly, *þæt* in *þæt þe* is in SpecCP only to be reanalyzed as C when it surfaces as the subordinator *þæt/that*. SpecC is then renewed by *so*, itself undergoing the specifier-to-head reanalysis afterwards.

Importantly, in order to achieve a broad insight into the purpose subordinators, this study makes use of both functional and generative approaches to grammaticalization. As I hope to have shown, the two approaches complement each other (see also e.g. Bjerre et al. 2008 and Newmeyer 2010). Exclusion of either perspective, i.e. the functionalist idea of a grammaticalization path or a formal construal of the CP cycle, would have resulted in a less thorough description of the data.

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Multiple complementizers in Modern Danish and Middle English

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Abstract

This paper expands the empirical coverage of the cP/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 cP/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> <u>(*at)</u> 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> <u>(at)</u> 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 cP/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 cP/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 cP/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 cP/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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The paradigmatic adverbials reexamined after 35 years

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Abstract

Nølke (1983a) proposed a new category of (French) *Paradigmatic Adverbials* (**ParAdv**) comprising adverbials like *même*, *surtout*, *seulement*, … In the late 1980s, linguists began to talk about focus particles, which in central aspects are similar to the ParAdv. This paper will have a closer look at what this new research has contributed to our understanding of their properties. After a brief recapitulation of Nølke's (1983) analysis, I introduce a focalisation theory based on Nølke (1983b, 1994, 2006). It occupies a central position in my new analysis, which tries to situate the analysis of the ParAdv in a more general theoretical framework. The central notion is still 'paradigm', and therefore the paper will end with an examination of the nature of the paradigm as used in linguistics.

1. Introduction

In Nølke (1983a), I proposed a new category of (French) adverbials called the *Paradigmatic Adverbials* (**ParAdv**) because of their key feature being a paradigmatising function. The sentences in (1)-(5) present some examples:

(1) Il ressentit ***même*** une sorte de dégoût.
     'He felt even a kind of disgust'
(2) La vieille dame du premier étage sera appelée ***aussi*** à le reconnaître.
     'The old lady on first floor will be called also to recognise him'
(3) On parla ***surtout*** de politique étrangère.
     'One talked especially about foreign politics'
(4) Il les dirigeait dans Paris ***seulement***.
     'He conducted them in Paris only'

(5)   Cela échappe ***précisément*** à la gradation continue.
       'That escapes precisely from the continued gradation'

All the highlighted adverbials are ParAdv. Many of these had been subject to analysis, but at the time being, they had never been treated as constituting a category. In Nølke (1983a), I showed that they all share two properties which separate them from all other adverbials:

   i) like sentence adverbials, they are very mobile, but unlike sentence adverbials, the two different possible positions are linked to two clearly different interpretations.
   ii) they introduce a presupposition of the existence of a paradigm of virtual or imagined utterances. It is a result of a *paradigmatisation*, which is a constitutive element of the focalisation act.

Since 1983, especially Anglo-Saxon and German linguists have started to show an interest in this type of adverbials, which they often call *focus particles* because of their focalising function. There are many similarities between these new analyses and those in Nølke (1983a), so I have found it interesting to have a closer look on what this new research has contributed to our understanding of their syntactic and semantic properties.

After a brief recapitulation of Nølke (1983a)'s analysis, I introduce a focalisation theory theory based on Nølke (1983b, 1994, 2006). This theory occupies a central position in my new approach, which tries to situate the analysis of the paradigmatic adverbials in a more general theoretical framework. It occupies a central position in my new analysis, which tries to situate the analysis of the ParAdv in a more general theoretical framework. The central notion is still 'paradigm', and therefore the paper will end with an examination of the nature of the paradigm involved in the analysis of paradigmatic adverbials.

2. The 1983 analysis

An important characteristic of Nølke's (1983a) analysis was that a clear distinction was made between respectively 'adverbs' which form a class of words or phrases and 'adverbials' which form a class of syntactic functions. The example in (6) illustrates this distinction:

(6)   … mais ***surtout*** les pays industrialisés ont modifies profondément leur attitude.

'… but especially the industrialised countries have profoundly modified their attititude'

Without context, (6) has two (connected) readings. In the first one, the whole sentence constitutes an argument in a series of arguments for something which is not necessarily mentioned in the sentence. This might be that a certain year was remarkable for several reasons among which the fact mentioned is the most important one. In the second reading, (6) expresses that the industrialised countries had modified their attitude more than other countries. In both cases, *surtout* is an adverb, but in the first reading it is a connector adverbial whereas it is a ParAdv in the second one.[1] The syntactic position is important for this distinction. As a connector, *surtout* is always in the leftmost position, detached from the sentence; as a ParAdv, it has a special syntax as detailed below.

Three **syntactic features** characterise the ParAdv:

1. They may appear at all the main syntactic junctures, like other sentence adverbials.
2. They take scope over the smallest predication they are integrated in.
3. They are associated with a specific element in the sentence; unlike other sentence adverbials. This element is their nucleus.

NUCLEUS MARKING RULE
The syntactic position of a ParAdv marks its nucleus. There are two possibilities:
- If it is integrated prosodically into the utterance, the immediately following element constitutes its nucleus.
- If it is inserted into the structure receiving parenthetic intonation, the immediately preceding element constitutes its nucleus.

Thus, in both examples in (7):

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[1] Today I consider 'connector' to be a text or discourse function, so the classification would be slightly different.

(7)   a. Même Pierre est venu à la fête.
          'Even Pierre has come to the party'
        b. Pierre, même, est venu à la fête.
          'Pierre, even, has come to the party'

Pierre is the nucleus of *même* and *Pierre est venu à la fête* constitutes its scope.

One **semantic feature** distinguishes the ParAdv from all other adverbials:

- ✓ They introduce a presupposition of the existence of a paradigm of utterances constructed by substituting the nucleus with another element of the same paradigm as this one. That is their paradigmatising function.

This semantic feature has definitional status, and it gives rise to further analysis of the particular types of ParAdv. *Même* may function as a prototypical example :

(8)   Même Pierre est venu à la fête.
        'Even Pierre has come to the party'

We can discern three components of the meaning of this utterance:

(8')   a. Pierre has come to the party. (**asserted meaning**)
        b. Someone else (at least one other person) than Pierre has come to the party. (**strongly presupposed meaning**)
        c. The fact that Pierre has come to the party is from a certain point of view more significant than the fact that the other person(s) has come. (**weakly presupposed meaning**)

The three components are not communicated in the same way. Whereas (a) is asserted – it yields new information – (b) and (c) are presupposed. (b) is the paradigmatic presupposition that defines the category of ParAdv. Thus, we can note that *même*, in some sense, is bound to the subject (*Pierre*) at the same time as it is taking the entire sentence in its scope. It was in order to describe this double characteristic that I introduced the distinction between the **nucleus** and the **scope** of the adverbial. This distinction is crucial for the analysis. Thus I say about (8) that the nucleus of *même* is

Pierre, and that the scope of *même* is *Pierre est venu à la fête*. (9) illustrates this structure:

(9)   Même   Pierre est venu à la fête.

(nucleus)

(scope)
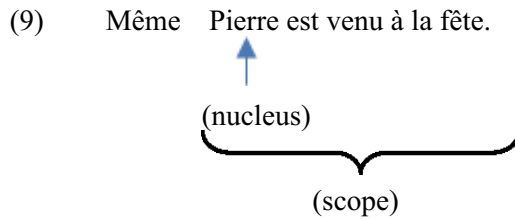
The surface structure marks the nucleus according to the rule in (10):

(10) 1. If the ParAdv is pronounced with neutral intonation:
       (a) its nucleus consists of the string of words following the ParAdv until the end of the rhythmic group;
       (b) if the ParAdv immediately follows a finite verb, this verb is part of the nucleus.
    2. If the ParAdv is pronounced with parenthetic intonation, the phrase that immediately precedes it constitutes le nucleus.

I symbolise (9) by means of the formula in (9'):

(9')   MEME$_k$ (VENIR À LA FÊTE (k)), where 'k' = 'Pierre'

The interpretation of the utterance can then be deduced from this formula by involving the particular lexical rules attached to the paradigmatic use of *même* and given in (8').

These rules are able to predict the distribution of the ParAdv as well as the relation between these adverbials and the interpretation of the utterance in which they appear. Every exception to the rule (and there are very few) can be explained easily by incidental properties of certain lexemes and certain context types. Nonetheless, for certain kinds of ParAdv some systematic modifications should be added to the general rules governing the detection of the nucleus.

Two categories of ParAdv can be distinguished. In the first one, we find adverbials like *même*, *aussi* and *surtout*. These ParAdv are much like (real) sentence adverbials. Roughly speaking, they have the same syntax and they never have any influence on the truth conditions of the sentence where they appear. They are also all additives in so far as their

paradigmatic presupposition is positive as we saw in (8). The second category is less homogeneous than the first one. It contains adverbials like *seulement*, *exactement* and *au moins*. These adverbials are less mobile and they sometimes have an influence on the truth conditions of the sentence. Furthermore, some of them – in particular those of the type *seulement* – are negative in the sense that all the other members of the paradigm of utterances are false (if the actual utterance is true):

(11)   Il les dirigeait dans Paris seulement (…)
           'He conducted them in Paris only'

If (11) is true, an utterance like *Il les dirigeait dans la province* is false.

3. Focus and scope

In the late eighties, some German and Anglo-Saxon linguists started to be interested in the linguistic units that I had called the paradigmatic adverbials. For these linguists[2], it is the focalising function which is constitutive of the class and the term *focus particles* was born. Ekkehard König's book, published in 1991 (*The Meaning of Focus Particles*) is undoubtedly the most important single contribution to these studies. König shows that it is vital to rigorously keep apart the notions of scope and focus, where scope and focus apparently correspond to my scope and nucleus, respectively. However, according to König's analysis, it is only the interpretation of the utterance that indicates what is the scope and what is the focus of the particles. It seems to me that if we accept this analysis, we give up any hope of arriving at an explanatory level. Unlike König, I believe that the structures of scope and focus do leave some systematic traces in the syntactic surface structure, insofar as the syntax puts (more or less precise) constraints on their creation. Since 1983, I have tried to explicate these constraints within a modular framework, and this work has led to the elaboration of a genuine (utterance act) theory of focalisation and to an outline of a formal scope theory. Here, I shall only present the focus theory and merely refer to my treatment of scope in Nølke (1994: 98-104).[3]

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[2] See for example Altmann (2007), de Cesare (2010), Dimroth & Klein (1996), König (1991), Moser (1992), Reis & Rosengren (1997), Rooth (1992).

[3] In the linguistic literature, *focus* has a number of different meanings. See Nølke (2006) for an overview of different information structure elements found in the literature and the relation between them.

3.1 The focalisation theory

In the Utterance Act Theory of Focalisation (UATF) presented in Nølke (2006), *focus* is the result of a focalisation act which takes place at the very moment the utterance act occurs. In this sense, and just like the illocution, it may be seen as a qualification of the locutionary act. The identification of the purpose of the focalisation constitutes a necessary part of the interpretation process. The focus is characterised by three constitutive and interdependent properties:

- The *syntagmatic property*. The focus appears in the utterance as a continuous string of utterance elements. It may be a series of words, a single word, or just a fragment of a word. The hearer must establish the extension of focus.
- The *paradigmatic* property. The focus is presented as the result of a choice made among the elements of a paradigm. The hearer must re-establish this paradigm.
- The *intentional* property. The paradigmatic choice was made with a special end in mind. The hearer must realise this objective.

I distinguish two major categories of focalisation: *neutral focalisation* and *specialised focalisation*. As an immediate consequence of its paradigmatic property, every instance of focalisation performs an act of identification. If the identification is the only purpose of the focalisation, we have neutral focalisation; if further purposes are involved, we are dealing with specialised focalisation. Depending on what these additional ends are, we get different types of specialised focalisation.

In spite of the fact that focalisation is defined as an utterance act, it nevertheless leaves many traces in the linguistic form of the sentence. Most focalisation types are in fact indicated or *marked* by syntactic, lexical and other means. It is above all this marking that makes focalisation an interesting phenomenon for system linguistics, which is my main framework. When focalisation is marked in this way, I talk about *bound focalisation*. Neutral focalisation is always bound. As we might expect, this marking is not decisive. Focalisation is linguistically underdetermined, since the exact extension of focus also depends on the hearer-specific interpretation of the utterance.

For the description of the syntactic constraints on focalisation, I apply the formal term *focus domain*.[4] Focus domains are generated by syntax and the global rule governing the relation between syntax and focalisation can be formulated as follows:

> **RULE 1**
> During the utterance act, a focalisation has to take place within the limits of every focus domain generated by syntax.

Every focus domain – neutral or specialised – is structured. As a default, it is right branching, but in general, particular syntactic rules govern the structuring. Every utterance conveys a neutral utterance focus. When the hearer seeks to establish the extension of a given focus, he performs a *stratification* of the utterance analysing it into *focus* and *base*. The content of the base is conveyed by a presupposition, while that of focus is asserted. Such a distinction is exemplified in (12):

(12)   Peter has been walking in the forest.

The neutral focus domain is:

(12')   (walking (in the forest)),

where the brackets indicate the right branching structure. In the reading where the hearer interprets 'in the forest' as focus, we get the stratification in (12"):

(12")   [Peter has walked somewhere]$_{base}$ ['somewhere' is instantiated by 'in the forest']

In this interpretation, the hearer takes the purpose of the utterance in (12) to be an "answer" to the implicit question "Where has Peter been walking?".

4. Modularity and focalisation

UATF has been applied to a wide range of phenomena, from word order in different languages, at different analytic levels, to uses of focus particles,

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[4] The term *focus domain* (or *scope of focus*) is not new and has been used for different phenomena more or less analogous to what I call *focus domain*. Anglo-Saxon linguists also talk about *scope of focus* for a similar phenomenon.

including punctuation in written texts and prosody in spoken language. This has been possible because the focalisation act interact with a wide range of linguistic phenomena: semantic, syntactic, prosodic and cognitive. A thorough focalisation analysis should therefore be inscribed into a modular framework (Nølke 1994). Here I shall content myself with pointing to some connexions with semantic features.

The shape of the generated paradigm is intimately connected with the semantic features of the focused element. Thus we may state the following (meta)rule:

RULE 2
- The generic semantic features help establishing the paradigm.
- The specific semantic features establish the distinctions inside the paradigm.

The example in (13) gives an illustration of RULE 2:

(13)   C'est la robe que je veux.
         'It is the dress that I want'

In (13), *robe* constitutes the focus. In a simple semantic analysis of this word we may say that the generic semantic feature is /clothing/ and the specific feature is /a particular kind of clothing/. This analysis gives us immediately the most probable interpretation of (13), namely the one in which *robe* is presented as a choice made within a paradigm of clothings. A consequence of RULE 2 is RULE 3:

RULE 3
- Only an element containing one or more specific semantic feature(s) can be focalised.
- The more specific semantic features an element contains, the more it lends itself to focalisation.

Specificity and genericity are not absolute notions. They rely on the semantic interpretation that the interpreter makes of the actual utterances. This interpretation depends of course on the lexical content, but it is also context-sensitive as illustrated by the examples in (14) and (15):

(14)   ☹   Dans la vallée, une rivière coule.
               'In the valley, a river flows'
(15)   ??   C'est tout le monde qui est venu à la fête.
               'It is everybody who has come to the party'

In (14), the verb *coule* ('flows') is focalised because it is the only element in the neutral focus domain. However, flowing is very much the normal thing to do for a river, so there is nothing specific about this focus, and hence the utterance is felt to be a little deviant.[5] (15) is odd for a slightly different reason; namely that there are no alternatives to 'everybody' in a default reading of (15), in which the paradigm simply consists of the relevant persons. Nevertheless, we may (following Grice's maxims) try to "save" the interpretation by constructing a paradigm which does contain alternatives. This may be difficult in this example but probably not impossible. At any rate, these interpretation considerations about more or less deviant examples seem to confirm RULES 2 and 3.

As another consequence of RULE 2, some linguistic items can never be subject to neutral focalisation[6]:

> **RULE 4**
> Linguistic items which cannot be focalised:
> - Any element with a purely grammatical function.
>   (ex: prepositions, conjunctions, auxiliary verbs, …)
> - Any unstressed element.
>   (ex: articles, clitic pronouns, other clitics, …)
> - Any element with shown meaning.
>   (ex: interjections, sentence adverbials, connectors, …)

5. New analysis of the paradigmatic adverbials

The development of the modular framework (Nølke 1994), and in particular the elaboration of UATF, has allowed me to explain several aspects of the

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[5] I mark this deviance with a sad smiley. As pointed out by an anonymous reviewer, (14) is "a candidate for locative or stylistic inversion". But this is exactly because the verb would then no longer be in final position. Stylistic inversion seems to be a means to block the stratification process leading to the bipartition of the utterance in base and focus.

[6] As all other kinds of linguistic items, they may of course be subject to specialised (contrastive or metalinguistic) focalisation (in French systematically assisted by heavy stress), where it is the choice of form rather than of content that is concerned.

analysis of the paradigmatic adverbials in Nølke (1983a) and hence to develop the analysis.

First, it is obvious that focus and nucleus are very similar phenomena, yet they are not exactly the same thing: The nucleus, as defined in Nølke (1983a), is not a focus but a focus domain. This becomes clear at closer scrutiny of an utterance like (16):

(16)   Marie a vendu même sa robe blanche.
         'Marie has sold even her white dress'

According to the analysis of Nølke (1983a), the string *sa robe blanche* is the nucleus of *même*, but (16) lends itself to two different (but of course related) interpretations, one in which *robe blanche* is focus and another one in which only *blanche* is focus. This is exactly what UATF predicts, if one reinterprets as focus domain what I called nucleus. Note that the fact that the possessive *sa* is included in the domain does not alter the analysis, since *sa* belongs to the set of items which "escape" focalisation. (17) yields more evidence for this analysis:

(17)   Marie a même vendu sa robe blanche.
         'Marie has even sold her white dress'

In most cases, (17) is felt as synonymous with (16). Indeed, (17) is open to the same two interpretations as (16), but (17) also allows for a third reading in which it "answers" an implicit question like "What has Marie done?". This is what UATF predicts if the chain *vendu sa robe blanche* constitutes a focus domain. Incidentally, (17) is probably also felt to be more natural than (16), which, in my analysis, is due to the fact that the position between the auxiliary and the participle is the default position for sentence adverbials.

It seems to follow from these considerations that the 1983 analysis still holds if we just replace the notion of nucleus with the one of focus domain. However, do the syntactic rules I proposed for the detection of the nucleus still hold, too? Consider the following set of utterances:

(18)   a. Même [Paul] a mangé des gâteaux.
            'Even Paul has eaten cakes'
         b. [Paul], même, a mangé des gâteaux.
            'Paul, even, has eaten cakes'

    c. Paul a même [mangé des gâteaux].
      'Paul has even eaten cakes'
    d. Paul a mangé même [des gâteaux].
      'Paul has eaten even cakes'
    e. Paul a mangé [des gâteaux]( ) même.
      'Paul has eaten cakes$_{(,)}$ even'

In all the examples the string of words within the square brackets constitute the nucleus according to the nucleus marking rule in Nølke (1983a), but the same chains are also focus domains according to UATF. One can therefore reformulate the 1983 rules in the UATF framework as follows:

    RULE 5
    1. If the ParAdv is integrated prosodically into the utterance, it marks the string immediately following it until the end of the rhythmic group as a focus domain.
    2. If the ParAdv is inserted into the structure receiving parenthetic intonation, it marks the immediately preceding constituent as a focus domain.

2. turns out to be a particular instance of a general rule in UATF according to which any inserted element – with a few well-defined exceptions – marks the preceding constituent as a focus domain. 1., on the other hand, is specific to paradigmatic adverbials. This property distinguishes them from all other sentence adverbials:

(19)   a. Peut-être (que) Paul a mangé des gâteaux.
        'Perhaps (that) Paul has eaten cakes'
      b. Paul, peut-être, a mangé des gâteaux.
        'Paul, perhaps, has eaten cakes'
      c. Paul a peut-être mangé des gâteaux.
        'Paul has perhaps eaten cakes'
      d. ?? Paul a mangé peut-être des gâteaux.
        'Paul has eaten perhaps cakes'
      e. Paul a mangé des gâteaux, peut-être.
        'Paul has eaten cakes, perhaps'

At first glance, the function of *peut-être* in (19) seems very similar to the function of *même* in (18). This resemblance is, however, an optical

illusion. In fact, while *même*, as a ParAdv, is marking the focus domain, *peut-être* simply associates itself with the focus already marked by the syntactic structure. This association follows a very general rule according to which sentence adverbials (and the syntactic negation *not*) associate with the focus yielding a kind of commentary to the choice of focus. They function as *adfocus* (see Nølke 1994; 2006). The difference in function becomes clear when one compares the acceptability of (18d) and (19d). The latter utterance is odd while the former is quite natural. The oddness of (19d) is due to the fact that the position of the adverbial is violating the general syntactic rule stipulating that a sentence adverbial cannot be inserted between the verb and the direct object. For the ParAdv, this rule is overruled by their special syntactic rule RULE 5.1.

Thus, the utterances in (18) yield further evidence for the analysis according to which the nucleus in Nølke (1983a) is a particular instance of a focus domain. Incidentally, this rule also explains why the paradigmatic adverbials have been considered as focus particles by most Anglo-Saxon and German linguists since König (1991).

6. The nature of the paradigm

Recent years have witnessed a growing interest amongst linguists and semioticians in the study of how the notion of paradigm is used in linguistic theory. I shall therefore examine the nature of the paradigm involved in the analysis of paradigmatic adverbials.

The introduction of the notion of paradigm into linguistics is of course due to Ferdinand de Saussure (1916), who distinguished the paradigmatic and syntagmatic axes. For Saussure, every linguistic item is defined solely by its membership of a paradigm. The paradigmaticity is thus a fundamental property of the language system (*langue*), while the syntagmaticity belongs to *parole*. More precisely, the paradigmatic axis is conceived of as a vertical taxonomic axis – it is the axis of lexical choices and of substitution – whereas the syntagmatic axis is the one of speech production and of combining the words into strings.

It is obvious that the paradigm I am talking about is different from Saussure's, since it not only involves lexical units and their position in the lexical structure but also the context in which the utterance is produced. One may say that whereas Saussure talks about **paradigm in *langue***, I am talking about **paradigm in *parole***. The paradigm involved in the interpretation of paradigmatic adverbials is the result of a **paradigmatisation**, which is a constitutive element of the focalisation act. The paradigmatisation generates

a paradigm of virtual or imagined utterances during the interpretation process. The two types of paradigm are however closely related, because, as we saw, paradigmatisation is constrained by linguistic form, insofar as the interpreter creates the paradigm by substituting the focalised expression with other expressions having the same generic semantic feature but other special features.

Paradigms in *parole* also differ from paradigms in *langue* by the fact that they may exhibit a particular internal structure. Thus, at least three different structures can be marked by the linguistic form as illustrated by the utterances in (20)-(22):

(20)   Il **ne** connaît **que** Pierre.
         'He knows only Pierre'
(21)   Il **n**'a **que** trois enfants.
         'He has only three children'
(22)   Le statu quo **n**'est **qu**'acceptable.
         'Status quo is only acceptable'

In (20), the paradigm involved is unordered; in (21), it forms a quantitative scale; in (22), a qualitative scale. These examples show that the internal structure of the paradigm depends on the lexical unit which the ParAdv are combined with. However, it also depends on the ParAdv itself. Thus, *même* does not seem to allow for scalar paradigms, but it is open for another (fourth) structure as in (23):

(23)   Mads parle le français, l'anglais, l'allemand, l'espagnol et **même** le basque.
         'Mads speaks French, English, German, Spanish and even Basque'

In (23), the paradigm is accumulative.
         In the following examples yet another type of paradigm appears:

(6)   (…) mais **surtout** les pays industrialisés ont modifié profondement leur attitude.
         '(…) but especially the industrialised countries have profoundly modified their attitude'
(24)   Et **même**, Pierre n'est pas venu à la fête.
         'And even, Pierre has not come to the party'
(25)   **Seulement**, Pierre est déjà parti.
         'Only, Pierre has already left'

As discussed in section 2 above, the analysis in Nølke (1983a) showed that (6) has an interpretation in which *surtout* functions as a connector and not as a ParAdv. (24) and (25) are similar cases, where adverbs often used as ParAdv function as connectors. Today, I call these words **paradigmatic adverbs** and some of these can, besides their function as ParAdv, also function as connectors. The two syntactic functions are in complementary distribution, insofar as the connector function requires that the adverb is in the leftmost position and separated prosodically from the rest of the utterance. The semantic function of the paradigmatic adverbs is, however, very similar in the two cases, for they also involve paradigmatisation in their connector function, except that the paradigm in this case is not created from the focus but from the entire sentence containing the adverb. The containing sentence is always presented as an argument within a series of implicit or explicit arguments for a certain conclusion. Thus, in (6), the conclusion might be that a particular year was remarkable for several reasons (given by other implicit or preceding arguments), amongst which the fact mentioned is the most important one. In (24), the conclusion might be that something is wrong with Pierre, and the fact that he has not gone to the party is the strongest argument for this conclusion. Finally, in (25), a preliminary conclusion might have been that it is time to start our project now that everybody is present. This preliminary conclusion is then cancelled by (25), because *seulement* belongs to the "negative" paradigmatic adverbs.

Incidentally, these examples also show that the paradigmatic function of the ParAdv stems from the lexical value of the paradigmatic adverbs which, in *parole*, interferes and "collaborates" with the general rules governing the focalisation act.

7. Conclusions and perspectives

In this paper, I have proposed a re-examination of the paradigmatic adverbials, which I introduced as a linguistic category in Nølke (1983a). I have shown that these adverbials are similar to what linguists have later called *focus particles*. In the first section, I briefly recapitulated my original analysis. Then I presented a more developed theoretical framework for the updated analysis. I introduced an Utterance Act Focalisation Theory (UAFT) developed in for instance Nølke (1983a; 1994; 2006). As a central element in a modular approach, UATF allowed me to scrutinise the paradigmatic adverbials and pinpoint their similarities and differences with focus particles. In particular, I have shown the existence of a close

relationship between their syntax and their semantics (and pragmatics). This re-examination led me to take a closer look at the notion 'paradigm' as used in linguistics and I suggested to distinguish between paradigm in *langue*, which is the notion introduced by Saussure, and paradigm in *parole*, which is the type of paradigm that is involved in the interpretation process attached to paradigmatic adverbials.

The functioning of paradigmatic adverbials is very complex as it relies on diverse syntactic, semantic (and pragmatic) phenomena, but the modular framework I applied has allowed me to combine systematically insights gained from these different analytic levels. However, much is still to be done. I have not addressed questions like: Do the paradigmatic adverbials form a syntactic category or should they be coupled with for example focus particles? Which are the pragmatic and discursive consequences of their use? Which is the cognitive correlate to the paradigmatising function they induce? Do other languages have similar adverbials? There is ample material for future research.

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Are there cases in fifteenth-century Dutch? A 'case study' of an Utrecht manuscript (1464)

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Abstract

This article examines the case system in a fifteenth-century Utrecht manuscript. It demonstrates that there is a functional case system in the manuscript. However, it also identifies a relatively small number of mistakes – grammatical errors as well as hypercorrections – in how this case system is used in the manuscript. It argues that these mistakes indicate that the case system had lost its support in the underlying spoken dialect. The mistakes concern both the use of case forms in the nominative and the accusative, and the use of gender markers in the genitive and the dative. By examining the mistakes in the use of cases (accusative and nominative), it is possible to determine the conditions for syncretic *n*-deletion in the underlying spoken dialect; and, by examining the mistakes in the use of gender markers (in the genitive and dative), it is possible to determine an expansion of masculine flexion in the genitive and dative in the underlying spoken dialect.

1. Introduction

One of the most significant changes that has taken place in the history of Dutch (and most of its relatives, such as English and Danish) is the loss of case distinctions. Like all Germanic languages, Dutch began with a system of four relatively distinct cases (nominative, genitive, dative and accusative). The use of these cases was very similar to other Germanic

languages at the time.[1] In the thirteenth century, Dutch still had functional cases (Marynissen 1996:24). However, by the seventeenth century, the nominative and accusative cases were syncretic, the dative was no longer productive and the genitive was only productive in a rather restricted way, as the ending *–s* mainly appeared in connection with proper names and kinship terms (Weijnen 1971:50; Geerts 1966:153). This raises the important question of what happened to the case system between the thirteenth and seventeenth centuries. In this article, I begin to answer this question by examining the case forms in a fifteenth-century Utrecht manuscript.

I shall begin the article with a brief presentation of the Utrecht manuscript (section 2). I will then demonstrate that there is a functional case system in the manuscript (section 3). However, I will proceed to argue that, because of the mistakes in how this case system is used in the manuscript, the case system had lost its support in the underlying spoken dialect. I will identify two types of mistakes found in the manuscript: firstly, mistakes in the use of nominative and accusative masculine singular (section 4); and secondly, gender mistakes in the genitive and dative cases (section 5). The first type of mistake indicates syncretism of the nominative and accusative cases. On the basis of these mistakes, it is possible to establish the conditions for syncretic *n*-deletion and the effect of this conditioning on gender categorisation. The second type of mistake indicates an expansion of masculine flexion in both the genitive and the dative cases. This expansion constitutes a necessary transitional phase in the evolution of these cases from fully functional in the thirteenth century to restrictedly productive (genitive) or practically non-existent (dative) in the seventeenth century.

2. The Utrecht manuscript

The Utrecht manuscript is currently housed in the BibIiotheek Zuid-Kennemerland in the city of Haarlem in The Netherlands (signature II, 17). It contains the following colophon: *Dit boec is geeindet int jaer ons Heren*

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[1] The nominative occurred as subject and predicative complement; the genitive fulfilled a range of functions (it was an indicator for possession and partitive relations, an adjunct of time, an object to certain verbs, and it was used in connection with specific adjectives); the dative functioned as indirect object and was used after several prepositions; and the accusative was used as direct object, after prepositions and as an adverbial adjunct (Van der Horst 2008:145).

MCCCC ende IIII ende tsestich, opten XVI dach in sul. Een Ave Maria om God voer die scryver (fol. 269r), followed by an erased but still readable sentence that can also be found on fol. 179r (in the same handwriting): *Dit boec behoert toe Cayman Janssoen van Zerichzee, wonende mit den carthusers buten Utrecht.* We thus know that the manuscript was completed on 16th February 1464 (cf. Grotefend 1960:100; MNW *selle*) and originally belonged to Cayman Janssoen from Zierikzee, who lived in a Carthusian monastery just outside Utrecht, which we now know to be the Nieuwlicht monastery. In the Nieuwlicht monastery necrology, it is stated that Cayman was a lay porter (Van Hasselt 1886:367). We may therefore assume that he had the text copied in the same monastery by an experienced scribe and used the book for his personal meditation (Robbe 2010:173-174). The manuscript contains three religious texts: the *Spieghel onser Behoudenisse* (the Dutch prose translation of the *Speculum humanae salvationis* (1r-179r)), which, in its handwritten form, survives only in this manuscript, and two Dutch *artes moriendi* (179v-231r and 231v-269r), the second of which contains a (selective) Dutch translation of the anonymous *Speculum artis bene moriendi*, the fifteenth-century standard *ars moriendi*.[2] All the texts are written by the same hand in the Utrecht dialect (Robbe 2014:219-222). Interestingly, the language in the *Spieghel onser Behoudenisse* in the manuscript is identical to the language in the *Spieghel onser Behoudenisse* in the well-known block book of the same name. And, since the block book – whose first edition was printed between 1465 and 1470 – is considered to be the oldest printed book in Dutch, by studying the Utrecht manuscript, we can also gain an insight into the oldest printed Dutch language variety (Robbe 2013:319-320).

3. The case system in the Utrecht manuscript

By examining formal inflexional distinctions in determiners, it is possible to identify four distinct morphosyntactic cases in the Utrecht manuscript (nominative, genitive, dative and accusative) (cf. Comrie 1991:44-7). This can be demonstrated by the inflexion in nominal phrases headed by the masculine noun *man* ('man'), the feminine noun *bloem(e)* ('flower') and the neuter noun *kijnt* ('child') in different syntactic functions:

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[2] For a complete codicological description, see Robbe 2010:162-174.

(1)   *Daer om is dat <u>die man</u> ghescapen is inden acker van Damascho, ende dat wijf is ghemaect inden paradise.*[3] (1v-2r)
    'For this reason, the man is created in the field of Damascus, and the woman is created in paradise.'

(2)   *Dat wijf is ghescapen vander ribben <u>des slapenden mans</u>.* (2r)
    'The woman is created from the rib of the sleeping man.'

(3)   *Si is* (…) *<u>den man</u> ghegeven voer een mede ghesellinne.* (1r)
    'She is given to the man as a companion.'

(4)   *Dat wijf bedroech <u>den man</u>.* (5v)
    'The woman betrayed the man.'

In (1), *die man* is the subject of the sentence and is therefore nominative. In (2), the possessive determiner phrase *des slapenden mans* is genitive. In (3), the indirect object *den man* is dative. In (4), the direct object *den man* is accusative. Since masculine determiners do not have distinct accusative and dative forms in the singular, a feminine or neuter noun (i.c. *bloem(e)* and *kijnt*) is required to see the distinction between accusative and dative:

(5)   *Daer is <u>die bloem</u>* (…) *die niet verdort.* (155v)
    'There is the flower (…) which does not wither.'

(6)   *Die bladeren <u>deser bloemen</u> sijn die woerde* (…) *Cristi.* (14r)
    'This flower's leaves are the words (…) of Christ'

(7)   *In <u>deser bloemen</u> so werden seven goede medicinen ghevonden.* (12v)
    'In this flower, seven good cures are found.'

(8)   *Maria* (…) *heeft voert ghebracht <u>die alre vromentlic bloeme</u>.* (12r)
    'Mary (…) has produced the most beautiful flower.'

In (5), *die bloem* is the subject of the sentence and therefore nominative. In (6), the possessive determiner phrase *deser bloemen* is genitive. In (7), *deser bloemen* is dative, as the preposition *in* governs the dative case. In (8), the direct object *die alre vromentlic bloeme* is accusative. Feminine determiners have no distinct nominative and accusative forms. The same applies to neuter determiners:

(9)   *Dit is <u>tkijnt</u> dat God ons om doot te slaen ghewesen heeft.* (39v)
    'This is the child God said we should kill.'

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[3] The definite article *die* signals both masculine and feminine gender in the nominative singular.

(10) *Naaman is bider Jordanen ghemaect alst vleisch <u>eens jonck kijnts</u>.* (44r)
'The Jordan river made Naaman['s flesh, JR] like the flesh of a young child.'

(11) *Doe die coninghen ghecomen waren, vielen si neder <u>voer den ki-jnde</u>.* (32r)
'When the kings arrived, they lay down before the child.'

(12) *Op dat hi also <u>dat kijnt</u> dat hi ontsach, doden mocht.* (39r)
'So that he could kill the child he feared.'

In (9), *tkijnt* (the proclitic form of *dat kijn*) is the subject of the sentence and therefore nominative. In (10), the possessive determiner phrase *eens jonck kijnts* is genitive. In (11), *den kijnde* is dative, as the preposition *voer* governs the dative case. In (12), the direct object *dat kijnt* is accusative.

Examples (1) to (12) reveal the presence of a functional case system in the Utrecht manuscript. However, I will now continue to identify two types of mistakes in the use of this system in the manuscript. These mistakes indicate that the case system had lost its support in the underlying spoken dialect.

4. Nominative and accusative

In many modern Dutch dialects – including all Dutch dialects in present Belgium – one may assume - *ən* as the basic adnominal suffix form for the masculine singular, cf. *een/ne grōt[ən] aap* 'a big monkey' (Taeldeman 1980:225). The decisive distributional factor for the choice of either *–ə* or *–ən* is formed by the initial segment of the subsequent noun: *–ən* before *t, d, b, h* and *vowel*, and *–ə* elsewhere. Taeldeman (1980:226) provides the following examples: *nən dikkən tak* ('a thick branch'), *nə langən dag* ('a long day'), *nən (h)ogen berg* ('a high mountain'), *nə wildən (h)ond* ('a wild dog'), *nə grotən aap* ('a big monkey'), *nə langə stok* ('a long stick'), *nə vuilə pot* ('a dirty pot'), *nə jongə lijster* ('a young thrush') and *nə frissə wind* ('a fresh breeze'). From a historical perspective, the basic adnominal suffix for the masculine singular represents the accusative, which has been generalised to the nominative. This evolution took place between 1360 and 1570 (Van Loon 1989; MAND 2005:61). In seventeenth-century Holland, one can also assume *–ən* as the basic adnominal suffix form for the masculine singular.[4] Geerts outlines a situation in which the outer boundary line is

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[4] When I refer to *Holland*, I mean the former County of Holland, which roughly consists of the two present-day Dutch provinces of North Holland and South Holland.

formed by the conditioning word-initial segments *(h)*, *d*, *t*, *b*, *r* and *vowel*. As one progresses to the North, first the *r* disappears as a conditioning segment, then *b*, *d* and *t* disappear as conditioning segments, and, in the extreme north of Holland, even word-initial vowels no longer seem to have a conserving effect on the *n* (Geerts 1966:179-180). It is assumed that these geographical differences reflect a chronological evolution whereby *n*-deletion became increasingly unconditioned (Geerts 1966:180). In the Utrecht manuscript, there is a sharp distinction between the nominative and the accusative; however, against the backdrop of this evolution, it is unlikely that this distinction also existed in the underlying spoken dialect. By searching the manuscript for instances of the accusative case being used where correct grammatical usage demands the nominative (simple grammar mistakes) or vice versa (hypercorrections), I hope to situate the underlying dialect in one of the following phases: (1) nominative and accusative are not yet syncretic; (2) nominative and accusative are syncretic without –*ən/-ə* alternation: –*ən* occurs in all positions; (3) nominative and accusative are syncretic with –*ən/-ə* alternation; (4) nominative and accusative are syncretic without –*ən/-ə* alternation: –*ə* occurs in all positions. In phase 1, we expect no mistakes; in phase 2, we expect random mistakes; in phase 3, we expect mistakes before the word-initial segments mentioned above; in phase 4, we also expect random mistakes. However, we can exclude phase 4 on chronological grounds, as it is unrealistic to suppose that the Utrecht fifteenth-century dialect could have evolved so rapidly into a situation that resembled the situation in the extreme north of Holland in the seventeenth century. In geographical terms, the first phase corresponds to the situation in the whole Dutch language area before 1360; the second phase is preserved in present day French Flanders and in the extreme West of Flanders (Taeldeman 1986:227); the third phase is preserved in the dialects of Dutch-speaking Belgium; and the fourth phase corresponds to the modern dialects of Holland and Utrecht, as well as the present standard language.

In the following 18 sentences, the accusative is mistakenly used instead of the nominative:

(13)   *Na dien dat dit beelt* (…) *verdorven ende te niet ghebracht was, is* <u>*desen steen*</u> *tenen groten berch ghewassen.* (41r)
        'When this statue was destroyed and annihilated, this stone grew into a big mountain.'

(14) *Dat derde conenclike teiken was <u>enen gouden cepter</u>.* (77r)
'The third royal emblem was a golden sceptre.'

(15) *In desen bosken van mirren waren alle dinghen te samen gebonden die Cristo (…) ghedaen waren: (…) <u>den doeck</u> daer sijn oghen mede verbonden waren (…), die droom van Pilatus wijf (...), die dorst Cristi (...), dat riet mit der spongien, ysop ende <u>ghemirden wijn</u>.* (111r-112r)
'In this bundle of myrrh, everything was bound together which had been done to Christ: the blindfold by which his eyes were covered, (…) Pilate's wife's dream, (…) the thirst of Christ, the reed with the sponge, hyssop and myrrhed wine.'

(16) *Jonas was inden scepe dat mit den storm wert geworpen, dat <u>den doot</u> dreichde alden ghenen die daer in waren.* (119v)
'Jonas was on the ship which was tossed by the storm, so that death threatened everyone who was on there.'

(17) *Die tranen der sonders die waraftelic berouwen, sijn God ende den heiligen <u>den alren besten wijn</u> ende louterdranck.* (123r)
'The tears of the sinners who genuinely repent are to God and the saints the very best wine and refined drink.'

(18) *<u>Sinen riem</u> was of waren die banden ende repen.* (144v)
'His belt was or were the bonds and ropes.'

(19) *Dit is een ander boec van vijf becoringen die <u>den viant</u> den mensche aen doet in sijn uterste.* (179v)
'This is a second book about five ways in which the devil tempts the human at the end of his life.'

(20) *<u>Onsen Heer</u> God oordeelt enen igheliken niet na sinen voerleden leven, mer na sinen einde.* (185v)
'God Our Lord does not judge anyone according to the life he lived before death but by the way he died.'

(21) *Dat alre sekerste teiken der verdoemenisse is <u>stedighen voertganc tot tijtliken goede</u>.* (202r)
'The most certain sign of damnation is the continuous accumulation of wealth.'

(22) *Dese teghenwoerdighe tribulatie is <u>den wech</u> des levens, die wech der salicheit, die wech der glorien, <u>den wech</u> des stats, die wech der woninghen ende die wech des rikes.* (202v)
'This present tribulation is the way to life, the way to salvation, the way to glory, the way to the city [of Jerusalem, JR], the way to [God's, JR] dwelling and the way to the Kingdom.'

(23)   *Die tribulatie is die scat <u>die den Gods</u> soen in deser werlt heeft*
       vercoren. (203r)
       'Tribulation is the treasure that the Son of God chose in this world.'
(24)   *Hoe seer lijdsam is <u>onsen Heer</u> God in te verdraghen onser*
       misdaden. (210r)
       'How very patient is God Our Lord in tolerating our crimes.'
(25)   *In enen onlijdsamen mensche sijn <u>heren toorn</u> ende verwoetheit*
       ende besitten hem. (211r)
       'In an impatient human there is fierce rage and anger and [they, JR]
       possess him.'
(26)   *In deser becoringhen ende in anderen becoringhen en mach <u>den*
       viant</u> niemant verwinnen also langhe als hi sinen vrien wil wel
       beschicht hevet. (232v)
       'In this temptation and in other temptations, the devil cannot
       triumph over anyone as long as he has control over his free will.'
(27)   *Daer om pijnt <u>den viant</u> mit al sijnre cracht inden utersten den*
       mensche vanden ghelove te brenghen. (232v)
       'Therefore the devil tries with all his force to take away faith from
       the human at the end.'
(28)   *Niet <u>minen wille</u>, mer die uwe gheschie.* (240r)
       'Not my will, but yours be done.'
(29)   *Dit visioen vertelde <u>desen cappellaen</u> veel luden.* (261v)
       'This chaplain told this vision to many people.'
(30)   *Sich an hoe dat die helle een verveerlic afgront is (…) als <u>enen*
       oven</u> daer die vlamme of anxtelike uut slaet. (262r)
       'See how hell is a horrible abyss (…), like an oven that fiercely
       emits a flame.'

The accusatives are 1) subject of the sentence, as in (13), (16), (18), (20),
(24), (25), (26), (27), (28), (29), subject of the relative clause, as in (19);
2) predicative complement, as in (14), (17), (21), predicative complement
in a comparative structure, as in (30); 3) part of an enumeration in the
nominative case, as in (15), or in a predicative complement function, as
in (22), in which they appear to alternate with nominatives for stylistic
reasons; whereas the accusative and nominative are inverted in *die den
Gods soen* (23) – the relative pronoun *die* being the object in the relative
clause and *den Gods soen* being the subject. However, in the following
three sentences, the nominative is hyper-correctly used instead of the
accusative:

(31) *Die dochter des conincs Astragis beteikende Mariam, die der werlt voert ghebrocht heeft <u>die goedertieren ende gherechten wijngaert</u>.* (10r)
'The king's daughter Astragis prefigured Mary, who produced for the world the merciful and just vineyard.'

(32) *Salicheit der zielen is biecht, want si reinicht <u>die sondaer</u> ende maect hem rechtveerdich.* (186r)
'Confession is sanctity of the soul, because it cleanses the sinner and makes him righteous.'

(33) *Wanneer dat toorn den sin beroert, so verstoertse die woeninghe des heilighen gheestes ende verdrijft <u>die vader</u> ende <u>die soen</u>.* (195r)
'When anger touches the mind, it destroys the dwelling of the Holy Spirit and chases away the Father and the Son.'

In (31), the article *die* in *die goedertieren ende gherechten wijngaert* displays the nominative form, whilst the adjective *gherechten* displays the accusative ending *–en*. The adjective *goedertieren* in this phrase can be both nominative and accusative, because it can remain uninflected (Robbe 2014:227-228). In (32), *die sondaer* is the direct object and should have been accusative. In (33), both *die vader* and *die soen* are direct object and should therefore have been accusative.

The examples presented above (plus a further example I discuss below) represent an exhaustive list of all the accusative and nominative mistakes in the Utrecht manuscript. These mistakes occur too frequently to categorise them as mere oversight (on average, there is a mistake every twelve pages) and they are only possible in a syncretic situation. Moreover, they are not random: they generally occur before the word-initial segments that condition the use of *-n* in the adnominal suffix for the masculine singular in modern Dutch dialects: *h* (20, 24), *d* (15, 16), *t* (25), *b* (17), *r* (18) and *vowel* (17, 30), but also – and even more frequently – before *s* (13, 32, 33), *v* (19, 21, 26, 27, 33), *w* (15,17, 22, 28) and *g* (14, 23, 31). We may therefore assume that *n*-deletion in the underlying spoken language was conditioned and, as such, situate this dialect in phase 3. In light of this, the following question arises: How do these additional segments relate to the conditioning segments in the modern dialects? The conditions for *n*-deletion in the modern dialects have long been the subject of debate among phonologists, because *(h)*, *d*, *t*, *b*, *r* and *vowel* do not constitute a 'natural class' in terms of distinctive features

(Taeldeman 1986; De Vriendt 2001; MAND 2005:62). However, De Wulf and Taeldeman (2001; quoted in MAND 2005:62) have shown that, by setting aside *vowel* and *h*, the combined use of a positive and negative feature specification does in fact show naturalness, as *n* has the features [+anterior] and [-continuant] in common with *d*, *t*, *b* and does not differ in either of the features [coronal] and [voice]. Also, from an assimilation point of view, we could argue that conservation or insertion of *n* is natural before *vowel* or *h* (especially in *h*-less dialects) in order to avoid hiatus, and that *n* – itself a dental consonant – is conserved before other dental consonants, including *r*. Before *b*, *n* can be assimilated to *m*, which can then be deleted by nasalisation of the preceding vowel. Both stages exist in Dutch dialects (MAND 2005:62). The conditioning segments in the Utrecht manuscript seem to fit and support this point of view: *s* and *v* are dental consonants; the bilabial semi-vowel *w* is related to both vowels and bilabial *b*; and *g* can be linked to *h*, as laryngealisation may have pushed *g* in the direction of *h*.[5] The non-native word *cappellaen* in (29) raises the question of the historic pronunciation: it may have been pronounced as in contemporaneous French with initial [ʃ] or as in modern Dutch with initial [k]; however, considering the conditioning of the *n*-deletion discussed above, the dental French pronunciation is more likely. We can thus distinguish between the following groups: a *vowel*-group; a dental group (larger than the dental group in modern dialects) that contains *d*, *t*, *r*, *v*, *s* and *ʃ*; a bilabial group that contains *b* and *w*; and a laryngeal group that contains *h* and *g*.

Syncretism and conditional *n*-deletion in the underlying spoken dialect can also account for the mistake in the following apposition:

(34)   *Die coninginne Thamari prefigureerde oec Mariam, die den alren wreetsten Cyrum, die manslachtighen, onthoefde.* (113r)
       'Queen Tomyris also prefigured Mary, who decapitated the very cruel Cyrus, the murderer.'

In this sentence, *die manslachtighen* is an apposition to *Cyrum*, the object of the relative sentence, and should therefore be accusative. In effect, only the nominalised adjective is accusative, whereas the article shows the nominative case. This is likely to correspond to the (syncretised) spoken

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[5]   As such, *g* as a fifteenth-century conditioning segment can shed light on the chronology of the laryngealisation process in the northern Dutch dialects.

language, as *n*-deletion must have taken place before *m*. In modern Dutch dialects in Belgium, nominalised adjectives with masculine referents in the singular also always take *–n*, whereas adnominal *n*-deletion, as mentioned above, occurs before certain word-initial segments. In the West-Flemish phrase *den diksten en de magersten* ('the fattest and the thinnest', referring to men in the singular), we can witness exactly the same phenomenon: the nominalised adjectives take *–n*, whilst the *n* is conserved in the article before *d* and deleted before *m*.

As has now become evident, the above-mentioned mistakes strongly indicate that syncretism of nominative and accusative has taken place and that the *n*-deletion is conditioned in a similar way to modern Dutch dialects in Belgium and in the seventeenth-century dialect in Holland. Given that the manuscript dates from 1464 and that the process of syncretism occurred between 1350 and 1670, this is in line with our expectations. Moreover, both the syncretism of nominative and accusative and the conditioning of *n*-deletion must have affected gender categorisation. We may assume that, similar to the seventeenth-century Holland dialect, the fifteenth-century Utrecht dialect has three categories of nouns: (1) a *de*-group, (2) a (h)et-group and (3) a *den*-group;[6] the first containing historical feminine nouns and historical masculine nouns with different word-initial segments than nouns in the *den*-group, the second containing historical neuter nouns, and the third containing masculine nouns with *d*, *t*, *r*, *v*, *s*, *f*, *b*, *w*, *h*, *g* and *vowel* as word-initial segments. However, because of this large class of conditioning segments, gender must have been more stable in the fifteenth-century Utrecht dialect than in the seventeenth-century Holland dialect. First of all, there were more words in the *den*-group, but we also have to take into consideration that historically masculine words in the *de*-group did not suddenly lose all adnominal *n*-support. For example, in modern West-Flemish, generally only *t*, *d*, *b*, *(h)* and *vowel* are *n*-conserving word-initial segments, but, in a phrase like *den oudste win e(s) nie(t) altit den besten* ('the oldest wine is not always the best'), the historically masculine *de*-noun *win* ('wine') is surrounded by no fewer than three adnominal *n*-suffixes. In the fifteenth-century Utrecht dialect, this kind of *n*-support, considering the amount of *n*-conserving segments,

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[6] In the Utrecht manuscript, *de* appears as *<die>*, except after the relative pronoun *die*, cf. *<die de>* (90r, 173v, 191r, 216r, 220v, 231r); *(h)et* appears both as *<het>* (9v, 57v, 93r [2x], 94r [2x], 179v, 184r, 187r, 193v, 194r, 197r, 199v, 214r, 225v, 232r, 232v, 233r, 233v, 236r, 247r, 247v, 260r, 262r, 263r [3x], 368v [2x]) and as *<dat>* (which is the normal form).

must have been even stronger, and it therefore seems unlikely that many shifts from masculine to feminine gender could have taken place. Only words like *pot* ('pot') and *kerker* ('dungeon') could theoretically undergo a gender shift from masculine to feminine, as they do not begin with any *n*-conserving segments and do not refer to people or animals of the masculine sex; however, they could still enjoy strong adnominal gender support. In the Utrecht manuscript, there is only a single attestation for *pot* (with a masculine gender marker): *bri cleeft anden pot* ('porridge sticks to the pot'); whereas *kerker* has eight attestations with nine gender markers, seven of which display masculine gender: *tot den ewighen kerker* (7v), *vanden kerker* (28r, 51r), *inden kerker* (50v), *totten kerker* (50v, 261v), and two of which display feminine gender: *in die kerker* (7v) and *inder kerker* (27v).[7]

Having established nominative-accusative syncretism and conditional *n*-deletion of the adnominal suffix for the masculine singular in the Utrecht fifteenth-century dialect, we can conclude that, although there is a sharp distinction between the two cases in the manuscript, the difference between the nominative *die* and the accusative *den* is not informed by the underlying dialect, whereas gender stability in the manuscript is still largely supported by the underlying dialect.

5. Genitive and dative

In the seventeenth century, *der* and *des* – the historical G.sg.f./G.pl./D.sg.f. and G.sg.m/n. forms of the definite article respectively – no longer exist in Holland dialects except in fixed expressions, and the *-s* attached to the noun no longer acts as a gender marker but as a formal case marker on proper names and kinship terms, in which case it is expanded to feminine nouns (Geerts 1966:179). As such, there is no difference between seventeenth-century Dutch in Holland and the modern Dutch standard language (Geerts 1966:180).[8] At first glance, the situation in the seventeenth century (and in modern Dutch) seems very different from the situation in the Utrecht manuscript. But it is not as different as one might think. In the manuscript, there is also clear evidence that *-s* has become a formal case marker and no longer acts as a gender marker. This can be illustrated with the example of the noun *moeder* ('mother'):

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[7]   We may also assume that the feminisation of *kerker* was helped by the confusion with *kerke* (cf. MNW *kerker* and *kerke*).

[8]   Another use of the genitive, which survives in modern Dutch, is the partitive genitive of substantivated adjectives after pronouns: *wat beters* ('something better'), *iets lekkers* ('something tasty') (Weijnen 1971:42).

(35) *Laet ons horen die droefheit sijns alre soetsten moeders.* (95r)
'Let us hear his very sweet mother's sorrow'.

(36) *Dat speer (…) doer ghinc dat herte des levende moeders.* (110r)
'The spear (…) went through the living mother's heart.'

(37) *Die punten der doornen (…) wonden dat hert sijns moeders.* (110r)
'The points of the thorns wounded his mother's heart.

(38) *Aensiet dat liden Cristi ende die ellende sijns moeders.* (133v)
'Look at the Passion of Christ and his mother's suffering.'

(39) *Salomon, die coninc, settede die troon sijns moeders ter rechterhant.* (135v)
'King Solomon put his mother's throne at his right side.'

(40) *Die bose en gehengeden niet dattu na gewoenliker manieren eens moeders sijn oghen sluten mochts.* (169v)
'The evil [Jews, JR] did not allow you to shut his eyes in a mother's traditional way.'

(41) *Doe dat onsprekende kijnt Johannes in den buuc sijns moeders hem verblide.* (173v)
'When the infant John rejoiced in his mother's womb.'

Since it refers to a woman, the noun *moeder* is unambiguously feminine, but, in (35) to (41), *moeder* is treated as a masculine noun. The ending -*s* is attached to the noun and, moreover, the pronoun *sijns* (35, 37, 38, 39, 41), the definite article *des* (36) and the indefinite article *eens* (40) are genitive. This indicates an expansion of the masculine singular -*s* in the genitive, regardless of the gender.

A similar trend can be seen in the dative. Just as the masculine singular ending -*s* expands to feminine nouns in the genitive, the masculine singular ending -*n* expands to feminine nouns in the dative. A good example is *bloem*(*e*) – an unambiguously feminine noun (cf. MNW: *bloeme*). There are three attestations of *bloem*(*e*) in an accusative singular context with four gender-marked determiners or adjectives, none of which displays the masculine ending -*n*, which is to be expected (see table 1 at the end of this article). There are also four attestations in a dative singular context, where *bloem*(*e*) is preceded by a preposition (*in* and *van*) and a pronominal determiner (*dese*): *in deser bloemen* (12v), *van deser bloemen* (12v, 13r) and *van desen bloemen* (13r).[9] In the last prepositional phrase, the determiner reveals the expansion of masculine flexion.

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[9] There is no doubt about the singular, since the text refers to *die alre vromentlic bloeme Cristum* ('the most beautiful flower Christ').

In addition to *bloem*(*e*), the nouns *min*(*ne*) 'love', *rust*(*e*) 'rest' and *wrake/wraeck* 'revenge', which are all Germanic (*j*)ō-stems and unambiguously feminine (cf. MNW: *minne*, *ruste*, *wrake*), also provide valid examples of the expansion of masculine flexion in the dative and genitive singular.[10]

There are 21 attestations of *min*(*ne*) in the accusative singular context with 22 gender-marked determiners or adjectives, none of which displays the masculine ending -*n* (see table 2). There are 22 attestations of *min*(*ne*) in a dative singular context with 27 gender-marked determiners or adjectives, all of which display the feminine ending -*r*. Finally, there are 29 attestations of *min*(*ne*) in a genitive singular context with 37 gender-marked determiners or adjectives. Of these, 35 display the feminine ending. In the genitive possessive phrase [*die edelste soen*] *des vaderliken minne* ('[the noblest son] of fatherly love') (254r), the article displays -*s* and the adjective takes the weak ending -(*e*)*n*, which is the usual adjective ending in a masculine genitive singular context (Robbe 2014:231-233).

There are three attestations of *rust*(*e*) in an accusative singular context with four gender-marked determiners or adjectives, none of which displays the masculine ending (see table 3). There are no attestations in a dative singular context, but there is an attestation of *rust*(*e*) in a genitive singular context: [*inder stat*] *des rustes* (255r) ('[in the place] of rest'). Again, an unambiguously feminine noun is inflected as a masculine noun.

There are three attestations of *wrake/wraeck* in an accusative singular context with four gender-marked determiners or adjectives, none of which displays the masculine ending (see table 4). There are three attestations of *wrake/wraeck* in a dative singular context: *vander wraken* (139v, 149r) and *vanden wraken* (9r). In the first two instances, the article displays the feminine form and, in the third instance, it displays the masculine form. Just like *min*(*ne*) in the genitive singular, *wrake* is treated is a masculine noun in the dative singular. Unfortunately, there are no attestations in a genitive singular context.

The noun *son*(*ne*) ('sun') is an interesting example. Although this noun is labelled as both feminine and masculine in the MNW, the only basis for its masculine attribution is the one attestation in the Utrecht manuscript

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[10] I have chosen to disregard Germanic *i*-stems such as *werlt* ('world') and *cracht* ('craft', 'power'), because these nouns are listed in the MNW as both masculine and feminine (even though there are few attestations for the masculine gender) (cf. MNW: *werelt* and *cracht*). However, it is not unlikely that the expansion process of –*s* in the genitive may have originated from *i*-stems, since they could take –*s* in the genitive singular in Old Saxon (Van Helten 1887:§276).

in a genitive singular context. There are two attestations of *son*(*ne*) in the manuscript in an accusative singular context with three gender-marked determiners or adjectives, none of which displays the masculine ending (see table 5). There are six attestations of *son*(*ne*) in a dative singular context with eight gender-marked determiners or adjectives, six of which display the feminine ending. In the phrase *den waraftighen sonne* (16v) ('to the real sun'), the article and the adjective display masculine flexion. Finally, there are 14 attestations of *son*(*ne*) in a genitive singular context. 13 display the feminine form of the article. In the phrase *hetten des sonnes* (3v) ('the sun's heat), *sonne* displays masculine flexion. However, since we now know that the flexion of *sonne* is no different from *bloem*(*e*), *min*(*ne*), *rust*(*e*) and *wrake/wraeck*, and, as such, its attestation in the Utrecht manuscript provides no counterevidence for its feminine gender, it is perhaps time to reconsider its 'masculine' label in the MNW. Moreover, since there is no reason to assume this is an isolated instance, it could prove worthwhile to undertake a systematic review of the MNW to eliminate gender determination on the basis of fifteenth-century attestations of nouns with generalised masculine flexion in the genitive and the dative respectively.

The expansion of masculine flexion also applies to derived nouns with a suffix which imposes the feminine gender class, such as *heit* derivatives (Van Loey 1976:18) (see table 6). In the Utrecht manuscript, there are 90 *heit* derivatives in an accusative singular context with 112 gender-marked determiners or adjectives, none of which displays the masculine ending. There are 126 *heit* derivatives in a dative singular context with 133 gender-marked determiners or adjectives. 129 determiners or adjectives display the feminine ending and four display the masculine ending. Two of these occur in combination with determiners with feminine flexion in the same prepositional phrase. In one instance, the article displays the feminine ending and the adjective displays the masculine ending: *mits der smaliken sericheit* (80r) ('by humiliating pain'); in another instance, the possessive pronoun displays the feminine ending and the adjective displays the masculine ending: *tot sijnre meerren smaetheit* (81r) ('in order to increase his humiliation'). However, in both these instances, the ending *-en* could also be interpreted as a weak adjective ending.[11] In contrast, in the phrase

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[11] An argument in favour of this interpretation is the fact that weak declension is the historical declension for comparative adjectives, such as *meerre* (Paul 2007:204). It is also worth mentioning that we could consider *smaliken* as a non-inflected adjective with a historical modal dative plural ending (Paul 2007:206).

voerden dancbaerheit (17v) ('for the gratitude'), the article unambiguously displays the masculine singular form.

Furthermore, *heit* derivatives also demonstrate the expansion of masculine flexion in the genitive singular. There are 62 *heit* derivatives in the Utrecht manuscript in a genitive singular context with 66 gender-marked determiners or adjectives, 63 of which display the feminine ending and three of which display the masculine ending. In two instances, the masculine flexion seems to be triggered by the flexion of the preceding noun: *mit der gaven des medelidens ende des goetheit* (13r) ('with the gift of compassion and goodness') and *tot behoef des rijcs ende des mogentheits* (67v) ('for the benefit of the kingdom and the power'). However, this cannot account for the form *des* in *die bloem des joncheit* (155v) ('the flower of youth'), which constitutes a clear case of the expansion of the masculine singular ending *-s* in an independent syntactic context.

Finally, the following sentences demonstrate very clearly that the dative ending *-n* has lost its function as a masculine gender marker:

(42)   *Mer dit is die bedudinghe <u>naden godliker figueren</u>* (28r)
          'But this is the meaning according to the divine prefiguration.'
(43)   *Die soon Gods nedergheclommen vanden hemel in deser werlt op*
          dat hi hiliken soude <u>anden menscheliker natueren</u>. (108r)
          'The son of God has descended from the sky in order to be united
          with human nature.'

In (42) and (43), the article *den* acts as an enclitic attachment to the preposition – an invariable particle signalling the dative case –, whereas the adjective is inflected in agreement with the noun's feminine gender. It is clear that this could not occur if *-n* still acted as a gender marker. This levelling of gender in the dative, whereby different gender-markers occur in the same phrase, also has its parallel in the genitive. In the possessive determiner phrase [*mit der cronen*] *der ewigher sijns rijcs* (178v) ('[with the crown] of his eternal kingdom'), both the ending *-r* and *-s* are used alongside each other, similar to the combined use of different gender markers in (42) and (43).

6. Conclusion
In this article, I have attempted to begin to answer the question of what happened to the case system in Dutch between the thirteenth and seventeenth centuries by examining nominal flexion in a fifteenth-century

Utrecht manuscript. Although the manuscript reveals the presence of a functional case system, a number of mistakes – grammatical errors as well as hypercorrections – show that this case system is no longer supported by the underlying spoken dialect. The mistakes in the manuscript concern both the use of cases (accusative and nominative) and the use of gender (in the genitive and dative case).

The mistakes concerning the use of the accusative instead of the nominative and vice versa not only reveal syncretism between these cases, but also make it possible to gain a better understanding of the conditioning of the *n*-deletion in this syncretic phase and the effect of this conditioning on gender categorisation. With *d*, *t*, *r*, *v*, *s*, *f*, *b*, *w*, *h*, *g* and *vowel* as *n*-conserving word-initial segments, the underlying dialect must have had a larger group of *den*-words and thus more gender stability than any modern Dutch dialect.

Although gender was relatively stable, genitive and dative endings had lost their function as gender markers and masculine flexion had become the default in both cases. This situation constitutes an important link between the thirteenth and the seventeenth centuries. In the thirteenth century, genitive and dative endings were gender markers as well as case markers. In the seventeenth century, the genitive *des*, with exception of fossilised expressions, had ceased to exist in the spoken language, whereas the genitive ending -*s* mainly appeared in connection with proper names and kinship names. The dative case, with the exception of fossilised expressions, had also ceased to exist.

Finally, the expansion of masculine flexion in the genitive and dative has consequences for the determination of nominal gender, which the genitive and the dative do not reveal. In order to determine the gender of a fifteenth-century noun, we can only look at the nominative and accusative.

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Tables

Table 1: *bloem(e)*

	Gender-marked determiners or adjectives	
	F	**M**
A	*die bloeme* (12r), *een begheerlike bloem* (14v), *dese bloem* (15r)	
D	*in deser bloemen* (12v), *van deser bloemen* (12v, 13r)	*van desen bloemen* (13r)
G		

Table 2: *min*(*ne*)

	Gender-marked determiners or adjectives	
	F	**M**
A	*grote minne* (7v, 57r), *gheen min* (32v), *die minne* (36r, 245v, 245v, 247r, 243v), *onbegripelike minne* (159r) *meerre minne* (7v, 159r, 159v, 161v, 162r, 224r, 267v), *gheen volcomen minne* (235r), *dese minne* (86v [2x], 98v), *gheen ghewaer minne* (235r)	
D	*mit der minnen* (15v), *uut puerre minnen* (33v), *om der minnen* (56v), *van godliker minnen* (60r), *in mijnre minnen* (125r), *van onderlingher minnen* (155r), *bi deser wonderliker minnen* (159v), *mit sulker groter minnen* (177r), *ter minnen* (190r, 198r), *vander minnen* (198r, 198v), *inder godliker minnen* (287v), *mit haerre minnen* (230v), *overmits dijnre minnen* (252v), *mit volcomender minnen* (254v), *overmits dier onsprekeliker minnen* (255r), *inder selver minnen* (255r), *overmits der minnen* (255v), *mit sienliker minnen* (259v), *overmits deser minnen* (261r), *overmits sijnre minnen* (261r)	
G	*dijnre min* (160v), *der beruster minne* (254r), *der minnen boec* (10v, 97r, 132r), *der alre volmaecster minnen* (15v), *der minnen* (33v, 65r, 128v, 132r, 132v, 187v, 217r, 221v, 230r, 237v, 243v, 254v), *onghemetenre minnen* (86r), *der godliker minnen* (86r), *sijnre ewiger minnen* (134v), *dijnre minnen* (177v), *sijnre minnen* (180v), *sijnre minnen* (192r), *der godliker minnen* (200r, 218v), *sijnre minnen* (209), *der onsprekeliker minnen* (261r)	*des vaderliken minne* (254r)

Table 3: *rust(e)*

	Gender-marked determiners or adjectives	
	F	**M**
A	*die ewige ruste* (257r), *die ruste* (258r), *gheen ruste* (218r)	
D		
G		*des rustes* (255r)

Table 4: *wrake/wraeck*

	Gender-marked determiners or adjectives	
	F	**M**
A	*danighe wraeck* (72r), *ghelike wrake* (207r), *die ewighe wrake* (236v)	
D	*vander wraken* (139v, 149r)	*vanden wraken* (9r)
G		

Table 5: *son(ne)*

	Gender-marked determiners or adjectives	
	F	**M**
A	*die sonne* (101r), *een claer sonne* (14v)	
D	*der sonnen* (16v), *bider sonnen* (16r, 30r, 174v), *mit der claerre sonnen* (135r)	*den waraftighen sonne* (16v)
G	*der sonnen* (16r, 16v [8x], 57v, 58v, 112r, 184v)	*des sonnes* (3v)

Table 6: *heit* derivatives

Gender-marked determiners or adjectives	
F	**M**
A	*gheen heerlicheit* (2r), *lange ghesontheit* (5r), *die ewighe siecheit* (5r), *gheen onderscheidenheit* (13v), *enighe bequaemheit* (13v), *die soetheit* (14v), *alle wellustende begeerlicheit* (14r), *die godheit* (15v, 86r, 104v), *die salicheit* (18v, 82r, 85v), *groot onderscheit* (20v), *sijn groenheit* (25r), *dijn waerheit* (27r), *die groenheit* (29v [2x]), *die suetheit* (29v [2x]), *die mogentheit* (31r), *die reinheit* (32v), *die maechdelike reinicheit* (32v), *gheen oncuischeit* (35r), *die bermherticheit* (41v), *die gulsicheit* (47v), *die ontfermherticheit* (50r), *die hoecheit* (50v), *die menichfoudicheit* (50v), *sijn goedertierenheit* (51r), *alle overvloedicheit* (56r), *die waerheit* (57v, 68r, 74r), *alle begheerlicheit* (58r), *rechte vasticheit* (59v), *grote boesheit* (65v), *alle smaetheit* (70r), *sulke lijdsamheit* (78v), *die goetheit* (83v), *die soeticheit* (83v [2x]), *dese wreetheit* (84r), *alle mogentheit* (87v, 100v), *die droefheit* (95r, 99v), *dese droefheit* (95r), *grote bitterheit* (98r), *die alre meeste droefheit* (101v), *die grootheit* (103r), *die overste hoecheit* (124r), *die scoenheit* (124v), *die godlike claerheit* (124v), *alle droefheit* (126r), *alle waerheit* (126r), *die alre meeste overvloedicheit* (128r), *die soete teghenwoerdicheit* (129r), *die teghenwoerdicheit* (130r, 133r), *grote vuericheit* (132r), *die ontegenwoerdicheit* (132r, 133r), *die ewige vesticheit* (135r), *die oncuuscheit* (136r), *die giericheit* (136v), *sijn trouweheit* (143v), *sijn vergetelheit* (147v), *die mogentheit* (155r), *die goetheit* (155r), *wellustende vrolicheit* (156v), *die ewighe ewicheit* (157v), *die hemelsche hoecheit* (159r), *alle smaetheit* (161r), *warachtige lijdsaemheit* (162r), *dijn alre onghemetenste ontfermherticheit* (163v), *alle smaetheit* (164v), *die eerste droefheit* (165v), *die ander droefheit* (166v), *grote droefheit* (166v), *die derde droefheit* (167v), *die vierde droefheit* (168v), *dese droefheit* (169r), *die vijfte droefheit* (169r), *die seste droefheit* (170r), *grote sericheit* (170r), *die sevende droefheit* (171r), *sijn teghenwoerdicheit* (171r), *alre suetste tegenwoerdicheit* (171r), *die wonderlicheit* (174v)*	

| D | *overmits der bermherticheit* (1r), *ter rechtvaerdicheit* (10r), *mits haere vastheit* (11r), *vander hoecheit* (1r), *mit groter neersticheit* (6v), *bi sijnre barmherticheit* (7v), *inder ewicheit* (15r), *mit der suverheit* (15v), *voer onser salicheit* (17r), *inder ewicheit* (19v,), *van onbehoerliker oncuischeit* (19v), *van hare salicheit* (20v), *inder ewicheit* (21r), *om der reinicheit* (21r), *inder ewicheit* (21v [2x], 26v, 102r), *van haere kijntscheit* (24r), *der mogentheit* (30r), *om sijnre edelheit* (33v), *tot der hoecheit* (34r), *in haere hoecheit* (37r), *inder outheit* (41r), *mits sijnre onmetelheit* (41r), *mits sijnre bermherticheit* (47r), *vander gulsicheit* (47r), *mits der gulsicheit* (47r), *bider gulsicheit* (47v), *van sijnre stercheit* (48r), *vander ontfermherticheit* (50r [2x]), *mits sijnre bermherticheit* (51r), *ter quaetheit* (51v), *tot dijnre tegenwoerdicheit* (53r), *vander onsalicheit* (53v), *van deser sueticheit* (58v [2x]), *mit alre sachtmoedicheit* (62r), *inder quaetheit* (66v), *mit alre sachtmoedicheit* (69v), *mit veelre smalicheit* (69v), *omder waerheit* (74v), *in sijnre smaetheit* (78v), *mit groter lijdsamheit* (78v), *mits der (…) sericheit* (80r), *tot sijnre (…) smaetheit* (81r), *van groter soeticheit* (85r), *om sijnre eerbaerheit* (85v), *inder godheit* (90v, 93r), *na onser salicheit* (92r), *uut der grootheit* (92v), *inder menscheit* (93r), *in sijnre teghenwoerdicheit* (93v), *inder ewicheit* (95r, 96r, 117v), *der ewicheit* (110r), *mit groter droefheit* (95r), *in sijnre droefheit* (96r), *van haerre droefheit* (97r), *mit der godheit* (102v), *tot dijnre tegenwoerdicheit* (106r), *bi eenre ghelijcheit* (106r), *om sijnre snootheit* (107v), *om sijnre heilicheit* (107v), *om sijnre smaetheit* (107v), *mit der godheit* (113v), *mit sijnre teghenwoerdicheit* (114v), *mit mijnre menschelicheit* (125v), *mit mijnre godheit* (125v), *om groter verscrictheit* (126v), *inder waerheit* (128r), *inder overvloedicheit* (128r), *omder sueticheit* (128v), *tot gheenre vuulheit* (134r), *mit der godheit* (135r), *bider idelheit* (136r), *bi sijnre dwaesheit* (137v), *bi hare wijsheit* (139r), *vander onweerdicheit* (139v), *voer onser salicheit* (143r), *inder ewicheit* (143r), *mit sijnre rechtvaerdicheit* (146v), *mit hare ontfermherticheit* (146v), *nader grootheit* (147v), *inder teghenwoerdicheit* (148v), *groter lelicheit* (151r), *inder ewicheit* (155v), *in groter rijcheit* (167v), *tot dier ewigher vrolicheit* (158r), *mit dicker ende devoter dancbaerheit* (158v),* | *mits (…) smaliken sericheit* (80r)*, tot* (…) *meerren smaetheit* (81r)*, voerden dancbaerheit* (17v) |

D	*bi deser overovervloedigher oetmoedicheit* (159r), *tot dijnre tegenwoerdicheit* (159v), *mit alre sachtmoedicheit* (160r), *bider smaetheit* (161r), *mit groter lijdsamheit* (162r), *om deser smaetheit* (162r), *om der meester versmaetheit* (163v), *tot dijnre versmaetheit* (163v), *vander droefheit* (164v), *mit der alre grootster droefheit* (165r), *mit der alre groetster sericheit* (165r), *mit groter sericheit* (166r), *in groter droefheit* (166r), *om deser droefheit* (166v), *mit groter nidicheit* (167r), *bi deser droefheit* (167r, 168r, 171v), *bi dijnre verghetelheit* (167v), *tot der hoecheit* (168r), *mit groter droefheit* (168r, 170r), *bi deser droefheit* (169v, 170v), *na deser onsalicheit* (170r), *van maechdeliker reinicheit* (171r), *mit groter droefheit* (171v), *van deser droefheit* (171v), *mit vrolicheit* (173v), *tot sijnre teghenwoerdicheit* (176r), *inder ewicheit* (176r)	
G	*der onsalicheit* (4v), *der ontfermherticheit* (8r), *der salicheit* (8r), *der heiligher drievoudicheit* (11r), *der salicheit* (11v), *der traecheit* (13v), *der stercheit* (13v), *der ghiericheit* (14r), *der gulsicheit* (14r), *der oncuischeit* (14v), *dijnre sueticheit* (15r), *der alre reinste suverheit* (15v), *haere reinicheit* (20r), *onser menschelicheit* (26r), *der ewigher vrolicheit* (26r), *dijnre mogentheit* (27r), *der heiligher drievoldicheit* (28r), *der maechdeliker suverheit* (32v), *der bermherticheit* (36r [2x]), *der goedertierenheit* (36v), *der ontfermherticheit* (36v), *sijnre outheit* (41v), *der gulsicheit* (47v, 48r), *der giericheit* (49r), *der salicheit* (49v), *sijnre bermherticheit* (53r), *der ontfermherticheit* (55r), *danigher voersichticheit* (66r), *der boesheit* (86r, 100r), *der waerheit* (94v), *onser salicheit* (98r), *groter wreetheit* (99r), *der sinlicheit* (103r), *der godheit* (104r), *der vrolicheit* (110v), *der menschelicheit* (115v), *der godheit* (115v), *onser salicheit* (122v), *der waerheit* (123v), *der ewicheit* (124v), *sijnre teghenwoerdicheit* (130r, 170r), *der menschelicheit* (131r), *der giericheit* (136r), *der vuulheit* (138r), *der nidicheit* (140v), *der ontfermherticheit* (148v, 149r), *dijnre goetheit* (158r), *der alre volmaecster oetmoedicheit* (159r), *der groenheit* (174r), *der enicheit* (178r), *onser duusterheiden* (37r), *der dancberheiden* (75v), *der ontfermherticheiden* (86v, 251v)	*des goetheit* (13r), *des mogentheits* (67v), *des joncheit* (155v)

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The borderline between irony and sarcasm

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Abstract

It is the claim in this article that the definition of both irony and sarcasm involves a violation of one or more Gricean maxims, an allusion to a currently highly accessible thought, dissociation, irresponsibility, ridicule, and critique. The difference between irony and sarcasm is that the the speaker who is being ironic addresses the utterance to a hearer whose thought is being alluded to or echoed, in order to inform him or her that the thought is untenable. Sarcasm is not uttered for information to the author of an untenable thought, but as scorn of the principal of the sarcasm to the bystanders. However, in the analysis of some (almost) authentic examples, it will be shown that real examples are much more complicated and can only be analysed with a sophisticated framework that includes the theory of presupposition failure.

1. An example

At the Danish general election on June 18, 2015, the centre-left Social-democrats won 47 seats, and among the right-wing parties, the Danish People's party (*Dansk Folkeparti*, DF, led by Kristian Thulesen Dahl) won 37 seats , *Venstre* (V) 34, *Liberal Alliance* (LA) 13, and the Conservatives (K) 6. The next day, 90 members (out of 179 total) pointed at the leader of *Venstre* as a "royal investigator", whose job it is to investigate the possibilities of forming a government. In this situation Jens Rohde, a politician from V (who left the party 6 months later), wrote the following on Facebook:

(1)   Jeg synes at V, K og LA skulle enes om at gøre Kristian til
        kongelig undersøger :-). Det kunne være spektakulært.
        I think that V, K and LA should agree to make Kristian royal
        investigator. :-) It could be spectacular.
        [where "Kristian" refers to Kristian Thulesen Dahl, who is
        head of a party different from Jens Rohde's own party]

Some minutes later, Frede Jensen commented on Facebook:

(2)   Jeg har stemt på dig ved de seneste EU-valg - men det er slut
        nu. Jeg finder en anden og mere loyal venstremand til næste
        valg. Du er partiskadelig.
        I voted for you at the latest EU-elections - but I will not do so
        again. I'll find another more loyal politician from your party at
        the next election. You are a danger to your own party.

As reported at *DR tekst TV*, Jens Rohde replied in the following way:

(3)   ROHDE: FORSTÅR INGEN IRONI?
        Det skal 'tydeligvis' forstås ironisk, når Venstres Eu-parla-
        mentariker Jens Rohde foreslår, at Thulesen Dahl (DF) burde
        være kongelig undersøger i stedet for hans egen formand, Lars
        Løkke Rasmussen.
        - Enhver kan da se, at det er for at udstille absurditeten i, at
        Folketingets største parti vil stå udenfor regering. Ironi kan
        forekomme, siger Jens Rohde.

        ROHDE: DOESN'T ANYONE UNDERSTAND IRONY?
        It is 'obviously' to be understood ironically when EU-parliam-
        entarian Jens Rohde suggests that Thulesen Dahl (DF) ought
        to be the royal investigator instead of his own political leader,
        Lars Løkke Rasmussen.
        - Anyone can surely see that this was said in order to underline
        the absurdity of the largest party in parliament not wanting to
        be part of the government. Irony may occur, says Jens Rohde.

Is (1) an example of irony as claimed by its author in (3)? Or is it an example of sarcasm? What are the criteria for determining whether something should be understood as irony, sarcasm or some other figure of speech? This is what this paper is about.

2. Dictionary definitions

The two notions of 'irony' and 'sarcasm' are sometimes used as synonyms, but they do not have exactly the same meaning. By *irony* I will only mean verbal irony, not romantic irony, tragic irony, cosmic irony or Socratic irony, notions that all have their specific meanings differentiated from, but related to, verbal irony. These distinctions will not be dealt with here.

The notions of 'irony' and 'sarcasm' are defined in the following way in three different dictionaries:

(4)   ***Collins Cobuild English Language Dictionary***. 1987, London: HarperCollins.

Irony is a form of humour, or an indirect way of conveying meaning, in which you say something in such a way that people realize that you are joking or that you really mean the opposite of what you *say.* E.G. *She said with slight irony. 'Bravo'.*

Sarcasm is speech or writing which actually means the opposite of what it seems to say and which is *usually* intended to mock or insult someone. E.G. *'Oh yeah,' said Jenny with broad sarcasm, 'I notice how you hate doing well in exams.'*

(5)   ***Longman Lexicon of Contemporary English***. 1981. Harlow: Longman.

irony - a way of speaking which expresses by its manner the opposite of what the words say*: The irony in his words was unmistakable.*

sarcasm - speaking or writing which tries to hurt someone's feelings, esp by expressions which clearly mean the opposite to what is felt. *'Thank you for bringing back my bicycle so quickly; you've only had it six months,' he said with heavy sarcasm.*

(6)   ***Concise Oxford Dictionary***. 1982. 7ᵗʰ ed. Oxford: Oxford
        University Press.

        irony - Expression of one's meaning by language of opposite
        or different tendency, esp. simulated adoption of another's
        point of view or laudatory tone for purpose of ridicule ...

        sarcasm - Bitter or wounding remark, taunt, esp. one ironically
        worded; language consisting of, faculty of uttering, use of,
        such remarks.

This means that two features of their definitions are common to both
concepts: (a) the expression is an indirect way of conveying meaning, and
(b) the communicated meaning is the opposite of what is literally said. Two
features of each concept differentiate between irony and sarcasm, viz. the
ironic speaker is (c) joking or using humour, and (d) simulating adoption
of another's point of view; whereas the sarcastic speaker is (e) mocking,
insulting, hurting or wounding someone, and (f) speaks out of bitterness.

(7)

IRONY		
(c) using humour, joking, (d) simulated adopting another's point of view.	Expression (a) which is an indirect way of conveying meaning, (b) the meaning of which is the opposite of what is literally said,	(e) taunting, mocking, insulting, hurting, wounding (f) out of bitterness.
	SARCASM	

These lexicon definitions allow us to distinguish the following two examples.

(8)   A teacher to a student who comes late to his class without
        apologising: "I hope you will excuse us for starting the class on
        time."

(9)   Thank you for bringing back my bicycle so quickly; you've only
        had it for six months.

(8) is here taken to be an example of irony because (a) it indirectly conveys something like (b) the message that the student should apologise for being late, (c) because it itself is an excuse, which is not serious, but joking, and (d) because it simulates adopting the student's point of view. (9) on the other hand is an example of sarcasm because (a) it indirectly conveys something like (b) the message that the addressee should have brought back the bicycle more quickly, and (e) it is telling him off (f) out of bitterness. But it is not clear what it is in the form of the utterance or in its context that differs in the two examples. In this paper, I will try to make a pragmatic description of the differences and to draw the line between irony and sarcasm more clearly.

3. The indirect communication

The first problem to be investigated is how it is signalled that the message of an ironic or sarcastic utterance is conveyed indirectly. What is the indication of the indirectness of the message, as Birkelund & Nølke (2013), Nølke (2013) and Birkelund (2013) call it? If people just directly say the opposite of what they intend to communicate, nothing but misunderstanding will be the result. If you mean 'Turn left' and say: 'Turn right', you are not ironic, but stupid. But if in our discussion, I have maintained that we should turn right to get to the tower we want to visit, and when approaching it we realize that it is very obviously on the left-hand side of the road, you could say':

  (10)   OK, turn right!

That would be ironically or sarcastically uttered.

In (10), there are two indications that the message is conveyed indirectly, namely inappropriateness and simulation. The simulation is that your sentence is a sort of an repetition, a quotation, or an echo of what I have just said, and the inappropriateness in this case is the fact that it is not possible under the circumstances to make a right turn at all.

The simulation is best explained by Goffmann's (1981: 144) distinction between three functions of the role of the speaker, viz. the function as animator, as author and as principal (in the legalistic sense). Normally the same person has all three functions, but in (10), the speaker is only the animator of the utterance, not the author of it, and not at all responsible for the speech act. In (8), the teacher is both the animator and the author, but she is not the responsible principal because it is inappropriate in the situation to apologise. In (9), the speaker is the animator and also the author because he

is not quoting anyone, but he still does not take responsibility of the literal meaning of *quickly* and *only*. What they presuppose is in contradiction with *six months*, and consequently the speaker does not take responsibility for the communicative function of *Thank you*. So in irony and sarcasm, the speaker only simulates and does not take responsibility for the speech act which the sentence is a literal expression of. The inappropriateness separates the function of principal from the functions of animator and author. It is this simulation that Sperber & Wilson (1995:239-241) describe as the utterance 'being an echo of a thought'.

The inappropriateness can be of many sorts. In (8), the inappropriateness is that the interrupted teacher is apologising to the interrupting student, and in (9), it is the contradiction between six months and the presuppositions of *so quickly* and *only*. In (10), it is the infelicity of the directive speech act that is inappropriate (because the requested right turn could not be carried out). In other examples, it is said to be the manner, the tone, the voice or style that is improper. On a screen, the humorous distance can be marked by a smiley or an emoticon as in (1) above. Notice that when something is inappropriate, it is not just unexpected, but also breaking the norms:

(11)   Da Umberto Eco i juni 2015 i en alder af 83 år blev udnævnt til æresdoktor i Lodz i Polen, blev han spurgt om temaet for hans næste bog. Han svarede, at det som regel tog ham seks-otte år at skrive en roman, "så det får I at vide, hvis I da ellers lever til den tid."

When 83-year-old Umberto Eco in June of 2015 was appointed honorary doctor in Lodz, Poland, he was asked about the theme of his next book. He answered that it normally took six to eight years for him to write a novel, "so you will learn, provided that you are still alive then".

Frederik Stjernfelt: "Æresdoktoren og det videnskabelige testamente" *Weekendavisen* #24, June 12, 2015, *Bøger*, page 6.

In (11) *provided that you are alive at that time* is a modified echo of the thoughts of the audience, viz. that 83-year-old Umberto Eco would not be alive in eight years, and is for that reason a very humorous remark, but not irony (nor sarcasm), because there is no breach or violation of any norm. It is just unexpected.

What signals or indicates irony, is not a single feature of an utterance like linguistic form, context, situation, paralinguistic phenomena, common knowledge or genre or discourse type (Nølke 2013), but always a sort of inconsistency or clash between two features of the same utterance. It is the claim of this article that what makes an ironic utterance inconsistent or inappropriate can be pinned down to its being a breach or violation of one or more of the four Gricean maxims (Grice 1967:27):

(12)   **Maxim of Quality**: Try to make your contribution one that is true! Do not say what you believe to be false! Do not say that for which you lack adequate evidence!

Maxim of Quantity: Make your contribution as informative as is required (for the current purposes of the exchange)! Do not make your contribution more informative than is required!

Maxim of Relation: Be Relevant!

Maxim of Manner: Be perspicuous! Avoid ambiguity of expression! Be brief (avoid unnecessary prolixity)! Be orderly!

There is no breach of any maxim in (11); whereas (8) is a violation of the maxim of relevance, (9) of the maxim of quality, and (10) of the maxim of relevance.

4. Utterance, presupposition and implicature

In a pragmatic analysis of an utterance it is necessary to distinguish between (a) what is said (its explicature, the literal meaning of the linguistic form), (b) what is taken for granted although it is not explicitly stated, because it is presupposed by the form of the uttered sentence (its presuppositions), and (c) what is implicated in the situation by uttering the utterance (the text) in the situation (its implicature). What is communicated by implicature in irony and sarcasm is the negation of the relevant parts of what is presupposed. The distinctions are shown in (13):

(13)   Example (8) repeated from above:

A teacher to a student who comes late to his class without apologising: "I hope you will excuse us for starting the class on time."

U The **utterance** is: *I hope you will excuse us for starting the class on time.*

E The **explicature** is: 'The speaking teacher excuses that she and the other students have started the lesson as scheduled, not waiting for the latecomer'.

P Some of the **presuppositions** to which the linguistic form is an allusion, viz. those that are triggered by the word *excuse*, are: 'it is to be expected that a teacher waits until the latecomers have arrived' and 'it is wrong for a teacher to start on time'.

I The **implicature**, which is generated by the inappropriateness of the teacher's misplaced apology, dissociates her from the presupposition of the sentence, and communicates that the presupposed value judgement of the utterance is wrong: 'it is wrong that it is wrong for the teacher to start on time', and hence 'students and teachers should be in class on time'.

The intended message of an ironic utterance is not just the opposite of the propositional content of it, i.e. the negation of the sentence uttered, eg.. 'I don't hope that you excuse us for starting the lesson on time', or 'I hope that you don't excuse us for starting the lesson on time'. The intended message generated by the irony is a negation of the presupposed value judgement of the alluded utterance, eg: negation of 'it is wrong for a teacher to start on time'. The ironic point is not descriptive, but evaluative and normative. Irony is thus defined in the following way:

(14) Verbal irony is an utterance by which someone says something, which

    a. because of a breach of one or more the Gricean maxims

    b. is marked as an allusion to a currently highly accessible thought,

    c. which the speaker dissociates herself from

    d. and which she in this way, without responsibility, ridicules and criticises

If the thought is attributed to the listener, it is standard irony (or sarcasm); if it is attributed to the speaker herself (or rather to her previous self), it is self-irony. Allusion is a figure of speech, in which one refers covertly or indirectly to an object or circumstance known from an external context. It is left to the audience to make the connection. It is what Sperber & Wilson (1995) call an echo. The difference between irony and sarcasm is the following: If the echoed and modified thought is only attributed to the listener as animator or perhaps author, but not as a principal, it is irony; if it is attributed to the listener as a responsible principal of the thought, the utterance is sarcastic. Irony goes for the ball, sarcasm for the (responsible) player. The addressee of an ironic utterance is the author of the thought alluded to, but the addressee of a sarcastic utterance is primarily bystanders and only secondarily the speaker of the thought echoed, the person who is the target of the mocking.

(15)   The speaker who is being **ironic** addresses the utterance to a hearer whose thought is being alluded to or echoed, in order to inform him or her that the thought is untenable. **Sarcasm** is not uttered for information to the author of an untenable thought, but as scorn of the principal of the sarcasm to the bystanders.

5. Theory of presupposition failure

The difference between irony and sarcasm is proposed to be a difference between (a) informing the author of the alluded thought that it is untenable, and (b) scorning the responsible principal of such an untenable thought in front of some bystanders. But how can we define the difference between informing and scorning linguistically? I propose that the theory of presupposition failure, proposed by Peter Harder and Christian Kock (1976) will yield the necessary tools.

They introduce a notation of the mutual assumptions of the speaker and hearer in an communicative event involving presuppositions. S+ is a notation of the situation in which the presupposition in question belongs to the background assumptions of the speaker, +H that it belongs to the background assumptions of the hearer; S- and -H designates that the presupposition does not belong to the background assumptions of speaker and hearer respectively. SH± indicates the speaker's assumption as to whether the presupposition belongs to the background of the hearer, ±HS the hearers assumption as to whether the presupposition belongs to the background of the speaker. And so on.

By this notation several speech phenomena can be defined: sincerity, mistakes, one up-ness, communicative balance, solidarity, rhetorical behaviour, bullying, deception, suspicion and achieved communication, and the standard situation involving achieved communication. What the speaker by her choice of form presupposes belongs in the standard situation to the background assumptions of both the speaker and the listener, and they both know that without any mistakes. It will have a notation as in (16) (Harder & Kock 1976, with changes in notation similar to the ones made in Togeby 1993:664):

(16)   S +   + H   level 1
             SH +   + HS   level 2
            SHS +   + HSH   level 3
           SHSH +   + HSHS   level 4
        standard situation

In the case of namedropping the situation is different. If I say:

(17)   I got the idea that irony is an example of presupposition failure
        from Peter and Christian.

I have presupposed that my relationship with Peter Harder and Christian Kock is so intimate that I can call them by their first names, and this is true because we were fellow students (notation S+). But in fact it will not be appropriate for many of my readers (-H). Here I commit a PRESUPPOSITION FAILURE because I presuppose something that is not part of your background assumptions. I know that you are not that intimate with them (SH-), which means that I show NON-SOLIDARITY with you; I only made this formulation to IMPRESS you, which is an example of NAMEDROPPING. You might of course know Peter, Christian and I once were fellow students (+HS), but if you don't (-HS), you will think that I am bluffing, and in that you make a mistake and then you are ONE-DOWN. I assume you don't know that it is a mistake (SHS-), and that is what you assume about me (-HSHS). You know that I don't believe that you could address them with their first name (-HSH), and I know that (SHSH-). This situation can be described as (18):

(18)   S +   −H
            SH −   −HS
          SHS −   −HSH
        SHSH − −HSHS
        intentional, aborted, sincere namedropping

Many of Harder & Kock's presuppositions failures are illustrated in (19):

(19)

        S −   H   S −   H
        SH   HS   SH   + HS
       SHS +   HSH   SHS +   HSH
       SHSH   HSHS   SHSH   + HSHS
       deception: different   achieved deception: H
       S-marks on level 1 &   mistaken as expected by S
       3 or on level 2 & 4

        S −   − H   S   − H
        SH − − HS   SH   HS
       SHS + − HSH   SHS   + HSH
       SHSH + + HSHS   SHSH   HSHS
       abortive deception: suspicion: different
       S is mistaken; H   H-marks on level 1 & 3 or
       suspicious   on level 2 & 4

        S −   H   S +   − H
        SH   HS   SH −   + HS
       SHS   HSH   SHS +   − HSH
       SHSH   HSHS   SHSH − + HSHS
       S is insincere   bullying

```
   S –    H              S +    H
   SH   + HS             SH   – HS
S is one up, H is       S is one up, H is mistaken
mistaken
```

```
                              S      H
   S    + H               SH     + HS
   SH –   HS            SHS –    HSH
S is mistaken, H is one up   S is mistaken, H is one up
```

```
   S +                    S –
   SH –                   SH  +
ordinary humouring       ordinary humouring
non-solidarity of S      non-solidarity of S
```

```
                          S –  – H
                          SH –  – HS
                          SHS –  – HSH
                          SHSH –  – HSHS
balance = no mistakes    play, cynicism, make
                         believe
```

```
   S –    H               S –    H
   SH     HS              SH    – HS
  SHS –   HSH            SHS –    HSH
  SHSH    HSHS           SHSH    – HSHS
rhetorical behaviour     achieved irony
```

$$
\begin{array}{ll}
\text{S} - \quad \text{H} \\
\text{SH} \quad - \text{HS} \\
\text{SHS} - \quad \text{HSH} \\
\text{SHSH} \quad + \text{HSHS} \\
\end{array}
\qquad
\begin{array}{ll}
\text{S} - \quad + \text{H} \\
\text{SH} + \quad - \text{HS} \\
\text{SHS} - \quad + \text{HSH} \\
\text{SHSH} + \quad - \text{HSHS} \\
\end{array}
$$

aborted irony, taken as   making fun of
deception

By means of this framework, it is possible to give precise definitions of irony and sarcasm. They share, if achieved, the features: insincerity (S-), intentionality (SHS-) , solidarity (no H-mistakes), no deception (-HS & -HSHS). The difference is that the ironic speaker does not take the hearer to be responsible for the presupposed value judgement that she dissociates herself from, but takes him to be only animator or perhaps author (-H & SH-). This holds for example (8) *I hope you will excuse us for starting the class on time.* In cases of sarcasm, on the other hand, the hearer is insulted exactly because he believes in the thought which is being ridiculed (+H) deliberately by S (SH+ & SHS-). These features holds for example (9) *Thank you for bringing back my bicycle so quickly; you've only had it for six months.*

(20)
$$
\begin{array}{ll}
\text{S} - \quad \text{H} \\
\text{SH} \quad - \text{HS} \\
\text{SHS} - \quad \text{HSH} \\
\text{SHSH} \quad - \text{HSHS} \\
\end{array}
$$

achieved irony or sarcasm

$$
\begin{array}{ll}
\text{S} - \quad - \text{H} \\
\text{SH} - \quad - \text{HS} \\
\text{SHS} - \quad - \text{HSH} \\
\text{SHSH} - \quad - \text{HSHS} \\
\end{array}
\qquad
\begin{array}{ll}
\text{S} - \quad + \text{H} \\
\text{SH} + \quad - \text{HS} \\
\text{SHS} - \quad + \text{HSH} \\
\text{SHSH} + \quad - \text{HSHS} \\
\end{array}
$$

irony = play   sarcasm = making
                        fun of

6. Analysis of (almost) authentic examples

The examples (8)-(10) were constructed in so far as their situational context was invented in order to fit the category. In this section some authentic examples will be analysed in the proposed framework.

The first example is a strip from the Doonesbury cartoon, Trudeau (2013:194) The examples are found in the remarks of the characters in the story in which the situation is already described, i.e. in the earlier strips. The relation between the cartoonist, Garry B. Trudeau, and us, the readers, will not be analysed here. The remark that is analysed is the question *All three?*

(21)

The situation told in earlier strips is the following: The husband Rick is an unemployed journalist, and his wife Joanie is a journalist too, but she has just been hired as member of the campaign staff of a female politician,

who is the one who speaking on TV in the first two pictures. Alex is their grandchild who has helped her grandmother and who is probably making a congratulation call in the last picture.

Rick's utterance *All three* is an allusion to Joanie's remark *I wrote those three words*. It is a violation of both the maxims of quantity and quality, to presuppose that he doubts that she has written so many, and to presuppose that it is a lot for a journalist to have written and had published as much as three words. By this inappropriateness, he dissociates himself from the value judgement that three words are many, and without responsibility, he ridicules and criticises her proudness of having written the words. Perhaps he is at bit envious too.

The relevant presupposition is that it is a great effort for a journalist to have written three words. And it is this value judgement that he dissociates himself from by asking the impudent question. He does not have the presupposition as his background assumptions (S-), and he does not think that she has it either (SH-), as she in fact has (+H). He is mistaken. And so is she, because she does not realize that he is insincere (+HS). He attempts to be ironic, and acts accordingly, but she is totally naïve and happy. So his remark is intended as irony or sarcasm, but it is not achieved because of her naivety. It is also relevant that there isn't any audience or bystanders in front of whom he could make sarcastic fun of her. In a way, aborted irony is not irony at all, because irony is defined as a perlocutionary act of sharing mind sets and value judgements. Only if it is achieved is it irony according to the definition.

(22)　　The presupposition: 'three words are many for a journalist':

　　　　　S − 　+ H　　　　S is insincere, rhetorical

　　　　　SH − 　+ HS　　　both S and H are mistaken

　　　　　SHS − 　+ HSH　　both S and H are mistaken

　　　　SHSH − 　+ HSHS　both S and H are mistaken

　　　intentional, aborted, irony

And now we are in a position to see how this definition of irony can account for example (1), which is a real authentic example which furthermore has even been called irony by its own speaker.

(1)   Jeg synes at V, K og LA skulle enes om at gøre Kristian til
        kongelig undersøger :-). Det kunne være spektakulært.

        I think that V, K and LA should agree to make Kristian royal
        investigator. :-) It could be spectacular.

The story behind (1) is that all four right-wing parties (V, K, LA and DF) pointed
to the leader of *Venstre*, Lars Løkke Rasmussen, as the royal investigator. In
other words, even though DF won three seats more than V in the parliament,
the leader of DF insisted that Lars Løkke Rasmussen, the leader of a
smaller party, should be appointed as royal investigator. Because of the
fact that DF is not mentioned in (1), it is presupposed that the (right-wing)
party with the most seats should lead the negotiations. This is what Jens
Rohde has as his background assumptions (S+), and he thinks that all his
readers will agree (SH+).

        His statement is modified in two ways: There is a smiley, :-), which
signals joking, and the statement is marked as subjunctive by being in the past
tense although it deals with future events. He did not write:

(23)   Jeg synes at V, K og LA <u>skal</u> enes om at gøre Kristian til
        kongelig undersøger. Det <u>vil blive</u> spektakulært.

        I think that V, K and LA shall agree to make Kristian royal
        investigator. It will be spectacular.

The past tense is normally understood as signalling a hypothesis or
counterfactivity, i.e. that the situation described is not real but only imagined,
and so the unreality is a presupposition of the remark too. And also this
presupposition is put forward by Rhode as in the standard situation: (S+,
SH+, SHS+, SHSH+)

        What happens on Facebook is that Frede Jensen misunderstands (1)
as (23), and consequently thinks that Rohde really wants Kristian Thulesen-
Dahl to be prime minister, and regards Rohde as a traitor (-H, +HS, -HSH,
+HSHS). In this schema, Frede Jensen makes one mistake (SH+ & -HSH),
and Rohde gets into trouble because he makes two mistakes: (-H & SH+
and -HSH & SHSH+). He escapes by claiming that it was irony, and that
he didn't mean what Frede Jensen thought he meant.

        But it was not irony. It was put forward as a hypothesis saying: 'If
we did such and such, it would be spectacular and show the hypocrisy of
DF, but we won't do it.' It was a counterfactive hypothesis. It is interesting

that Rohde afterwards expounds it as irony with a very imprecise reference: *Ironi kan forekomme* 'Irony may occur'. He did not outright say *It was irony.* I think that he knows that it was not ironic (S-), but that it will make him escape from the incriminating remark because the readers will believe that it was (+H & SH+).

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English VPs and why they contain more than just verbs

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Abstract

Hjulmand & Schwarz (2009:32, 2012:33) (and many others) assume that *has concluded* constitutes a verb phrase (VP) in the example *The British car industry has concluded a deal with the Japanese government*. I want to defend a different analysis, namely that *concluded* constitutes a VP together with the object, i.e. *The British car industry has concluded a deal with the Japanese government*. One advantage is that VPs are less different from other phrases, in that VPs may now contain more than just verbs, just like NPs may contain more than nouns and PPs more than prepositions. Another advantage of this analysis is a better account of examples like *Saved many a life at sea, they have*. The VP-internal structural difference between arguments (e.g. objects) and adjuncts (e.g. adverbials) will also be discussed, as well as discontinuous VPs. Finally, the appendix will discuss the analysis of Danish.

1. Introduction

Hjulmand & Schwarz (2009, 2012) is the textbook most frequently used in courses in English grammar at Danish universities. Although it contains no references, it clearly builds on other Danish analyses of English, including Bache, Davenport, Dienhart & Larsen (1993), Bache (1996), Bache & Davidsen-Nielsen (1997) and Preisler (1997). Hjulmand & Schwarz' (2009, 2012) analysis is also clearly within the tradition of the so-called Quirk-grammars, e.g. Quirk, Greenbaum, Leech & Svartvik (1985), Greenbaum & Quirk (1990) and Greenbaum (1996).

In this contribution[1], which is based on a hand-out from a course taught jointly with Johanna Wood since 2011, I will compare the approach to (English) clause structure taken by Hjulmand & Schwarz (2009, 2012) to the generative approach that Johanna and I (and many others) use in our teaching (Haegeman & Guéron 1999, Carnie 2013, Gelderen 2014) and in our research (Heycock & al. 2012, Vikner 1995, 1997, 1999, 2011, 2014, 2015, Wood & Vikner 2011, 2013, Wood 2002, 2013).

It should perhaps be underlined that what is here taken to be shortcomings of the clause structure analysis of Hjulmand & Schwarz (2009, 2012) are shortcomings shared with a great number of other analyses, cf. the references above and in (4)b below.

2. What is in a VP?

2.1 One VP per clause or one VP per verb?

In Hjulmand & Schwarz (2009, 2012), there is always one and only one VP in every clause, and this VP consists of verbs, all the verbs, and nothing but verbs. This I call a "homogeneous" VP, HOMG:

(1)   **2.4.1.1. The Verb Phrase**
         The **head** of a verb phrase is, as the name indicates, a verb. Like other phrases, a verb phrase may be **simple** and contain only one verb (*The new coffee machine <u>works</u> perfectly. I <u>called</u> the real estate agent.*) or **complex** and contain more than one verb (*The British car industry <u>has concluded</u> a deal with the Japanese government. The scientists <u>are keeping</u> a record of radioactive levels in the area. The kids <u>were told</u> to look for the ball. The situation <u>will become</u> critical in the next few weeks. The visitor <u>must have come</u> on foot.*).
                                             Hjulmand & Schwarz (2009:32, 2012:33)

The alternative is what I will call a "heterogeneous" VP, HETG, where there is one VP for each verb, and where this VP consists of a verb plus its complement (if there is one) plus its modifiers (if there are any). The heterogeneous VP is very common within the generative approach[2] but it is also used by others, e.g. Bolander (2001:139-141) and Declerck et al. (2006:12).

One and the same clause thus receives very different analyses in the two approaches (where (2)a=(3)a and (2)b=(3)b):

(2) a.   They [_{VP} must   have   read] it.   HOMG, e.g. Hjulmand & Schwarz (2009, 2012)

    b.   They   must [_{vp} have [_{vp} read it]] .   HETG, e.g. the generative approach (& others)

(3)   a. HOMG

St		
S / NP	V / VP	DO / NP
H / pers pron	PreM / mod →inf	PreM / perf →ptp	H / v	H / pers pron
They	*must*	*have*	*read*	*it*
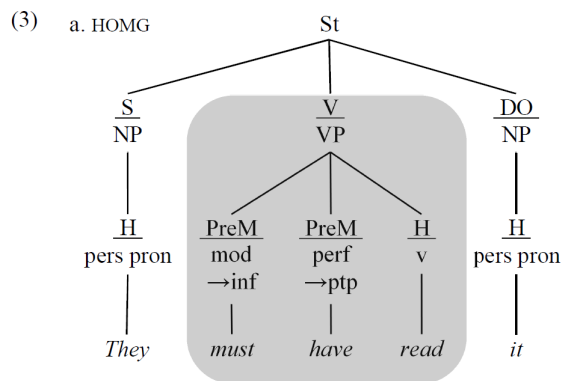
St	sentence
S	subject
V	verb
DO	direct object
NP	noun phrase
H	head (of a phrase)
PreM	premodifier
v	verb

---

[2]   Although Chomsky (1957:111) had a heterogeneous VP (*VP → Verb + NP*), it also had the homogeneous VP as a constituent (*Verb → Aux + V*), and it was therefore not at all compatible with (2)b/(3)b, and neither was Chomsky (1965:43). One of the first generative analyses to be compatible with (2)b/(3)b was Ross (1969).

b. HETG

```
         IP
        /  \
      DP    I'
      |    /  \
      D'  I°    VP
      |  must    |
      D°         V'
     They       /  \
             V°      VP
            have      |
                      V'
                     /  \
                   V°    DP
                  read    |
                          D'
                          |
                          D°
                          it
```

IP	inflection phrase
VP	verb phrase
DP	determiner phrase
I°/V°/D°	head of IP/VP/DP
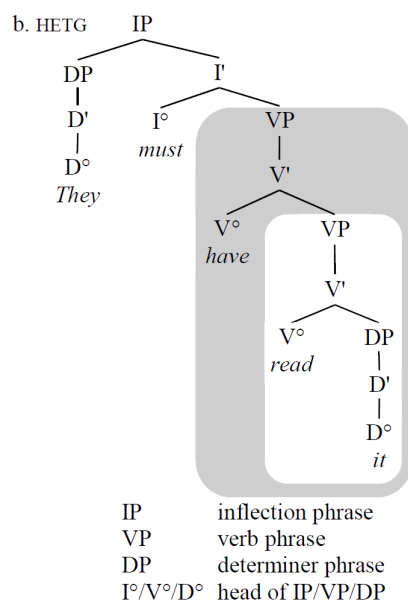
There is nothing that corresponds to the heterogeneous VP (= verb + complement/modifiers – one VP for each verb) in Hjulmand & Schwarz (2009, 2012), and typically there is nothing that corresponds to the homogeneous VP (= all verbs and only verbs / one and only VP for each clause) in generative analyses:

(4) a. **Analyses of English that have only the heterogeneous VP** (= verb + complement/modifiers) include Aarts & Haegeman (2006:126-133), Aarts (2001:43, 104-11, 196-201, 2011:66), Altenberg & Vago (2010:126), Carnie (2013:80). Fromkin et al. (2011:130), Huddleston & Pullum (2005:13), Hurford (1994:93, 186), Johansson & Manninen (2012:67, 85-88), Payne (2011:200-203), and Radford (2009:40)

   Like the above, both Börjars & Burridge (2001:77) and Declerck et al. (2006:12) have the heterogeneous VP (= verb + complement/modifiers), but in addition, both books also have the homogeneous VP under a different label: "verb string" in Börjars & Burridge (2001:143) and "verb form" in Declerck et al. (2006:15).

b. **Analyses of English that have only the homogeneous VP** (= all and only verbs) include Andersen (2006:60), Ballard (2013:101-103), Biber et al. (1999:99-100), Collins & Hollo (2010:78), Crystal (2004:114), Greenbaum (1996:59), Hasselgård et al. (2012:21, 164), McGregor (1997:123, 2015:113-114), Preisler (1997:27, 76-79), Quirk et al. (1985:96-97) and Thomas (1993). Also Bache (1996, 2014:65) and Bache, Davenport, Dienhart & Larsen (1993:74-75) only have the homogeneous VP, but they call it "verb group".

> In Bache & Davidsen-Nielsen (1997), the "predicator" (1997:38-40), the "verb group" (1997:59), and the "verbal" (1997:277) all correspond to the homogeneous VP. However, Bache & Davidsen-Nielsen (1997:179) also very briefly mentions a "verb phrase" which comprises "the predicator and its subordinate constituents".
>
> Culpeper et al. (2009:146-149) also prefer the homogeneous VP (called the "small VP"), but they explicitly compare it to the heterogeneous VP (called the "large VP".)

In my opinion, there are a number of reasons to prefer the heterogeneous VP (= verb + complement/ modifiers – one VP for each verb) to the homogeneous VP (= all verbs and only verbs / one and only VP for each clause), as will be discussed in the following sections.

2.2 Do VPs exclude complements/modifiers?

In Hjulmand & Schwarz (2009, 2012), VP has a very special status, in that it is the only type of phrase that does not contain complements, and in that it only consists of words from a single word class (viz. verbs). As opposed to their VP, the NP of Hjulmand & Schwarz (2009, 2012) contains more than just nouns, their AdjP contains more than just adjectives, their AdvP contains more than just adverbs and their PP contains more than just prepositions:

(5)   **Verb phrase**   (H&S 2009:32, 2012:33)
   a.   *The British car industry <u>has concluded</u> a deal with the Japanese government.*

         Noun phrase   (H&S 2009:34, 2012:35)
   b.   <u>*The house-buying market*</u> *is <u>a textbook example of how capitalism operates</u>.*

         Adjective phrase   (H&S 2009:35, 2012:37)
   c.   *Susan had always been <u>fond of animals</u>.*

         Adverb phrase   (H&S 2009:35, 2012:37)
   d.   *He runs <u>much faster than his brother</u>.*

         Prepositional phrase   (H&S 2009:35, 2012:38)
   e.   *They travelled <u>to New York</u> <u>by train</u>.*

The generative approach (and other proponents of the heterogeneous VP) would agree with Hjulmand & Schwarz (2009, 2012) that all the above are phrases (although in many generative analyses, NPs would be labelled DPs), **<u>except</u>** for the VPs, where *has concluded* would not be a constituent at all.

However, as the next section will show, there are also other (and perhaps better) arguments against the homogeneous VP than one based on the lack of internal consistency.

2.2 Should VPs be allowed to violate constituency rules?

Just like Haegeman & Guéron (1999:45-53), Aarts (2001:193-240), and Radford (2009:58-69), also Hjulmand & Schwarz (2009:45-48, 2012:48-51), Bache & Davidsen-Nielsen (1997:20-22), and Bache (2014:15-18) discuss ways of testing whether a string of words is a constituent or not. This section will argue that whereas the heterogeneous VP can be shown to be a constituent in the sense of such constituency tests, this is not the case for the homogeneous VP. (For more discussion of constituents and constituency, see the second appendix in section 7.)

VPs may be fronted in certain cases (this is often called "VP-preposing"), and such examples clearly show that VPs consist not only of verbs, but of verbs, complements, and modifiers. (6)a is from Greenbaum & Quirk (1990:409), (6)b from Quirk, Greenbaum, Leech & Svartvik (1985:125) and (6)c is a "real life" example from the *British National Corpus*:

(6) a.   They have promised to [finish the work], and [finish it] they will ___ .

     b.   Bill said that he would [win the match], and [win the match] he did ___ .

     c.   It was, it was indeed, a virus so small that the eye of man had
            never [seen it before]. But [see it now] we did ___ .
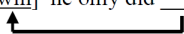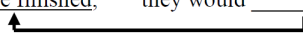
Notice how it is totally impossible for *will finish* to be a constituent in (6)a, as here [*finish it*] is shown to be a constituent, and *finish* could not possibly be part of a constituent [*finish it*] and at the same time be part of another constituent [*will finish*]. This is parallel to the impossibility of one and the same day (even Sunday the 31st) being both part of the month of January and part of the month of February.

The following further examples of the same type are also from the *British National Corpus* (and it should be underlined that although it is of course positive when a particular type of example is found in the *BNC*, what is crucial is whether or not the type of example is found to be acceptable by native speakers):

(7) a.   [Been in town all afternoon], I have ___ .

     b.   [Just done the circuit], he has ___ .

     c.   [Saved many a life at sea], they have ___ .

There is thus clear evidence in favour of the heterogeneous VP (= verb + complement/modifiers) from constituency tests of movement. What about the homogeneous VP (= all and only verbs)?

(8)   They promised to pay us all, ...
     a.   * ... but [paid] they only _____ him.
     b.   * ... but [pay] they only did ___ him.

(9)   Bill said that he would win all the matches, ...
   a.   * ... but [won] he only _____ the first one.
   b.   * ... but [win] he only did ___ the first one.

(10) a.   Finished the work, they would have _____, ...
   b.   * Have finished,   they would _____ the work, ...

     ... if it hadn't started to rain.

I have actually never come across any cases where the existence of the homogeneous VP (= all and only verbs) can be supported by means of such constituency tests.[3] Furthermore, even if we could perhaps come up with reasons why the homogeneous VP cannot move in (8)a,b, (9)a,b, and (10) b, then e.g. (10)a clearly shows that it is impossible for *would have finished* to make up a constituent, given that *finished* is already part of a constituent together with *the work*. The evidence from constituency tests of movement thus clearly supports the heterogeneous VP rather than the homogeneous one.

3. Complements vs. modifiers
3.1 Complements vs. modifiers at the clause/VP-level
In the generative analysis, there is a structural difference between complements and modifiers:

(11) a.   A constituent may be the sister of a X° (a head), and then it is a complement of this head, i.e. it is **an argument** of the head (e.g. an object), and not an adjunct.
    b.   A constituent may be the sister of an XP (a phrase), and then it is a modifier of this phrase, i.e. it is **an adjunct** of the phrase (e.g. an adverbial), and not an argument.

---

[3] It should be mentioned at this point that data from ellipsis perhaps could be seen as support for both (!) the heterogeneous and the homogeneous VP. In both of the following examples from the *British National Corpus*, a sequence of words has been elided (in the underlined position) which would have been a repetition of an earlier sequence of words (surrounded by []):

(i)   a.   He must have [**caught this same train many times**], and all the others before and after, as I have _____.
    b.   Does it confuse you that I [**should do**] the talking and you ___ the listening?

In an analysis with a heterogeneous VP, (i)a would be analysed as ellipsis of a VP (one constituent) and (i)b as gapping of two verbs (i.e. two constituents). In an analysis with a homogeneous VP, perhaps (i)b could be seen as ellipsis of a VP (one constituent) and (i)a as ellipsis of a verb, an object and an adverbial (i.e. three constituents, presumably).

HEAD	COMPLEMENT	MODIFIER	
(V°/N°)	OF V°/N°	OF VP/NP	

(12) a. Teaching English linguistics at Aarhus University (VP/CLAUSE)
b. Teachers of English linguistics from Aarhus University (DP/NP)

In the NP/DP, no difference at all is made between complements and modifiers in Hjulmand & Schwarz (2009, 2012), as both complements and modifiers are called "postmodifiers" (see section 3.2 below).

At the clause/VP-level, on the other hand, there is actually a difference between complements and modifiers in Hjulmand & Schwarz (2009, 2012), but it is only a difference in terminology, and not a structural one.[4] Complements are labelled e.g. direct objects and modifiers are labelled e.g. adverbials, cf. (13)a, which is from Hjulmand & Schwarz (2009:59, 2012:63):

(13) a. HOMG   b. HETG
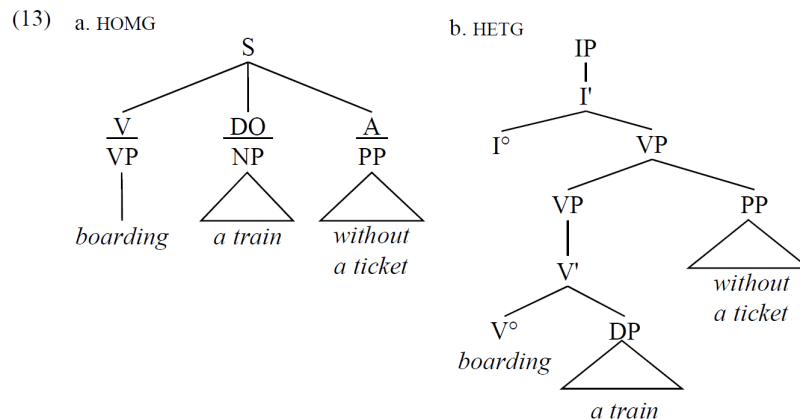
In the generative VP in (13)b, only the direct object *a train* is the sister of the verb *boarding*. The adverbial *without a ticket* on the other hand is the sister of the constituent it modifies, i.e. the VP *boarding a train*.

In the analysis in Hjulmand & Schwarz (2009, 2012), (13)a, both the direct object *a train* and the adverbial *without a ticket* are sisters of the verb *boarding*. This means that in a sentence with a final adverbial and without an object, this adverbial will have exactly the same structural position as the direct object would have had if it had been present (see (16)a,b below).

---

[4] Also in e.g. Bache & Davidsen-Nielsen (1997:30-31) and Bache (2014:110-111), the difference between complements and modifiers at the clause level is only one in labelling and not a structual difference.

As far as I can tell, this makes a structural account of the following differ-ence very difficult:

(14) a. *Daniel might call his mother and Aaron might do so his father.
     b.   Daniel might call next week and Aaron might do so a week later.

The generative account of this difference is based on the assumption that *do so* may only substitute VPs, and therefore *call* cannot be substituted by *do so* on its own in (15)a, where the smallest VP is *call her mother* (as *her mother* is the sister of V°), whereas *call* may indeed be substituted on its own by *do so* in (15)b, where the smallest VP is *call* (as *next week* is the sister not of V° but of VP):

(15) a. HETG

```
                    IP
            ┌────────┴────────┐
           DP                 I'
         Daniel        ┌──────┴──────┐
                       I°            VP
                     might           |
                                     V'
                                ┌────┴────┐
                               V°         DP
                              call    his mother
```

(*... and Aaron might **do so** his father)

b. HETG

```
                    IP
            ┌────────┴────────┐
           DP                 I'
         Daniel        ┌──────┴──────┐
                       I°            VP
                     might     ┌─────┴─────┐
                              VP           DP
                              |         next week
                              V'
                              |
                              V°
                             call
```

(... and Aaron might **do so** a week later)
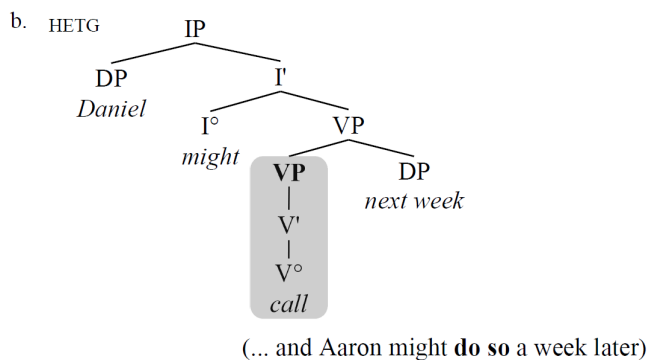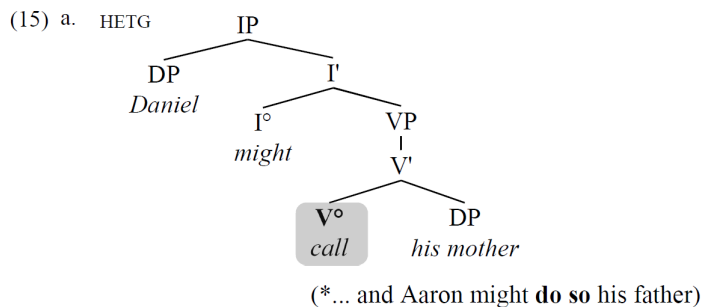
To Hjulmand & Schwarz (2009, 2012), these two cases would have exactly the same structure:

(16) a. HOMG
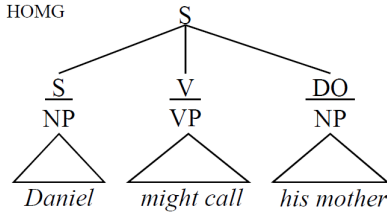
(*... and Aaron might **do so** his father)

b. HOMG
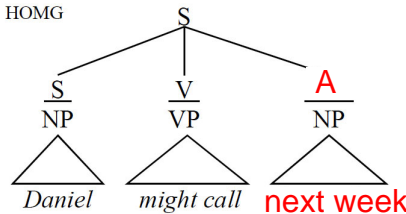
(... and Aaron might **do so** a week later)

... and then it is difficult to see why *call* may be substituted by *do so* in (16)b but not in (16)a. In other words, by not having a structural difference between complements and modifiers in the clause, it would seem very difficult to give a structural account of this systematic set of differences in approaches like Hjulmand & Schwarz (2009, 2012).

3.2 Complements vs. modifiers at the NP/DP-level
As mentioned above, no difference at all is made between complements and modifiers at the NP/DP-level in Hjulmand & Schwarz (2009, 2012)[5], see (17)a and (18)a. Both complements and modifiers are here called "post-modifiers". In a generative analysis, on the other hand, e.g. *of linguistics* in *a teacher of lingustics* will be seen as a complement of a noun, (17)b, whereas e.g. *with a blue shirt* in *a teacher with a blue shirt* will be seen as a modifier of an NP, (18)b.

---

[5]   Also in e.g. Bache & Davidsen-Nielsen (1997:343) and Bache (2014:150, 154), there are no differences made between complements and modifiers at the NP/DP-level.

In this section, I will continue to use the labels HOMG for "homogeneous" and HETG for "heterogeneous", even though this may be somewhat misleading, given that NPs are strictly speaking not homogeneous in Hjulmand & Schwarz (2009, 2012), where they may contain not just nouns but also other categories. The difference is instead that a "homogeneous" NP never contains a complement (as nouns cannot select a complement in Hjulmand & Schwarz 2009, 2012), whereas "heterogeneous" NPs/DPs may contain a complement (as some nouns, e.g. *teacher* or *breach* may select a complement in the generative analysis, whereas others, e.g. *chair* or *finger* may not).

(17)a is the same structure as the one given for *a breach of railway regulations* (Hjulmand & Schwarz 2009:59, 2012:63), where *of railway regulations* (and *of linguistics*) is a "postmodifier" whereas it would be a complement in a generative analysis, corresponding to the direct object of the verb *teach*. In other words, in (17)b, *teacher* is only a N°.

(17) a. HOMG   b. HETG
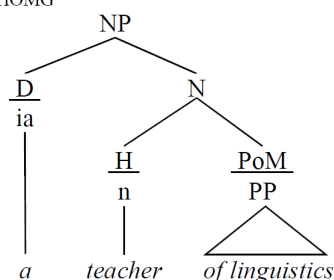
NP	noun phrase		
D	determiner		
ia	indefinite article	DP	determiner phrase
N	"the nominal part"	NP	noun phrase
	(H&S 2009:56/2012:60)	PP	preposition phrase
H	head (of a phrase)	D°/N°	head of DP/NP
n	noun		
PoM	postmodifier		
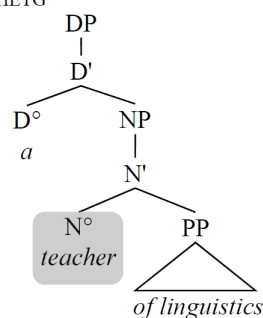
(18)a is the same structure as the one given for *his career in the army* (Hjulmand & Schwarz 2009:60, 2012:64), where *in the army* is a "postmodifier", where it would be a modifier in a generative analysis. In other words, in (18)b, *teacher* is both a N° and an NP.

(18)   a. HOMG   b. HETG
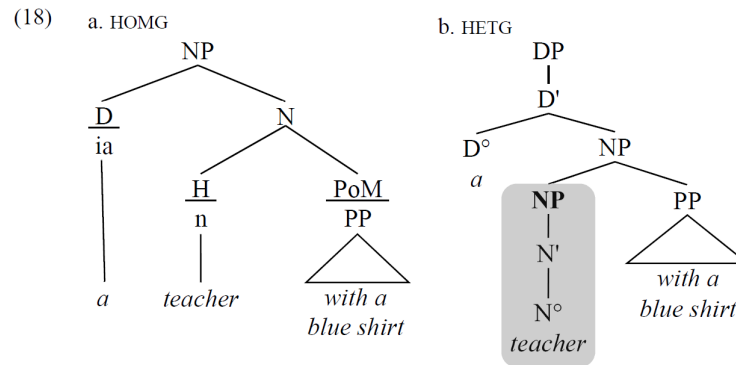
In the generative approach, the system is thus basically the same at the VP-level and at the DP-level: A **complement** like *of linguistics* is the sister of an X°, (17)b, whereas a **modifier** like *with a blue shirt* is the sister of an XP, (18)b.

Once again, substitution is a possible test, in that *one* can substitute an NP but not an N°:

(19) a.   * The teacher of linguistics   is taller than
                 the **one**   of physics.

       b.   The teacher with a blue shirt is taller than
                 the **one**   with a red shirt.

(19)a shows that *of linguistics* is a complement (it is part of what has to be substituted by *one*), and (19)b shows that *with a blue shirt* is a modifier (it is not part of what has to be substituted by *one*).

The assumption from above that a complement is the sister of a head (X°), whereas a modifier is the sister of a phrase (XP) also explains the ordering restrictions seen in (20). In the analysis that distinguishes between complements and modifiers, i.e. in (21)b, the order in (20)b would require branches to cross, but (20)a would not. No such structural difference is made in the analysis in (21)a.

(20) a.   A teacher [of linguistics] [with a blue shirt]
       b.   * A teacher   [with a blue shirt] [of linguistics]

(21) a. HOMG

```
            NP
       ┌─────┴─────────┐
       D               N
       ia      ┌───────┼────────┐
               H      PoM      PoM
               n      PP       PP
               │      ╱╲       ╱╲
        a   teacher  of linguistics  with a
                                     blue shirt
```

b. HETG

```
        DP
        │
        D'
     ┌──┴──────┐
     D°        NP
     a     ┌───┴────┐
          NP        PP
          │         ╱╲
          N'     with a
        ┌─┴─┐    blue shirt
        N°  PP
      teacher ╱╲
         of linguistics
```
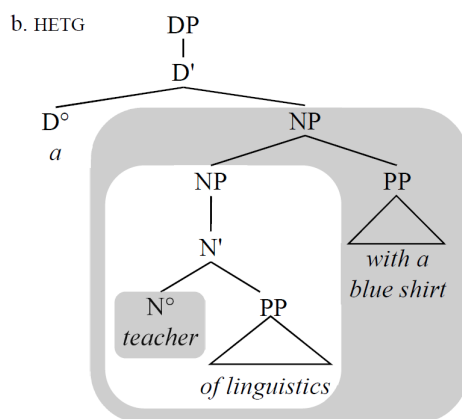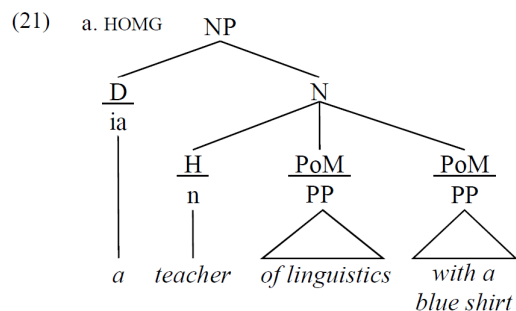
Assuming that there are two NPs in (21)b furthermore leads to correct predictions concerning possible and impossible *one*-substitutions:

(22) a.   This teacher of linguistics with a blue shirt is taller than
              that **one**   .

      b.   The teacher of linguistics with a blue shirt is taller than
              the **one**   with a red shirt.

      c.   * The teacher of linguistics with a blue shirt is taller than
              the **one**   of physics   with a red shirt.

In other words, by not having any kind of difference between complements and modifiers at the NP/DP-level, approaches like Hjulmand & Schwarz (2009, 2012) fail to capture this systematic set of differences. The relevance of this subsection on nominals (NPs/DPs) for the general discussion

of verb phrases is thus that the generative analysis of VP receives support from the fact that the data concerning *one*-substitution in the DP can be accounted for in a very similar analysis. The Hjulmand & Schwarz (2009, 2012) analysis of nominal structure, on the other hand, did not seem to offer an account of the *one*-substitution data, and it was at any rate not at all parallel to their analysis of VP.

4. Can VPs be discontinuous?

Hjulmand & Schwarz (2009:57-58, 2012:62) give an example of what they call a "split phrase"[6], viz. their VP *had dropped* in the example *Someone had probably dropped a cigarette*:

(23)

(Hjulmand & Schwarz 2009: 58,2012: 62)
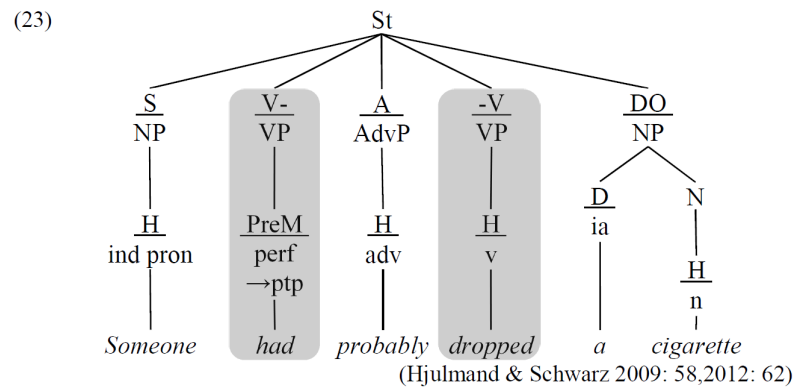
However, it seems to me that this analysis simply amounts to saying that branches in a syntactic tree may cross:

(24)

(What I think (23) actually means.)

---
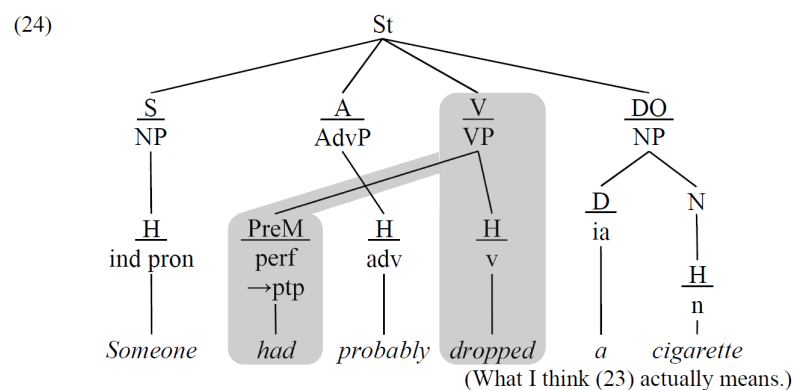
[6]   Completely parallel analyses with discontinuous "verb groups" are also found in e.g. Bache & Davidsen-Nielsen (1997:151, 155) and Bache (2014:60-61).

Hjulmand & Schwarz (2009:58, 2012:62) thus allow at least VPs to be discontinuous. (23) and (25)a show that their VP can be interrupted after the first verb, but does anything prevent a homogeneous VP from being interrupted after the second verb?

(25) a.   They will <u>perhaps</u> have read all of the novels by next week's lecture.
     b. * They will have <u>perhaps</u> read all of the novels by next week's lecture.

As far as I can tell, this restriction does not follow from anything within the homogeneous VP-analysis, which means it has to be stated separately (which is not done in Hjulmand & Schwarz 2009:48, 163, 2012:50, 177, but it could be done).

    In generative analyses, examples like (23) and (25)a are not completely straightforward either. The VP *dropped a cigarette* is not discontinuous, but it looks as if the VP *had (probably) dropped a cigarette* is.

    This is handled by assuming a movement of *had* from one head position (V°) to another (I°). Such a movement (V°-to-I°-movement) only takes place with finite auxiliary verbs in English, but it is found with all finite verbs in e.g. French and Icelandic (cf. Vikner 1997, 1999 and references there).

(26)

(Generative analysis of (23))
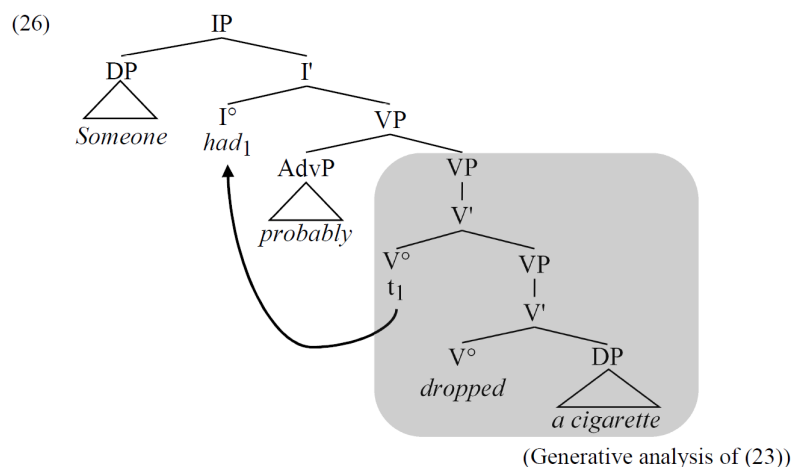
This again means that in the generative analysis, an extra stipulation is not necessary to prevent (25)b: (25)a is V°-to-I°-movement, and the impossibility of (25)b follows from I° like all other head positions only being able to contain one head (and from *perhaps* like all other sentential adverbs having to modify the highest VP of the clause).

What about other types of phrases? As Hjulmand & Schwarz (2009:163, 2012:177) in principle allow phrases to be discontinuous, they have to stipulate that this is only possible for VPs:

(27)   *Verb phrases (in contrast to what is usually the case with the other phrases) are sometimes split in two.*
                                   (Hjulmand & Schwarz 2009:163, 2012:177)

In generative analyses, the fact that only finite verbs behave as in (26) follow from the circumstances which lead to V°-to-I°-movement (Vikner 1997, 1999) not being present in other types of phrases.

    Notice that syntactic movement as such is found in both approaches, in that Hjulmand & Schwarz (2009:46-48, 2012:48-51) also assume movement, though only movement of phrases. The difference is thus not whether or not there is movement in syntax, but whether only phrases may move as in Hjulmand & Schwarz (2009, 2012) or both phrases (XP) and heads (X°) may move (as in the generative analysis).

5. Conclusion

The differences between the heterogeneous analysis of VP (and DP/NP) as found e.g. in the generative approach on the one hand and on the other hand the homogeneous analysis of VP as found in Hjulmand & Schwarz (2009, 2012), Bache & Davidsen-Nielsen (1997) and Bache (2014) (and the analysis of NP/noun group in the same accounts) are the following:

- The heterogeneous VP is consistent with the analysis of other phrases (section 2.2).
- The heterogeneous VP is compatible with the results of constituency tests (section 2.3).
- The structural difference between complements and modifiers both at the VP-level and at the DP-level in the generative analysis is compatible with the result of substitution of VPs by *do so* (section 3.1) and substitution of NPs by *one* (section 3.2).
- The generative analysis yields a more restrictive analysis of what would seem to be discontinuous VPs, i.e. of verb movement (section 4).
- (Furthermore, cf. the first appendix in section 6, the generative analysis yields a structural analysis of the differences between English and Danish that leads to improved generalisations concerning the similarities and differences between English and Danish word order).

The conclusion is thus that there is a series of reasons to assume the heterogeneous VP rather than the homogeneous VP in the analysis of English (and Danish) word order.

McGregor (2015:114) says that the arguments concerning the choice between homogeneous VPs (which he prefers) and heterogeneous VPs are "too complex to deal with in an introductory text". Bache (2014:12) says that the analysis used there, which employs the homogeneous VP (called "verb group"), may not be optimal from a research point of view, but that it on the other hand is both simple and practical. As outlined above, I fully agree that the homogeneous VP is not optimal from a research point of view, but I do not agree that the homogeneous VP can be said to be both simple and practical, particularly not at the university level. On the contrary, I find the homogeneous VP an unnecessary complication. It may be the case that it is convenient to assume a homogeneous VP (called *udsagnsled/verballed* 'verbal unit') in Danish primary schools, but I think that right from the first year at university (and possibly even in high school), it is much simpler to leave the homogeneous VP behind and instead employ the heterogeneous VP, both because it is much more consistent with the analysis of other phrases (NP, AdjP, AdvP, PP) and because it is much more compatible with the various constituency tests (which are recognised across the various theoretical approaches to syntax).

6. First appendix: The clause structure of Danish

Hjulmand & Schwarz (2009, 2012) is directly targeted at students who are native speakers of Danish, and it therefore contains a great many interesting observations about the differences between Danish and English (and the potential corresponding difficulties for Danish speakers of English), e.g.

(28)   *We find that Danish is a verb second-language, because whatever*
         comes initially, the verb is always in second position. [...] If Danes
         transfer this verb-second order into English, the result will be fine
         if the sentence starts with the subject.
                                    (Hjulmand & Schwarz 2009:267, 2012:291)

I completely agree that Danish is V2, but the advice given here would still incorrectly allow for e.g.

(29) Da. a. <u>Thomas</u> <u>reparerede</u> faktisk bilen i går
En. b. *<u>Thomas</u> <u>repaired</u> actually the car yesterday.
V2

In my view, what is missing in Hjulmand & Schwarz (2009, 2012) is a real attempt at a structural analysis of the differences between the two languages. This might improve on a number of insufficient and sometimes incorrect *ad hoc* rules, like (28) above or like the following:

(30) *In Danish it is common to have an adverbial, even a long one, between verb and direct object.*
(Hjulmand & Schwarz 2009:268, 2012:292)

It is thus predicted that the following four examples should be possible in Danish, contrary to fact:

(31) Da. a. Jakob taler <u>næsten aldrig</u> dansk.
Jakob speaks almost never Danish

b. * Jakob har talt <u>næsten aldrig</u> dansk.
Jakob has spoken almost never Danish

(32) Da. a. * Når Jakob taler <u>næsten aldrig</u> dansk, så er det fordi ...
When Jakob speaks almost never Danish, then is it because ...

b. * Når Jakob har talt <u>næsten aldrig</u> dansk, så er det fordi ...
When Jakob has spoken almost never Danish, then is it because ...

A generative analysis of this kind of data would be:

	XP	**C°**	**DP**	**AdvP**	**V°**	**V°**	**DP**
(33) Da. a.	Jakob	taler		næsten aldrig			dansk.
	Jakob	*speaks*		*almost never*			*Danish*
b.	Jakob	har		næsten aldrig		talt	dansk.
	Jakob	*has*		*almost never*		*spoken*	*Danish*
(34) Da. a.		Når	Jakob	næsten aldrig		taler	dansk, så er det fordi ...
		When	*Jakob*	*almost never*		*speaks*	*Danish, then is it because ...*
b.		Når	Jakob	næsten aldrig	har	talt	dansk, så er det fordi ...
		When	*Jakob*	*almost never*	*has*	*spoken*	*Danish, then is it because ...*

Later on the same page of Hjulmand & Schwarz (2009, 2012), the rule in (30) is modified as follows:

(35) *In the examples above we had simple verb phrases (one verb only). With complex verb phrases, on the other hand, we find the same constituent order in Danish and English: We place the adverbial after the first auxiliary.*   (Hjulmand & Schwarz 2009:268, 2012:292)

Now it looks as if there are two rules for Danish, ("if there is only one verb in the clause, place the adverbial after the main verb, **and** if there is more than one verb in the clause, place the adverbial after the first auxiliary"). This could easily be simplified (to "place the adverbial after the finite verb"), but neither the complicated nor the simplified formulation would be generally valid, as they would only apply to main clauses, (36), and not to embedded clauses, (37):

(36) Da. a.   Jakob taler   næsten aldrig   dansk.
                   Jakob speaks almost never   Danish.

      b.   Jakob har   næsten aldrig talt   dansk.
                   Jakob has   almost never spoken Danish.

(37) Da. a. * Når   Jakob taler   næsten aldrig   dansk, så   er det fordi   ...
                    When Jakob speaks almost never   Danish, then is it   because ...

      b. * Når   Jakob har   næsten aldrig talt   dansk, så   er det fordi   ...
                    When Jakob has   almost never spoken Danish, then is it   because ...

The corresponding generative analysis is given in (33) and (34) above. An informal formulation of the rule concerning the placement of sentential adverbials, (38)a, and for V2, (38)b, could be as follows:

(38) a.   Place the adverbial to the left of the finite verb.

       b.   If and only if the clause is a main clause, move the finite verb to the position left of the subject, and then move either the subject or another phrase to the first position of the clause.

This would also be compatible with an analysis like Diderichsen (1946), see also Vikner (2015).

7. Second appendix: Constituents and immediate constituents

Consider the following definitions:

(39) a. **Constituency**:
Relation, especially in syntax, between a unit which is part of a larger unit and the whole of which it is part. E.g. the adjective phrase *very friendly* is a constituent of the noun phrase *very friendly people*.
                    (*Oxford Concise Dictionary of Linguistics* = Matthews 2007)

   b. **Constituent:**
Any unit which is part of a larger unit. Morphs are constituents of words, words of phrases, phrases of clauses, clauses of sentences.
                    (*Cambridge Dictionary of Linguistics* = Brown & Miller 2013)

   c. **Constituent**:
One of the parts that form something (*the chemical <u>constituents of the liquid</u>*).
                    (*Merriam-Webster's Advanced Learner's Dictionary* = Perrault 2008)

One thing is perhaps still left open by the above definitions, namely whether the relation *constituent of* is transitive: If Z is a constituent of Y, and Y is a constituent of X, can Z then be said to be a constituent of X? To use a non-linguistic comparison, given that Shetland is part of Scotland, and Scotland is part of the United Kingdom (at least at the time of writing this in the autumn of 2015), can we say that Shetland is part of the United Kingdom?

Here I agree with Quirk et al. (1985:39-40), where the answer is yes (which corresponds to saying both that Scotland is part of the UK and that Shetland is part of the UK). Quirk et al. (1985:39-40) go on to suggest that if we need a term to refer only to constituents on the highest level, we can use the term *immediate constituent*. Here is the entire passage:

Constituents

[2.3d]

Figure 2.3d shows constituents simply as the smaller parts into which a unit can be divided. We may extend this part-whole relation to include units which are only indirectly part of a larger unit: thus in *Fig* 2.3d not only [*the evenings*], but indirectly also [*the*] and [*evenings*], *evening* and *-s* are constituents of the whole clause. But it is useful to reserve the term IMMEDIATE CONSTITUENT for those units which are the parts into which another unit is immediately divisible: thus the verb phrase [*have turned*] is an immediate constituent of the whole clause, and the auxiliary [*have*] and the main verb [*turned*] are immediate constituents of the verb phrase [*have turned*].   (Quirk et al. 1985:39-40)

Quirk et al. (1985:39-40) here point out that the constituents of a clause comprise both those constituents which *are immediate constituents of the clause* (constituents on the highest level, e.g. the subject *the evenings*) as well as those constituents which are NOT *immediate constituents of the clause* (constituents on a lower level, e.g. a part of the subject like *evenings*).

Given that Hjulmand & Schwarz (2009:24, 47, 2012:24, 50) refer both to *primary sentence constituents* and to *sentence constituents* (and to *constituents*), we might expect them to be making the same distinction that Quirk et al. (1985:39-40) make. This is not the case, however, as it is clear from the context that Hjulmand & Schwarz (2009:47, 2012:50) intend *sentence constituents* (and *constituents*) to have exactly the same (narrow) interpretation as *primary sentence constituents*. Consequently, they do not have a single term with the Quirk et al. (1985:39-40) sense of *constituent of the whole clause*, i.e. one term that comprises both e.g. the constituent which is the subject and a constituent inside this subject.

Also Bache (2014:14-18) uses *constituent* or *sentence constituent* to refer only to the immediate constituent of the clause and not to lower level units.

As pointed out above, constituency tests like substitution and movement are used to support the assumption of a given constituent within various theoretical approaches, see e.g. Bache & Davidsen-Nielsen (1997:20-22), Haegeman & Guéron (1999:45-53), Aarts (2001:193-240), and Radford (2009: 58-69), Hjulmand & Schwarz (2009:45-48, 2012:48-51), and Bache (2014:15-18). It should be pointed out that such tests do not necessarily distinguish between immediate constituents of the clause (cf. the movement of an adverbial in (40)b, and substitution of a direct object in (41)b) and lower level constituents (part of an adverbial in both (40)c and (42)b, and part of a part of an object in (43)b):

			THE EXAMPLE SHOWS THAT
(40)	a.	I found these examples in a book from 1859.	
	b.	<u>In which book</u> did you find these examples ___?	*in a book from 1859* IS A CONSTITUENT
	c.	<u>Which book</u> did you find these examples in ___?	*a book from 1859* IS A CONSTITUENT
(41)	a.	I gave <u>the man from the RSPCA</u> £10.	
	b.	<u>Who</u> did you give ___ £10?	*the man from the RSPCA* IS A CONSTITUENT

IS A CONSTITUENT

(42) a. I gave £10 to <u>the man from the RSPCA</u>.
     b. <u>Who</u> did you give £10 to ___?   *the man from the RSPCA*
                                                            IS A CONSTITUENT

(43) a. I saw a photo of <u>the man from the RSPCA</u>.
     b. <u>Who</u> did you see a photo of ___?   *the man from the RSPCA*
                                                            IS A CONSTITUENT

As constituency tests can be used to support the existence both of (immediate) constituents of the clause and of lower level constituents, it is extremely convenient to have a term that covers both types. I therefore agree with Quirk et al. (1985:39-40) that *constituent* should be used for constituents at any level, and also that if a term is needed to refer only to constituents on the highest level, the term *immediate constituent* will do the job very well.

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Incipient Jespersen's cycle in Old English negation

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Abstract

While Jespersen's cycle, the development *ne* > *ne…not* > *not* in the expression of negation, proceeds apace only in Middle English, it clearly has roots in an earlier reanalysis of the indefinite pronoun *nāwiht* 'nothing' as an adverb. However, few clear-cut instances of non-argument use of *nāwiht* occur in Old English, raising the question of when and how the adverbial negator that formed the basis for 'incipient Jespersen's cycle' arose in the first place. This paper will address this problem by examining possible bridging contexts for reanalysis, proposing that contexts with ambiguous argument structure provided favourable conditions, in particular, optionally transitive verbs ('eat nothing' > 'eat not') and predicates permitting optional extent arguments ('care nothing' > 'care not'). It tests this idea against the distribution of *nāwiht* in a sample of texts from the York Corpus of Old English.

1. Introduction

It is well-known that English has undergone Jespersen's cycle (Jespersen 1917, Dahl 1979), the renewal of marking of sentential negation found repeatedly in many languages of western Europe and beyond. By Middle English (1150-1500), a negative reinforcing element *not* was widely in use, occurring both in a bipartite structure *ne…not* and, particularly in the second half of the period, alone as the sole expression of sentential negation. The three options illustrated in Table 1, namely lone *ne* (stage I), bipartite *ne… not* (stage II) and lone *not* (stage III), represent three overlapping stages of Jespersen's cycle, with the innovative *not* eventually coming to replace the inherited marker *ne* entirely. The grammatical competition between

the three options has been the subject of intense empirical investigation. Wallage (2008:645), for instance, finds a steady progression through Jespersen's cycle in the course of Middle English. On the basis of data from the Penn Parsed Corpus of Middle English 2 (PPCME2), he shows that the bipartite stage II pattern was dominant in the period 1250-1350, being found in 68% of all negative clauses, while the stage III pattern with lone *not* had largely won out in the following period 1350-1420, being found in 88% of all clauses. Broadly similar patterns were found, but for declarative clauses only, by Frisch (1997:32).

	stage I	stage II	stage III	stage I′
English	*ic ne secge*	*I ne seye not*	*I say not*	*I don't say*
	(Old English)	(Middle English)	(Early Modern English)	(Present-day English)

Table 1. Schematic representation of the English Jespersen cycle.

While we have a broad understanding, at least at a descriptive level, of the progress of Jespersen's cycle once it was underway in Middle English, the initiation of Jespersen's cycle in English is much less well understood. The etymology of *not* is clear: it derives from Old English *nāwiht* 'nothing', evidently with reanalysis of the indefinite pronoun as a negative marker. The exact process by which this item was recruited for this function is less clear. This pathway of development, from negative indefinite to marker of sentential negation is crosslinguistically well-attested, being found also in Dutch, German, Old Norse, Middle Welsh, Piedmontese, Greek, North African Arabic dialects, Central Atlas Tamazight Berber, and perhaps Hungarian (Willis, Lucas & Breitbarth 2013:14). Investigation of the pathway for change in English is therefore also of relevance for our understanding of the emergence of new markers of negation and of the mechanisms behind cyclic syntactic change more generally (van Gelderen 2011).

Following van Kemenade (2000) and Wallage (2005), I will be assuming that recruitment of *not* as a negative marker was a two-stage process, the indefinite pronoun first being reanalysed as a VP-adjoined adverb and then integrated into the negation system (formally as the specifier of NegP). This assumption is based largely on crosslinguistic evidence, since there are languages where there is clear evidence for the additional, second reanalysis: for instance, in Middle Welsh, this reanalysis

is accompanied by clear changes in semantics (loss of emphatic meaning), word order (shift to earlier clausal position) and frequency (increase in frequency) (Willis 2010).

Old English had a number of lexicalized or semi-lexicalized (conventionalized) items to express emphatic negation, including *nānra þinga* 'of no things, not at all', *nāteshwōn* 'in no way, not at all', and *nā* 'never, not at all'. Lexicalization represents the first step towards Jespersen's cycle, and, for this reason, I will refer to items that have conventionalized as reinforcers of negation, whether or not they have changed syntactic category (i.e. undergone the first reanalysis) in the process, as involving 'incipient' Jespersen's cycle. Incipient Jespersen's cycle is no guarantee that any item in the language in question will progress on to a full Jespersen cycle, although it may be a necessary prerequisite. Emphatic items, particularly long and linguistically transparent ones, may retain their emphatic character indefinitely. While it has been argued that *nā* already functioned as the second part of a bipartite negative construction *ne ... nā* in Old English (van Kemenade 2000:64-66, but see van Bergen 2003:190 for the view that it was simply an adverb), none of the others participate further in a Jespersen-type development.

Direct word-order evidence in English for the second reanalysis is hard to come by: by Middle English, *not* is probably already a specifier of NegP and well-established both within bipartite negative structures and increasingly as a lone negator. Haeberli & Ingham (2007) argue, on the basis of word-order asymmetries between adverbs and *not*, that *not* does not have the distribution of an adverb in early Middle English (1150-1250) and should therefore already be treated as a specifier of a low NegP (above VP but below TP). Van Kemenade (1999, 2000), while arguing for a different, higher structural position for negation, nevertheless assumes that *not* is a specifier of NegP, rather than an adverb. While this will be adopted here, it is by no means the only view. Frisch (1997:30-42) considers that early Middle English uses of *not* are not instances of bipartite negation, but rather represent a use of *not* as an adverb with a distribution parallel to *never*. Others avoid the question entirely: Kroch (1989:236) suggests that *not* was reanalysed directly from VP-adverb to head of NegP, with no stage as a specifier, in the middle of the seventeenth century.

If *not* is already a negative specifier in early Middle English, then the second of the reanalyses evidently occurred in late Old English or very early Middle English. This is the position of van Kemenade (2000:68-69),

who states that *nāwiht* 'in Old English was used as a negated noun or an emphatic negative adverb', and that its later reflex, *not*, 'replaces *na/no* as the negative adverb in Spec,NegP in the transition from Old English to Middle English'. In a careful consideration of evidence for both positions in which he takes issue with a number of Frisch's theoretical assumptions, Wallage (2005:91) concludes that 'the general picture which emerges is one in which the distribution of *not* is consistent with its reanalysis as a sentential negator prior to the earliest Middle English period'.

This leaves us with the question of how, when and why Old English *nāwiht* became an adverb in the first place (the first reanalysis), a question which will be the main focus of this article. What status did *nāwiht* have in Old English; that is, was it already a negative adverb, or was its use still limited to etymologically expected positions (i.e. nominal argument positions)? It is often assumed that Old English *nāwiht* was already a member of the class of adverbs, and that it reinforced sentential negation expressed by *ne*. On the other hand, Ingham (2013:123-4) suggests that evidence for use of *nāwiht* as a negative adverb in Old English is actually rather limited.

A closer examination of the data will allow us to decide between these two positions and to reach a better understanding of the ways in which Jespersen's cycle gathers momentum during its early stages. I will begin by looking at crosslinguistic parallels of other negative indefinites to suggest that such items often have the potential to extend their domain beyond argument positions because they are often found in positions whose status is open to multiple interpretations. I will then examine a sample of instances of *nāwiht* in Old English texts to determine the extent to which its use can be accounted for in similar terms. I will argue ultimately that use of *nāwiht* in Old English as a negative reinforcer is highly structured and constrained and that these constraints are ones that are found repeatedly in the use of negative indefinites manifesting incipient Jespersen's cycle crosslinguistically. The conclusion is that *nāwiht*, in the Old English texts examined, in addition to its function as an ordinary argument (subject, object etc.), is largely constrained to function as an extent argument and as an extent (degree) modifier of an adjective (cf. Present-day English *very* or *no* in *very good* or *no better*). This is indeed incipient Jespersen's cycle, but reflects a stage which, in other languages, has not led inevitably to progression to full stage II of the cycle.

2. Bridging contexts for incipient Jespersen's cycle

Breitbarth, Lucas & Willis (2013) examine the emergence of new emphatic negative adverbs from nominals (both minimizers and indefinite pronouns) in a range of languages, suggesting that there is a fairly limited set of possible bridging contexts in which the acquisitional ambiguity necessary to initiate incipient Jespersen's cycle may be present in a given language. Not all environments are found in every language at this stage, and their relative importance is unclear, but all can be hypothesized in a number of different language histories. These environments divide into two broad types: (i) optionally transitive verbs such as *eat*, *drink*, *read*, *write*; and (ii) predicates taking an optional extent argument, with the latter type having a number of typical sub-categories, namely verbs of succeeding and verbs of caring and indifference. To these two sub-types may be added verbs of harming, and it is possible that other sub-types may be identified in individual languages, since the argument structure of verbs in these semantic classes varies somewhat from language to language.

Optionally transitive verbs, such as English *eat*, *drink*, *read*, *write*, have transitive and intransitive uses which, even if truth-conditionally distinct, may be pragmatically equivalent in many instances. Lucas (2007) argues that this played an important role in the reanalysis of Arabic *šay'* 'thing, something' as a negative reinforcer. In the context of the question in (1), the response in (2), intended in the grammar of the speaker as a transitive clause, may be understood by a hearer-acquirer as an intransitive clause where *šay'* marks emphatic negation.

(1)   akalt   al-xubz
       eat.PAST.2MSG   the-bread
       'Did you eat the bread?'   (Breitbarth, Lucas & Willis 2013:148)

(2)   la   mā akalt   šay'
       no   NEG eat.PAST.1SG thing(/NEG)
       'No, I didn't eat (anything/any)'.
                                   (Breitbarth, Lucas & Willis 2013:148)

A similar scenario is sketched as a contributory factor in the Middle Welsh Jespersen cycle by Willis (2006:77). In languages, such as Old English, where verbs expressing modality may be transitive, may take an infinitival complement or may participate in ellipsis of their complements, similar possibilities arise.

The second type is more diverse and more subject to crosslinguistic variation. Various predicates are prone to selecting an optional extent argument. We find this in various languages with verbs of caring or indifference, as with German *kümmern* 'care', illustrated in (3), and Dutch *schelen* 'make a difference', illustrated in (4).

(3) Das hat ihn   nicht / nichts / wenig gekümmert.
     that has him   not   nothing little bother.PAST.PTCP
     'That didn't bother him (at all, much).' (adapted from Bayer 2009:11)

(4) Dat kan me niet / niets   / weinig schelen.
     that can me   not   nothing little   differ.INF
     'I don't care about that.' (adapted from Hoeksema 1994:277)

With these verbs, we find both the ordinary negator (*nicht*, *niet*) and various other elements expressing the extent to which the predicate is true. While these are semantically closely related, they are not syntactically parallel: *nicht* and *niet* are true negators, *wenig* and *weinig* are adverbs, while *nichts* and *niets* are noun phrases, presumably arguments of the verb (extent arguments), but not its direct object. Acquisition of the syntax of these extent arguments thus poses some difficulty for the acquirer, and one might expect them to be misanalysed as adverbs, and hence extended historically to predicates that do not express a scale and hence do not meet the semantic requirements to take an extent argument. The negative indefinites *nichts* and *niets* express a more emphatic or emotive level of indifference, a fact which accords well with the fact that the new negator in Jespersen's cycle is typically emphatic in some way (Kiparsky & Condoravdi 2006). Similar issues arise at least with verbs of success and verbs of harming in certain languages. Willis (2006:72-76) argues that verbs of succeeding and verbs of harming played a significant role in promoting reanalysis in incipient Jespersen's cycle in Welsh.

3. A parallel development: Negative degree modifiers of adverbs and adjectives

A second, parallel development seems to act as a confound for investigation of incipient Jespersen's cycle. Negative indefinites in some languages develop into narrow-scope focus markers for adjectives or adverbs in negative clauses (Bayer 2009). Present-day English allows this to a very

limited extent, with *nothing* acting as a modifier of *like* (cf. its opposite, *exactly like*):[1]

(5)   I know the Mayor and he looks nothing like that. (Bayer 2009:6)

(6)   A dodo flies nothing like that. (Bayer 2009:6)

Here it is clear that *nothing* is not heading a noun phrase, because the verbs *look* (in the sense 'appear') and *fly* do not allow a nominal complement, as is clear from (7) and (8), where omission of *like* leads to ungrammaticality.

(7)   He looked *(like) that.

(8)   A dodo flies *(like) that.

We can therefore posit a structure in which *nothing* modifies the adjective. It can itself be modified by another item, as with *absolutely* in (9). Integrating *nothing* into the system of Neeleman, van de Koot & Doetjes (2004), we can propose the structure in (10), with *nothing* acting as a degree head selecting an adjective phrase headed by *like*, and *absolutely* acting as the specifier of *nothing like that*.[2]

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[1] Interpretation of these examples is complicated by the fact that English *like* may be an adjective/adverb or a preposition. I assume that *like* is an adjective in (5) (cf. *The mayor looks* [$_{AP}$ *important*], but **The mayor looks* [$_{PP}$ *in the office*]) and an adverb in (6); for further discussion of the dual status of *like*, see Huddleston & Pullum (2002:608).

[2] These structures assume that, in this use, *nothing* is a class-1 degree expression, that is, the head of a degree phrase. Like other class-1 items, such as *too* and *very*, it triggers optional expletive *much*-insertion with *like*:

  (i)   You look nothing (much) like your father.
  (ii)   You look too (much) like your father to go unnnoticed.
  (iii)   You look very (much) like your father.

While such items normally do not need *much* when their complement is an adjective, the optionality in these examples may be explained by the dual nature of *like* as both a preposition (triggering *much*-insertion) and an adjective (not triggering *much*-insertion). Contrast this behaviour with class-2 degree expressions (adjoined phrases), which combine freely with any category and are incompatible with *much*-insertion:

  (iv)   You look somewhat (*much) like your father.

Nothing hinges on adherence to this particular analysis and another tradition going back to Jackendoff (1977) treats all these items as phrasal specifiers. The only crucial observation is that *nothing* has been reanalysed as a modifier of *like*, in whatever precise configuration.

(9)   He looks absolutely nothing like that.
(10)
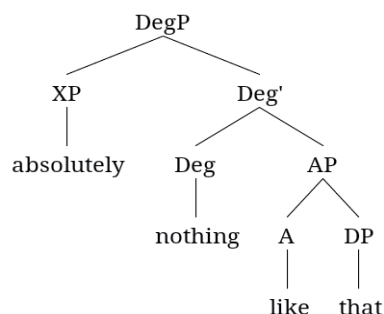
Thus, Present-day English has, however marginally, an item *nothing* used solely to modify adjectival or adverbial *like*. German *nichts* in (11), Dutch *niets* in (12) and Slovene *nič* in (13) and (14) manifest this same property somewhat more productively with modification of adjectives (in all cases, judgments are quite subtle and variable across speakers, but such uses are acceptable to a proportion of speakers, with no obvious geographical or social basis, and so provide the necessary input for syntactic change):

(11)   Aber ich war nichts   zufrieden.
        but   I   was nothing satisfied
        'But I wasn't satisfied at all.' (Bayer 2009:12)

(12)   Hij was niets   tevreden   over   het antwoord.
        he was nothing satisfied about the answer
        'He wasn't at all satisfied with the answer.'

(13)   Njegova krivda ni   nič   manjša.
        his   guilt NEG.be.PRS.3SG nothing less
        'His guilt is no less.' (*Slovar slovenskega knjižnega jezika, s.v. nič*)

(14)   Ali nisi   nič   vesela?
        QU NEG.be.PRS.2SG   nothing happy.FSG
        'Aren't you happy?' (Nova Beseda Corpus, IC HMP 1739)

There are various instances where the sequence 'nothing' + bare adverb may arise as a possible bridging context. One possibility (using English words as an example) is given in (15). This provides the opportunity for

nothing to be reanalysed from object of *did* to modifier of adverbial *better* (in a context where *did* could reasonably be interpreted either as transitive or intransitive).

(15)   We [$_{VP}$ [$_{VP}$ did nothing] better] today than yesterday.   →
         We [$_{VP}$ [$_{VP}$ did] [$_{AP}$ nothing better]] today than yesterday.

In a language where adjectives and adverbs are not formally distinct, the use may extend from there to non-comparative adverbs and to adjectives.

In English, the more common negative specifier of adverbs and adjectives is *no*, used to negate the scale of comparison in the case of comparatives. This item, evidently the result of a semantic and syntactic reanalysis of *nā/nō* 'never', is robustly attested with adverbs already in Old English:

(16)   …butan he geladige,   þæt he na bet
         unless   he make.oath.PRS.SBJV.3SG   that he   no better

         ne   cuðe.
         NEG know.PAST.3SG
         'unless he provides an oath that he knew no better.' (colaw2cn, LawIICn:15.1.42)

(17)   Ac ic þe   halsige   ðæt ðu   me no leng
         but I you   entreat.PRS.1SG that you me no longer

         ne   lette…
         NEG impede.PRS.SBJV.2SG
         'But I entreat you that you no longer impede me…' (coboeth, Bo:36.105.31.2056)

It has a continuous tradition of attestation ever since (*OED*, s.v. *no*, adv.[1]). We will see that developments with *nāwiht* were consistent with (and perhaps promoted by syntactic analogy with) the existing pattern with *nā*.

4. Incipient Jespersen's cycle as attested in contemporary varieties
Abundant presence of negative indefinite pronouns in the contexts identified in section 2 above provides a pathway for the initiation of full-scale Jespersen's cycle. It seems likely that items 'leak' from these contexts, extending their distribution to more and more predicates before coming into general use with all predicates. We expect negative indefinites

to occur in the bridging contexts in most languages, limited only by the lexical idiosyncrasies of individual verbs and verb classes. This is not as such evidence of Jespersen's cycle. Any leakage beyond these predicates is, however, evidence for reanalysis of the pronoun as an adverb, that is, for the first reanalysis involved in the shift to stage II of Jespersen's cycle discussed above. German *nichts* has been in this position for some time. It occurs both with predicates taking an extent argument, such as verbs of succeeding in (18), and verbs of harming in (19), but also with a number of others, such as *arbeiten* 'work' and *schlafen* 'sleep', in (20) and (21).

(18)   aber   das   hat   mir   nichts   geholfen.
        but   that   has   me.DAT   nothing   helped
        '…but that didn't help me at all.' (Bayer 2009:16)

(19)   Das   hat   ihm   nichts /   nicht   geschadet.
        that   has   him.DAT   nothing   not   damages
        'That did him no damage.' (Bayer 2009:11)

(20)   Karl   hat   nichts   gearbeitet.
        Karl   has   nothing   worked
        'Karl has done no work.' (Bayer 2009:11)

(21)   Von   Freitag   auf   Samstag   hab   ich   aber   fast
        from Friday   to   Saturday   have   I   however   almost

        nichts   geschlafen.
        nothing   slept
        'However, between Friday and Saturday I hardly slept.' (internet example, Bayer 2009:12)

Bayer (2009:10) concludes that these uses go back to the early modern period (sixteenth century) at least.

     Dutch *niets* is probably more conservative than German *nichts*, and, while it is robustly possible with a range of predicates allowing extent arguments, illustrated for a verb of succeeding in (22) and for a verb of harming in (23), spread beyond those contexts seems to be quite limited. Of the internet examples of spread of *niets* outside of extent-argument contexts cited by Bayer (2009:14-15), all were rejected by most or all native speakers consulted. The example in (24) was at the more acceptable end of the range:

(22) De verklaring hielp niets.
      the explanation helped nothing
      'The explanation didn't help at all.'

(23) Dat heeft het huis niets beschadigd.
      that has the house nothing damaged
      'That hasn't damage the house at all/one bit.'

(24) %Ik heb dus bijna niets geslapen, steeds maar
      I have thus almost nothing slept always but

      herhaald in mijn hoofd wat er gezegd was.
      repeated in my head what there said was.
      'So I almost didn't sleep at all, but kept on repeating in my mind
      what had been said.' (Bayer 2009:14, revised judgment)

Finally, Slovene *nič* 'nothing' is found as an extent argument with
verbs of succeeding in (25) and caring in (26), and again has 'leaked' to
some other contexts, including emphatic negation of the imperative of
imperfective verbs in (27) and emphatic negation of some other scalar
verbs in (28):

(25) Nič ni pomagala razlaga.
      nothing NEG.be.PRS.3SG help.PAST.PTCP explanation
      'The explanation didn't help at all.'

(26) Zanjo se ni brigal nič…
      Zanjo REFL NEG.be.PRS.3SG care.PAST.PTCP nothing
      'Zanjo didn't care (at all)…' (Nova Beseda Corpus, IC HMP 1571)

(27) Nič ne jokaj.
      nothing NEG cry.IMP.2SG
      'Don't cry (one bit).' (Nova Beseda Corpus, IC HMP 179)

(28) Nič ni spala.
      nothing NEG.be.PRS.3SG sleep.PAST.PTCP
      'She didn't sleep at all.'

All three items considered in this section show a distribution
somewhat beyond the bridging contexts identified in section 2. They are all
in constructions which are not normally thought of as currently undergoing

Jespersen's cycle in their respective languages (although this could of course change in the future). None has turned into a general negative adverb, let alone a sentential negator, yet all clearly have the potential to do so. It is in the context of these examples that we can consider the development of Old English *nāwiht*, asking specifically whether it conforms to the general pattern of diachronic development that we have been sketching so far, and, if it does, how far has it progressed in comparison with these other cases?

5. Old English

We now turn to consider the status of Old English *nāwiht* (and its variants *nōwiht*, *nāht*, and *nōht*, the last two being by far the most common in all uses) on the basis of textual evidence. As a pilot study to test the feasibility of the general approach outlined above, all instances of the pronoun were extracted from the first eight texts with relevant examples in the York Corpus of Old English (YCOE), namely Ælfric's *Homilies* (Supplemental), *Ælfric's Lives of Saints*, Alcuin's *De virtutibus et vitiis*, Alexander's Letter to Aristotle, Apollonius of Tyre, Bede's *Ecclesiastical history of the English people*, the Benedictine Rule, and the *Blickling Homilies*. Texts are cited using the corpus's system of identity tags. This produced 121 instances of the item, which were then analysed to see if they provided unambiguous evidence for reanalysis of *nāwiht* as a negative adverb, or whether they could be treated as instances of the types discussed above, specifically extent arguments and modifiers of adverbs or adjectives.

Not surprisingly, in the majority of cases (65 out of 121), *nāwiht* is found in argument position. Of the 45 cases where it is a direct object, 4 involve verbs that might reasonably be judged to be optionally intransitive, namely *singan* 'sing' (twice), *geseōn* 'see' and *cweðan* 'say':

(29) Cedmon, sing me hwæthwugu. Þa   ondswarede he &
      Cædmon sing me something   then   answered   he and

      cwæð: Ne   con ic noht   singan; &   ic   forþon
      said NEG can I nothing   sing   and I   therefore

      of   þeossum gebeorscipe uteode,   & hider   gewat,
      from this   entertainment withdrew and to.here left

      forþon ic naht   singan ne   cuðe.
      because I nothing   sing   NEG   could
      'Cædmon, sing me something.' Then he answered and said: 'I can-
      not sing anything; and for this reason I withdrew from this enter-

tainment and left for here, because I could not sing (anything).'
(cobede, Bede_4:25.342.29.3447)

(30)   heo styccemælum swa micel & swa ðicco wæron,
        they gradually   so   great   and so   dark   were

        þæt ic noht   geseon meahte
        that I nothing   see.INF   could
        'they gradually became so dark that I could not see anything'
        (cobede, Bede_5:13.426.9.4284)

In a further 3 instances, *nāwiht* is the direct object of a (pre-)modal:

(31)   þa   ne dorste   se heahgerefa naht   ongean þa
        *t**hen   NEG dare.PAST.3SG   the high.reeve   nothing against the*

        hæðengyldan
        heathens
        'then the high reeve dared not [do] anything against the heathens'
        (oaelive, +ALS [Agnes]:211.1857)

In accordance with the discussion in section 2, we can interpret these as providing bridging contexts for reanalysis in the form of acquisitional ambiguity (Willis 1998:41) because both transitive and intransitive interpretations are moderately plausible. However, they do not provide positive evidence that reanalysis had actually already taken place during the Old English period.

      In a further 14 cases, *nāwiht* functions as an extent argument within one of the three categories of verb discussed above, namely verbs of succeeding (7 cases), verbs of harming (4 cases) and verbs of caring (3 cases). With verbs of succeeding, all examples found are with verbs from the root *fram- (*fremian/fremman* and *fromian/framian*, both meaning 'profit, avail, benefit' in various argument realizations):

(32)   þæt eal his hogu and   gleawscipe naht   framað…
        that all his care and   wisdom   nothing   avail.PRS.3SG
        'all that care and wisdom of his will be of no help'
        (cobenrul, BenR:28.52.11.645)

(33)   &   he nowiht fromade   in   his lare
        and he   nothing succeed.PAST.3SG in   his teaching
        'and he had no success in his teaching'
        (cobede, Bede_3:3.162.24.1566)

The view that *nāwiht* here expresses extent is confirmed by the very frequent
Old English pattern with such verbs where the extent of the success is
indicated explicitly, typically with *micclum* 'greatly' or *lytel* 'little':

(34)   Oncnaw nu   and ongit   þæt hit þe   sceal lytel
        recognize now and understand that it you.DAT shall little

        fremigen, þæt þu toþohtest.
        avail.INF   that you intended
        'Now recognize and understand that it will help you little, what
        you intended.' (conicodC, Nic_[C]:30.29)

The extent argument may be questioned using *hwæt* 'what', a fact that
confirms that this argument position may be expressed nominally:

(35)   Hwæt fremað   þam blindan   seo beorhta sunbeam?
        what avail.PRS.3SG the   blind.DAT   the bright   sunbeam.NOM
        'How/what does the bright sunbeam help the blind person?'
        (coaelive, +ALS [Julian_and_Basilissa]:274.1107)

    Not included in these 7 instances is one example, given in (36),
with the verb *spōwan* 'succeed', where *nāwiht* could be a subject or an
extent argument. The parallel with the use of *hwōnlīce* 'little' in (37) would
suggest the latter interpretation (with a null expletive subject), but we
cannot be certain.

(36)   Ac ðaþa him   naht   ne   speow, þa   het   he
        but when them.DAT nothing NEG availed then ordered he

        spannan   oxan to…
        harness.INF   oxen to
        But when nothing worked for them, then he had oxen harnessed
        to [her]… (coaelive, +ALS [Lucy]:106.2232)

(37)   þeah   ðe us   hwonlice speowe
       though   PRT us.DAT little   succeed.PRS.SBJV.3SG
       'though we may succeed little'
       (coaelive, +ALS [Agatha]:32.2030)

The 4 examples with verbs of harming involve the verbs *derian* 'harm', *hearmian* 'harm', and *sceþþan* 'harm, scathe'. Examples are given in (38) and (39).

(38)   …þæt he Sceottas   hine   noht   sceðþende ne
       that he Scots.ACC him.ACC nothing harming   NEG

       afuhte…
        attack.PAST.SBJV.3SG
       '…that he should not attack the Scots [who were] not harming him…' (cobede, Bede_4:27.358.8.3599)

(39)   &   se deofol ne   mihte naht   derian   þam menn.
       and the devil NEG could nothing harm.INF the   man.DAT
       'and the devil could do the man no harm.'
       (coaelhom, +AHom_18:293.2654)

Finally, the 3 cases with verbs of caring involve the verbs *besorgian* 'be concerned, troubled (about)', *belimpan* 'concern, relate to' and *gebyrian* 'suit, pertain'. An example is given in (40).

(40)   We þeah   rædað,   þæt munecum   eallunga   to
       we though read.PRS.1PL that monks.DAT altogether to

       windrince   naht   ne   belimpe…
       wine-drinking nothing NEG concern.PRS.SBJV.3SG
       'We nevertheless read that drinking wine does not concern monks altogether at all.' (cobenrul, BenR:40.64.21.794)

These cases with extent-argument verbs form a not insignificant proportion of the total (14 out of 121). As with the cases with optionally transitive verbs, they provide a plausible basis for the first reanalysis of Jespersen's cycle, but, in and of themselves, provide no evidence that this reanalysis has actually taken place.

A further very large group of examples involves constituent negation of adverbs or adjectives, or narrow-focus negation of the same categories. Sentential negation refers to cases where an entire proposition is negated. Klima (1964:261-270) develops various (partially English-specific) tests for sentential negation. The first test involves the form of tag questions: negative clauses allow pragmatically neutral affirmative tags; thus, the tag in (41) offers a natural continuation, while the tag in (42) is pragmatically marked and is either rhetorical or presupposes an affirmative answer.

(41)   Writers will never accept suggestions, will they? (Klima 1964:263)

(42)   #Writers will often accept suggestions, will they?

Other tests involve possible continuations: a negative clause may be continued using a negative appositive tag with *not even*, may have *either* rather than *too* added to them, and may be continued using a *neither*-tag. These are illustrated along with ungrammatical affirmative counterparts in (43)-(48). In each case, the first negative example retains its grammaticality under the test condition, confirming its negative status, while the second, affirmative parallel sentence is ungrammatical, failing the test.

(43)   The writer will not accept suggestions, not even reasonable ones. (Klima 1964:262)

(44)   *The publisher often disregards suggestions, not even reasonable ones. (Klima 1964:262)

        [Publishers will usually reject suggestions,]
(45)   …and writers will not accept them either/*too. (Klima 1964:261)

(46)   …and writers will always reject them too/*either.

(47)   Writers don't accept suggestions, and neither do publishers.

(48)   *Writers often accept suggestions, and neither do publishers.

Alternatively, Payne (1985:200) proposes that instances of sentential negation allow paraphrases of the type 'I say of X that it is not true that Y', where X refers to contextually bound elements and Y to contextually free elements, and where either may be zero. Thus, the first

clause of example (47) passes this test in virtue of the fact that it may be accurately paraphrased as 'I say of writers that it is not true that they accept suggestions'.

Instances of sentential negation often have focus on one particular constituent (focus of negation), indicating that, if this constituent were changed appropriately, then the sentence would be true. Focus of negation may be indicated by intonation or by various syntactic means, often by placing a negative particle in front of the focused element. These cases are still instances of sentential negation. Thus, with intonationally expressed focus on *to Paris* in (49), the sentence may still be accurately paraphrased as 'I say of Mary that it is not true that she is going to Paris this weekend'. However, focus gives rise to the implicature that some other phrase in place of *to Paris* would yield a true proposition, for instance, 'Mary is going to Aarhus this weekend'.

(49)   Mary isn't going to Paris this weekend.

Clauses that contain negative elements, but which do not pass the tests for sentential negation, involve negation whose scope is more restricted than the proposition expressed by the clause (constituent negation):

(50)   There are some pretty villages not far from here.

This example fails the Klima tests for sentential negation and cannot be accurately paraphrased as 'I say of pretty villages that it is not true that there are some far from here'. The negative marker *not* here has scope only over the adjective phrase *far from here*, and the sentence as a whole is affirmative. For further discussion and exemplification of the distinction between constituent negation and narrow-focus negation, see Jäger (2008:20-23) and Willis, Lucas & Breitbarth (2013:4-6).

Some 35 of the cases examined involved either constituent negation (22 cases) or narrow-focus negation with focus on adverbs or adjectives (12 cases). These have frequently been analysed previously as instances of *nāwiht* as a negative adverb expressing standard sentential negation, but, when they are taken as a whole, it is clear that this is erroneous. Consider, for instance, (51), which Rissanen (1999:190) assumes involves *nawuht* as a negative adverb (and which he therefore treats as evidence bearing on the relative order of pronominal subjects and negation in inversion contexts).

(51)   ne   dorste he nawuht hrædlice ut   ofðære ceastre
        NEG dared he nothing quickly   out of the   city

        faran   up on ða muntas.
        go.INF up on   the mountains
        'He didn't dare go at all quickly out of the city up to the mountains.'
        (cocura, CP:51.397.32.2708)

In the data examined, there were many similar examples to this, justifying the conclusion that it is the presence of the adverb or adjective that is the crucial property of the construction, and that *nāwiht* therefore forms a constituent with the following adverb or adjective. This of course means that they are irrelevant for determining the principles of Old English word order at the clausal level.

Within these examples, there are two distinct patterns, which reflect a clear distinction in interpretation between constituent-negation readings and sentential-negation readings with narrow focus on the adverb or adjective. The distinction between the two types is in fact reminiscent of the behaviour of the narrow-focus/constituent negator *nalles* in Old High German (Jäger 2013:182-185). In the first pattern, *nāwiht* occurs in the absence of the sentential negator *ne* and the interpretation of the clause taken as a whole is not negative; that is, it cannot be paraphrased as 'I say of X that it is not true that…'. This constituent-negation use is illustrated in (52)-(54). Here it is clear that these sentences are affirmative; for instance, in (52), the monastery was indeed founded.

(52)   þæt mynster wæs geworden &   getimbred noht
        the monastery was founded   and built   nothing

        micle ær   from Hegiu
        much before by   Hegiu
        'The monastery was founded and erected, not long before, by He-
        giu…' (cobede, Bede_4:24.332.23.3338)

(53)   Ða   wæs in sumum tune   noht feorr sum ging   ðearfa…
        there was in some   hamlet not far some young pauper
        'There was in some hamlet not far (away) a certain young
        pauper…' (cobede, Bede_5:2.388.14.3858)

(54)   Ða   wæs æfter noht monegum gearum æfter his
        there   was after not   many   years   after his

        onweggewitenesse of   Breotone
        departure   from Britain
        'That was after not many years after his departure from Britain…'
        (cobede, Bede_3:5.170.9.1664)

In all but one case, the constituent negated is one of the following: an adverb, as in (52); an adjective, mostly either *feorr* 'far' in apposition to another noun phrase, as in (53); or one of the quantifiers *lytel* '(a) little', *manig* 'many' or *micel* 'great, much'.[3] Old English had *n(e)alles* and *nā* available as constituent negators for other grammatical categories (both also being used with adverbs) (Mitchell 1985:668-671).

    In other cases, *nāwiht* + adverb accompanies a verb preceded by the sentential negator *ne*. In these cases, the sentence overall is negative, and hence we are dealing with sentential negation; however, *nāwiht* indicates narrow focus of the negation on the adverb. This type is illustrated in (55) and (56). Both these examples are readily paraphrased as straightforward instances of sentential negation, for instance, 'The place won't stay empty long' or 'I say of that place that it is not true that it will stay empty long'. In these cases, therefore, *ne* marks the scope of negation, while *nāwiht* marks its focus. In all cases *nāwiht* modifies an adverb rather than an adjective, typically *lange* 'long (in time)' or *eaðe* 'easily'.[4]

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[3] On the syntax of quantifiers in Old English, see Carlson (1978) and Lightfoot (1979:168-86). Lightfoot follows Carlson in proposing that items whose Present-day English reflexes are quantifiers were indistinguishable from adjectives in their distribution in Old English (and hence termed 'pre-quantifiers'). This is by no means uncontroversial, with Fischer & van der Leek (1981) presenting various evidence that the distributional similarities between the two sets of items are more limited, suggesting a categorial distinction already in Old English. Wood's (2007:171-182) argument in favour of distinct determiners (and hence DPs) on the basis of word-order asymmetries among prenominal elements in Old English also implies that quantifiers represent a distinct syntactic category alongside determiners in the language. If adjectives and quantifiers are indeed already distinct, then we need to say that modifier *nāwiht* occurs freely with quantifiers, but to a much more limited extent with adjectives.

[4] There is one difficult case where the status of the element modified by *nāwiht* is unclear, namely the following (with emendation following Bosworth & Toller 1921, s.v. *unwæstmfæst*):

(55)   Forðæm ic þæt cuðlice wat,   þæt seo stow noht   lange
        because I that truly   know that the place nothing long

        æmettig   ne   wunað…
        empty   NEG   remain.PRS.3SG
        'Because I truly know what the place will not long stay empty/
        won't stay empty long.' (cobede, Bede_4:31.376.21.3765)

(56)   And þa gewilnunge naht   lange ne   ylde
        and the desire   nothing long NEG   delayed
        'And that desire delayed not long/didn't delay long.' (coapollo,
        ApT:1.10.8)

Again, we can analyse *nāwiht* and the adverb as forming a constituent,
following the crosslinguistically more general patterns discussed in section
3 above. The function and syntax of *nāwiht* in this use is therefore very
similar to that of *any* and *no* in the following Present-day English examples:

(57)   The house won't stay empty any longer.

(58)   The house will stay empty no longer.

    Finally, there are 6 examples which do not fit straightforwardly
into the categories postulated above and where we must therefore seriously

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(i)   Seo   Elizabeþ   þonne wæs unwæstmfæst [on lichaman, ac   wæstmfæst]
       the   Elizabeth   yet   was barren   in body   but fertile
       þara   godcundra mægena,
       the   divine   strength
       þeah   þe   heo   þæs   bearnes   lata wære;   heo
       though COMP   she   the   child.GEN   late be.PAST. SBJV.3SG   she
       þonne   þæs bearnes   noht   lata   ne   wæs.
       yet   the child.GEN   nothing   late   NEG   be.PAST.3SG
       'This Elizabeth was barren in body but fertile in divine power, even though she might
       be late of child; yet she was not late of child.' [Translation of Latin *Erat quidem
       Elisabeth sterilis corpore, sed fecunda virtutibus; tarda soboli, sed non tarda Deo*
       'Elizabeth was indeed barren in body, yet rich in virtue; late with offspring, but not
       late with God.'] (coblick, LS_12_[NatJnBapt[BlHom_14])

Here, *nawiht* (*noht*) modifies *lata*, which is listed by Bosworth & Toller (1921, s.v. *lata*)
as the only attestation of a noun meaning 'one who is late or slow'. However, an error for
the more common adverb *late* 'slowly, late', under the influence of Latin *tarda*, cannot be
excluded, in which case the example would fit the more general pattern described here. The
translation is in any case partially corrupt, making it difficult to draw firm conclusions on
the basis of it.

consider an adverbial analysis for *nāwiht*, plus one miscellaneous example (involving *noht þon læs* 'nonetheless') which need not be considered further. In one of these, given in (59), *nowiht* may the object of *fore*, the latter acting as a postposition, hence '(not) on account of anything'.

(59) & hie seoþþan ealle worlde wean & ealle
      and they afterwards all world.GEN sorrow and all

      þreatas oforhogodan,
      threats disregard.PAST.3PL

      & him nowiht fore ne ondredon…
      and them nothing for NEG be.afraid.PAST.3PL
      '…and they afterwards disregarded all the world's sorrow and all threats, and they did not frighten them at all…' (coblick, HomS_46_[BlHom_11]:119.57.1514)

In one other, given in (60), the syntax is rather unclear. In his edition, Skeat takes *naht* to be the object of *hæbbende* (i.e. 'having none of their treasure'). Constituent negation (motivated by the contrast with *mid þam sange* 'with the song') could also be at work. On either interpretation, it is unlikely to be adverbial.

(60) þa wurdon þa oþre awrehte mid þam
      then become.PAST.3PL the others concerned with the

      sange and naht heora
      song and nothing their

      gold hordas þe hi healdan sceoldon hæbbende
      gold hordes REL they keep.INF should.3PL having

      næron
      NEG.be.PAST.3PL
      'Then the others were concerned with the song and were not possessing their gold hordes which they should have guarded.' (coaelive, +ALS_[Martin]:1481.6947)

This leaves us with four examples that provide good evidence of use of *nāwiht* as an emphatic negative adverb, involving the verbs *gefrēdsan* 'feel, perceive' (two instances), *tweōgan* 'doubt', and *gemunan* 'remember, bear in mind':

(61)   …me   þincð þæt   ðu   plegast   and   þu   mine
     me.DAT   seems that you play.PRS.2SG and   you my

yrmðe naht   ne   gefredst.
misery nothing NEG   feel.PRS.2SG
'It seems to me that you are playing and you do not perceive/feel
my misery.' (coaelhom, +AHom_27:89.3980)

(62)   …þæt ðu   þas   dyntas naht   ne   gefretst…
     that you those blows   nothing   NEG feel.PRS.2SG
'that you do not feel those blows at all' (coaelive, +ALS_[Julian_
and_Basilissa]:146.1027)

(63)   Ne   twygeo   ic   þonne mec   noht   æfter þæs
     NEG   doubt.PRS.1SG I   then me.ACC nothing   after the

lichoman deaðe   hræðe   gelæd   beon to   þam   ecan
body.GEN   death   swiftly carried be.INF to   the   eternal

deaðe   minre sawle   & helle   tintregu underðeoded
death.DAT my soul.GEN   and hell.GEN   torments subjected

ne   beon.
NEG   be.INF
'I have no doubt that, after the death of this body, I shall be carried
swiftly to the eternal death of my soul and be subjected to hell's
torments.' [Translation of Latin *Nec dubito me post mortem corpo-
ris statim ad perpetuam animae mortem rapiendum, ac infernali-
bus subdendum esse tormentis*.] (cobede, Bede_3:11.190.21.1921)

(64)   Þonne hwæþere æt   þære halgan Elizabet seo hire gebyrd
     then   QU   at   the   holy   Elizabeth this her condition

naht   gemunan   þe   heo hire   on ylda   þa
nothing remember.INF   REL she her.DAT on old.age   there

wære?
be.PAST.SBJV.3SG
'With regard to the holy Elizabeth, ought not her condition in her
advanced years ever be borne in mind?' (coblick, LS_12_[NatJn
Bapt[BlHom_14]]:163.41.2067)

These suggest relatively minor 'leakage' of the type found in Present-day German; that is, *nāwiht* has begun to be used emphatically with verbs with scalar semantics, but remains at a low frequency in such uses.

function	no. of attestations
subject	9
direct object	45
[of which, direct object of optionally transitive verb	4]
[of which, direct object of modal	3]
object of preposition	5
complement of 'be' or '(be) worth'	6
total argument	**65**
extent argument of verb of succeeding	7
extent argument of verb of harming	4
extent argument of verb of caring	3
total extent argument	**14**
constituent negation of adverb, quantifier or adjective	22
other constituent negation	1
narrow-focus negation of adverb, quantifier or adjective	12
total constituent and narrow-focus negation	**35**
adverb	**6**
other	**1**
TOTAL	**121**

Table 2. Distribution of functions of *nāwiht* in the Old English texts examined.

6. Conclusion

The overall pattern of uses of *nāwiht* in the texts examined is summarized in Table 2. From this distribution, we have seen that:

(i)　in these texts, *nāwiht* is overwhelmingly used in contexts that do not imply the emergence of an emphatic negative adverb by reanalysis;

(ii)　a substantial proportion of cases do, however, require us to posit the development of a constituent and narrow-focus negator, largely limited to positions modifying adverbs, quantifiers or adjectives;

(iii) the frequency of potential bridging contexts for emergence of adverbial *nāwiht* is 17% of the total tokens of *nāwiht* (21 out of 121), a substantial body of evidence for an acquirer to base a reanalysis on, lending credence to the role of these contexts in facilitating the early impetus for Jespersen's cycle, both in English and, by extension, crosslinguistically;

(iv) 'leakage', that is, use of the negative indefinite pronoun beyond the core of extent-argument verbs exists, but at levels similar to what is likely to be found in some present-day languages that are not usually characterized by linguists as being at stage II of Jespersen's cycle.

　　　We can therefore conclude, concurring with Ingham (2013:123-4), that the evidence for adverbial *nāwiht* in Old English is indeed rather limited, and that Old English is a typical incipient Jespersen's cycle language, with the potential of entering stage II (as subsequent Middle English developments amply attest to), but not there yet.

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