Revisiting '*it*-extraposition': The historical development of constructions with matrices *(it)/(there) be* + NP followed by a complement clause

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Abstract

This article traces the historical development of complement constructions with matrices containing *be* + NP with *wonder* as well as those containing *be* + *tweo*/*doubt*, and proposes an analysis of them at two levels of generality. At the meso-constructional level, all the forms of *(it/that)* + *be* + *wundor* are analysed as historical variants of a predicative matrix and those with (*of that*) + (*it/there*) + *be* + *tweo* as historical variants of an existential clause. At the macro-constructional level, we argue that the two meso-constructions share the same schematic functional and structural components, which is evidenced by the fact that they both allow for comparable lexical and grammatical readings, and that the latter readings have the same paradigmatic variants, viz. parentheticals and discursively juxtaposed independent sentences. In view of this we posit a single macro-construction, with matrix and complement clause as the primary structural units. We thus propose a different analysis for the subtype with predicative matrix than the traditional *it*-extraposition account, which treats the *that*-clause as the extraposed subject of the whole construction, and views subject extraposition as a phenomenon *sui generis*. Against this, our analysis "respects the overt form" (Langacker 1991: 69) which the existential and predicative matrices and their complement clause have had through their whole history, and proposes semantics naturally coded by this form.

Keywords: extraposition, complementation, existentials, predicatives, interpersonal qualification, history of English

1. Introduction[1]

In this article, we examine the historical development of complementation constructions whose matrix is a predicative or existential clause containing one full NP, followed by a complement clause, as

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[1] We dedicate this article to Teresa Fanego in warm appreciation for all that she has done and continues to do in support of true scholarship of the English language, in particular, the functional-cognitive study of English historical syntax. We salute Teresa for her remarkable achievements as researcher, teacher, supervisor, editor and network builder. A researcher *pur sang*, Teresa has in all her other academic roles made very many good things happen through her integrity and generosity. She has always steered clear of personal acclaim and has focused in every venture on the (joint) work and the people involved. For all these reasons we are delighted to

illustrated by (1)-(2). We will give arguments for viewing them as one 'macro-construction', i.e. as a form-meaning pairing defined by a highly schematic structure and corresponding functions (Traugott 2008: 236).

(1) My kids got to see that my out-of-home life was far more complex and intense than they thought. *It was a wonder to them* that I get to do all this stuff. (https://our-story-begins.com/2015/08/)
(2) such preparations are used in certain cases of anaemia and even by some people who believe (though it isn't proven) that it will prevent their hair from greying. *There is no doubt* that fluoride is necessary for the healthy formation and growth of bones and teeth [...](WB)[2]

Theoretically, we situate ourselves within the tradition of semiotically-based, functional-structural construction grammars such as Langacker (1987, 1991, 2002), Halliday (1994), and McGregor (1997). They all seek to identify which precise units are involved in conceptually motivated structural relations and they recognize the role played by different types of structural relations, such as modification versus complementation, in the way form codes meaning.

 In a nutshell, our functional-structural analysis is as follows. The primary structural units are the matrix and the complement clause. On a lexical reading, the matrices convey a specific emotional or cognitive state. The *that*-clause represents the proposition presupposed in the emotion process or created by the cognition process depicted by the matrix. In other words, on their lexical reading, they are factive or reporting complementation constructions. In (1) the matrix *it was a wonder to them* conveys that the speaker's children are very surprised. The *that*-clause contains the presupposed factive proposition that they are surprised about. In (2), the matrix *there is no doubt* conveys that scientists know for sure *that fluoride is necessary for healthy bones and teeth* as opposed to some people believing without proof that fluoride prevents their hair from going grey. The complex sentence with *there is no doubt* is thus a construction of reported thought.

 Importantly, the two matrix types can, through grammaticalization and subjectification, acquire a speaker-related meaning, conveying mirative, evidential or modal qualifications, which scope over the proposition in the complement clause (McGregor 1997: 64-73). In (3), *it's no wonder* comments on the proposition in terms of its (un)expectedness, i.e. mirativity (DeLancey 2001). Its meaning can be paraphrased by an expectation adverb such as *of course* (Simon-Vandenbergen & Aimer 2008: 172). The speaker's lack of surprise about the proposition *Norwegians hunt whale* is justified by the following clause, *There's nothing else left to catch*. In (4), *there is no doubt* expresses the speaker's modal qualification by a high degree of certainty of the proposition that the race horse Petite Margot will prove to be a winner. The use of epistemic modal *may* in the preceding sentence

[2] The examples marked with (WB) were extracted from Wordbanks*Online* and are reproduced with the permission of HarperCollins. For examples found on the Internet with Google, the url is given.

supports this reading, as it is another instance of the speaker modally qualifying his assessment of Petite Margot.

(3) *It's no wonder* Norwegians hunt whale. There's nothing else left to catch. (WB)
(4) SHE may never match her full-brother Ollie Magern but *there is no doubt* PETITE MARGOT has a big race in her. (WB)

There is no *syntactic* difference between the lexically (1)-(2) and grammatically used (3)-(4) complementation constructions. Both consist of a matrix and a subordinated complement clause. However, as pointed out by Boye & Harder (2007: 584-589) for examples with a matrix like *I think*, different *discursive* uses are involved, in which either the matrix or the complement clause is discourse primary. This can be brought out by textual follow-ups such as questions or reactions like *really*? which pick out the unit that is primary in the discourse context. In many actual contexts, the distinction, which is of its nature cline-like (Hopper & Traugott 1993: 6), remains underspecified, but it can be illustrated for clear cases. With a clear lexical example like (1), *It was a wonder to them that I get to do all this stuff*, following questions and exclamations clearly pick up on the matrix: *Was it a wonder to them? Really?* By contrast, an example with a miratively used matrix as in (3) would not be queried by an open-ended polar interrogative *Is it a wonder?* and *Really?* would be felt to apply to the whole complex sentence in its meaning 'of course, Norwegians hunt whale'.

The comprehensive account proposed here goes against the mainstream position, which analyses examples with predicative matrix differently from those with existential matrix. More specifically, the examples with *it* + *be* + predicative complement are set apart as a construction in its own right involving *it*-extraposition (Quirk et al. 1985: 1391; Huddleston & Pullum 2002: 1403). On this analysis (often credited to Rosenbaum 1967), the *that*-clause in (1) is said to be extraposed from the subject position, which is filled by *it.* The "extraposition construction" in (1) is thus viewed as deriving from the non-extraposed structure, (1)' *that I get to do all this stuff was a wonder to them*. Consequently, the clause in final position is analysed as "semantically … stand[ing] in the same relation to the verb (or verb + predicative complement)" (Huddleston & Pullum 2002: 1403) as in the non-extraposed variant, i.e. as a subject clause. In other words, the *that*-clause is viewed as the 'predicand' to which the predicate phrase relates, e.g. *is a wonder* in (1). The extraposition analysis of examples with predicative matrix has as an important consequence that the examples with existential matrix are not seen as subtypes of the same overarching construction, since they do not have alternates in which the *that*-clause functions as subject.

In this contribution we set out to show that the historical development of these constructions supports analysing them as one schematic macro-construction, which provides a natural explanation for their similar – lexical and grammatical – meanings. At the same time, we will also do justice to the distinct grammatical semantics of the two matrix types, by analysing them at the meso-constructional level, where sets of similarly behaving more specific constructions can be distinguished (Traugott 2008: 236). We will trace the development of the complementation constructions whose matrices contain the nouns *wonder* and *tweo/doubt* from Old to Present-day English. Because the noun *doubt* entered English from French only at around 1225, we will investigate the data with Germanic *tweo* ('doubt') for the Old English period. Throughout their history, these nouns have featured in matrices with *be*, either predicative (1) or existential (2), which we will analyse as subtypes, or more specific meso-

constructions (Traugott 2008: 236), of the very schematic complementation structure we posit at the macro-level.

In Section 2 we describe the extraction and compilation of the corpus data on which our study is based. We reconstruct the historical development of the complementation constructions in two main temporal stages, Old English (Section 3) and Middle to Present-day English (Section 4). As we will show, the greatest changes took place between these two periods, with the constructions studied remaining relatively stable from Middle English onwards. In Section 5, we spell out the main consequences of our alternative account in comparison with the traditional extraposition account.

2. Extraction and compilation of corpus datasets

2.1 Datasets with complementation constructions whose matrix contains be + NP with wonder

Since the *Oxford English Dictionary* (*OED*) puts the first occurrence of the noun *wonder* at *c*.700, it was possible to collect data from Old English on. Diachronic data were extracted from the following corpora: the York-Toronto-Helsinki Parsed Corpus of Old English Prose (YCOE) for the period 750-1150, the Penn-Helsinki Parsed Corpus of Middle English (PPCME2) for 1150-1500, the Penn-Helsinki Parsed Corpus of Early Modern English (PPCEME) for 1500-1710, and the Corpus of Late Modern English Texts (CLMETEV) for 1710-1920. Exhaustive extractions were made on the noun *wonder*, including all spelling variants attested in the *Oxford English Dictionary (OED)* as well as all morphological variants. This yielded 2017 hits in total. From these extractions, we manually selected all instances with a matrix containing a NP with *wonder* as predicate of *be*, followed by a finite complement clause, as in (1) above. Table 1 indicates the number of relevant instances retrieved for the three main historical periods, and their subperiods.

[Table 1 here]

Table 1. Historical Data: Complementation Constructions with Matrices (*it*)/(*there) be + Wonder*

Period	Corpus	N of words (millions)	N Relevant tokens	Normalized frequency (/1,000,000)	Subperiod	N Relevant tokens
Old English: 750–1150	YCOE	1.45	64	44.1	750-950	15
					950-1150	49
Middle English: 1150-1500	PPCME	1.16	38	32.8	1150-1350	24
					1350-1500	14
Early Modern English: 1500-1710	PPCEME	1.79	14	7.8		
Late Modern English: 1710-1920	CLMETEV	15.01	92	6.1		

The synchronic dataset was compiled from WordBanks*Online*. For reasons of comparability with the diachronic data, we extracted data from written British English sources only. We took a random sample of 250 instances of the noun *wonder*. This yielded 89 instances of the complementation constructions in question.

2.2 Datasets with complementation constructions whose matrix contains be + NP with tweo/doubt

For Old English, the YCOE was trawled for examples with the noun *tweo* in all its spelling and morphological variants. From these, instances of the complementation constructions investigated were manually selected, yielding the number of relevant tokens indicated in Table 2. No relevant Middle English tokens were retrieved from the PPCME2; the only example of the noun was found in the prepositional phrase *wið-uten alche twene* 'without any doubt' (1150–1250). Out of the seven quotations of the lemma *tweon* in the online Middle English Dictionary, six involve the phrase *buton/wið-uten tweon* and just one instantiates a construction studied here.[3]

[Table 2 here]

Table 2. Old English Data: Complementation Constructions with Matrices (*it)/(there) + be + Tweo*

Period	Corpus	N of words (millions)	N Relevant tokens	Normalized frequency (/1,000,000)	Subperiod	N relevant tokens
Old English: 750–1150	YCOE	1.45	21	14.5	750-950	9
					950-1150	12

As the noun *doubt* was borrowed from Old French into Middle English around 1225, it was possible to collect diachronic data from Middle English on from the PPCME2, the PPCEME and the CLMETEV. Again, all spelling and morphological variants were included in the queries. Table 3 lists the number of relevant tokens retained for the two historical periods covered.

[Table 3 here]

Table 3. Historical Data: Complementation Constructions with Matrices (*it)/(there) + be + Doubt*

Period	Corpus	N of words (millions)	N Relevant tokens	Normalized frequency (/1,000,000)	subperiod	N relevant tokens
Middle English	PPCME	1.16	9	7.8	Early	1
					Late	8
Early Modern English	PPCEME	1.79	17	9.5		
Late Modern English	CLMETEV	15.01	311	20.7		

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[3] *Nis nan twyn þæt* eow ne beo forgolden ælc þære stæpe þe ge to Godes huse steppeð, ebnben [read: emben] eower sawle þearfe.
'There is no (lit. not-is no) doubt that you will be recompensed for each step that you take towards God's house with regard to your soul's need.' (a1150(OE) *Vsp.D.Hom.*(Vsp D.14))

The synchronic dataset was compiled from written British English sources of the Wordbanks*Online* corpus. We took a random sample of 250 hits, extracted on the noun *doubt*, which yielded 88 relevant tokens.

3. Complementation constructions with *(it)*/*(there) be* + NP in Old English

In this section we first survey the main descriptive lines set out in historical reference works and studies for the complementation constructions with *(it)*/*(there) be* + NP in Old English (Section 3.1). As we will see, these historical studies deviate already on a number of points from the traditional approach to *it*-extraposition found in synchronic reference works such as Quirk et al. (1985) and Huddleston & Pullum (2002). Firstly, it is generally assumed that the so-called 'extraposed' form is historically prior and should be seen as the default (e.g. Visser 1970, Los 2015, Ramhöj 2016). Secondly, a number of authors tacitly or explicitly include examples with existential matrices as instances of the same complementation construction. Finally, considerable attention has gone to the early forms of predicative and existential matrices without *it* and *there*, and to the precursor of *it*-extraposition featuring the demonstrative *that*. In Section 3.2 we will propose our own account of the Old English data, which explicitly delineates the macro-construction more broadly as subsuming predicative and existential matrices.

3.1 The literature on the development of **it**-extraposition in Old English

It is generally assumed that the earliest variant, or the source construction, of *it*-extraposition is formed by examples whose matrix consists of *be* + NP only, as in (5). Such matrices have been referred to as "subjectless" (e.g. Visser 1970) or "impersonal" (e.g. Traugott 1992, Visser 1972).

(5) *Micele mare wundor is* þæt he wolde beon mann on þisum life.
'Much greater wonder (it) is that he wanted to be a human in this life' (YCOE, 950-1050)

Intriguingly, a number of authors, when they discuss precursors of *it*-extraposition such as (5), include existential examples such as (6).[4] For the latter, the term "subjectless" seems inappropriate, as, on at least some analyses, *nan tweo*, which denotes the entity (not) existing, is the subject in this clause . However, both (5) and (6) can be called "impersonal" in the sense that they do not explicitly code any personal participants in the process (who may nevertheless be involved in their contextualized interpretation).

(6)   forþon *nis nan tweo* þæt forgifnesse syllan nelle.
'therefore there is no (lit. not-is no) doubt that he will give forgiveness' (Traugott 1992:271, 850-1050)

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[4] In a sense, this generalization over examples with predicative matrices like (5) and existential ones like (6) is entailed by the notion of "null subjects" in the formal tradition, which refers to the presence of a syntactic position for expletives, which are left unexpressed, be they *it* or *there* (e.g. Hulk & van Kemenade 1993, Williams 2000).

Some authors seem to tacitly interpret the latter as predicative structures (p.c. Méndez-Naya). This is also how they tend to be parsed in the *York-Toronto-Helsinki Parsed Corpus of Old English Prose*.[5] Others, like Visser (1979, I, §27n 19-20), Traugott (1992: 271), Williams (2000: 179-180) and Pfenninger (2009: 54), translate examples like (6) into Present-day English existential clauses, but do not comment on this in their description.

In a similar way, examples with an existential matrix with subject *it* have been included in discussions of *it*-extraposition. Because the distinction between noun and adjective was not clear in Old English (and early Middle English) in a number of cases (see Van linden 2012: 132), some of these examples are, strictly speaking, ambiguous between an existential and a predicative reading, as in (7). However, the possibility of the existential reading is sometimes overlooked.

(7) But Jhesus … he knewe alle men; and for *it was not nede* to hym, that ony man schulde bere witnessyng
'Jesus … He knew them all, so it was not necessary ['there was no need to him', our translation] that anyone gave testimony on them … ' (1380, *The New Testament in English* according to the version by John Wycliffe, cited in Loureiro-Porto 2010: 374)

When no predicative reading is possible, it is mostly noted that *it* is an alternative of existential *there*, as does Mitchell (1985, I: 625) with regard to example (8).

(8) *Is hit lytel tweo* þæt…
'Is there little doubt that …?' (Mitchell 1985: I, 625, our translation)

The largely tacit inclusion of examples with existential matrices under the heading of extraposition constructions seems to be caused by the surface similarity between the so-called 'expletiveless' predicative (5) and existential matrices (6), and between predicative (1) and existential matrices (8) with subject *it*. To our knowledge, no proposals have been made to consciously subsume the subtypes with predicative and existential matrix under the same macro-construction and present structural and semantic arguments for this.

A second precursor of *it*-extraposition pointed out in the literature is formed by examples with matrices with the demonstrative *that* as subject, as in (9).

(9) *þæt is wundor,* þæt ðu swa ræðe forhæfdnisse & swa hearde habban wilt.
'that is wonder, that you want to have fierce and harsh abstinence.' (YCOE, 850-950)

Examples of this type are generally ascribed the same structure (e.g. Mitchell 1985: §1964) as, but different discourse semantics than, *it*-extraposition. According to Möhlig-Falke (2012: 176), for

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[5] Out of the 12 'subjectless' matrices with *tweo* in YCOE (see Table 5 below), 10 have the Existent NP tagged as predicative NP (NP-NOM-PRD), as in (i) below. In the other two instances, the NPs are tagged as NP-NOM.

    (i)   ((IP-MAT-SPE (NP-NOM-x *exp*) (ADVP (ADV For+d+am)) (NEG+BEPI *nis*) (NP-NOM-PRD (NEG+Q^N *nan*) (N^N *tweo*)) (CP-THT-SPE-x (C +t+at) þes andwearda wela myrð & let þa men þe bioð <atehte> to þam soðum gesælðum.))
                'Therefore there is no doubt that this present wealth hinders and impedes the men that are attracted to the true felicities.' (YCOE 850-950)

instance, the demonstrative subject *that* "claims … the audience's attention and anticipates that something of high information value follows in the appositional clause". Interestingly, Méndez-Naya (1995) advocates a different structural analysis for examples like (9), according to which the *that*-clause is in an appositional relation to the demonstrative subject *that*. Her main arguments for this are the following. Firstly, in Old English the default was to have no explicit subject in impersonal predicative matrices, but *if* the subject was explicitly coded, it was more commonly demonstrative *that* than *it*. The choice for *that* was always motivated by contextual emphasis (Méndez-Naya 1995: 31). Secondly, Méndez-Naya (1995: 28) argues that the emphasis on subject *that* went together with a strong tendency to have punctuation, indicative of a syntactic/intonational boundary, after the matrix. As punctuation in historical texts may have been inserted by the text editors, it has to be noted that this is a tenuous argument.[6]

3.2 The development of complementation constructions with *be + wundor* and *be + tweo* in Old English

In this section, we present a description of the complementation constructions with *wundor* and *tweo* in our Old English datasets, distinguishing the meso-constructional level (Section 3.2.1) from the macro-constructional level (Section 3.2.2). At the meso-constructional level, we show that the complementation constructions with *be + wundor* have a predicative matrix and those with *be + tweo* an existential one. By way of grammatical argumentation for this (see McGregor 1994: 305), we adduce the different syntactic paradigms formed by the matrix variants with *wundor* and *tweo*. We also propose that the predicative and existential matrices code – subtle – semantic differences. At the macro-constructional level, we argue that the different meso-constructions share the same schematic structural and functional components. We argue that their primary structural units are the matrix and the complement clause. In support of this, we point out that the matrices, in their grammatical uses, which qualify the proposition in the complement clause, have the same paradigmatic variants, viz. parentheticals and independent sentences juxtaposed to the proposition they relate to. We then show how these structural units correlate with the main functional units of the lexical and grammatical readings, as set out for examples (1)-(2) and (3)-(4) in the Introduction.

3.2.1. Predicative *be + wundor* versus existential *be + tweo*

Our grammatical argumentation to distinguish between predicative and existential matrices of complement constructions in Old English rests on the different matrix variants observed with *wundor* and *tweo*. Tables 4 and 5 categorize the different matrix types attested in the Old English data in terms

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[6] It is interesting to note that examples of such appositional relations between cataphoric *that* and a *that*-clause are still – infrequently – found in Present-day English, as in (ii). In this example, the comma between matrix and complement clause suggests that the complex sentence would naturally be uttered with two tone groups (marked by //), which correspond to two information units (Halliday & Matthiessen 2004: 88): *he says that's no wonder // that the wedding had been postponed //*.

(ii) He   says   *that's   no   wonder*,   that   the   wedding   had   been   postponed. (http://tvmegasite.net/updates/passions/2005/pass-01-31-05.shtml)

of the absence or presence of the pronouns *it* and *there*, and the presence of demonstrative *that* referring forward to the proposition in the complement clause.

Table 4, which summarizes the *wundor* data, presents the variants of the predicative matrix recognized in historical studies (see Section 3.1). They can have no overt subject (10), subject *that* (11) or subject *it* (12), and the predicative complement with *wundor* appears in the nominative case. The analysis of all these types as construing a predicative relation is uncontroversial.

(10) *Micele mare wundor is* þæt he wolde beon mann on þisum life
'Much greater wonder (it) is that he wanted to be a human in this life' (YCOE, 950-1050)
(11) *þæt is wundor,* þæt ðu swa ræðe forhæfdnisse & swa hearde habban wilt.
'that is wonder, that you want to have fierce and harsh abstinence.' (YCOE, 850-950)
(12) *Full mycel wundor hit wæs* þæt þæt mæden gebær cild.
'Full great wonder it was that that maiden bore a child' (YCOE, 1050-1150)

[Table 4 here]
Table 4. Classification of Matrix Types with *be* + *Wundor* in Old English Dataset

OE Subperiods	Ø *be* **wundor**	*þæt be* **wundor**	*hit be* **wundor**	TOTAL
850-950	2	9	4	15
950-1050	13	7	2	22
1050-1150	8	14	5	27
TOTAL	23	30	11	64

The sample is really too small to formulate reliable quantitative generalizations but it offers some support for the idea that the variants without overt subject and with subject *that* are older than the matrix with *it*, because the latter is the least frequent in the Old English dataset.[7]

Table 5 summarizes our classification of the matrix types with *tweo* in our Old English dataset. It is immediately clear that we are dealing with a different syntactic paradigm than that of the predicative matrices in Table 4.

[Table 5 here]
Table 5. Classification of Matrix Types with *be* + *Tweo* in Old English Dataset

OE Subperiods	Ø *be tweo*	*þæs be tweo*	*hit be tweo*	*þær be tweo*	TOTAL
850-950	5	3	1	0	9
950-1050	3	0	0	0	3
1050-1150	4	1	3	1	9
TOTAL	12	4	4	1	21

Most strikingly, the variant with existential *there*, e.g. (16), is part of this paradigm, which is not attested in the *wundor* dataset. This very fact reveals that in the variant with *it* in examples like (8) above and (15) below, we are dealing with existential *it* (Breivik 1983: 257; López-Couso 2006, 2011,

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[7] In terms of strict chronology of appearance, matrices with subjects *hit* and *that* and without overt subject are found in the same texts, i.e. in Boethius' *The Consolation of Philosophy*, Gregory's *Pastoral Care* and *Orosius*.

p.c.). Indeed, when Mitchell (1985, I, 625) discusses *it* as a more common alternative of expletive *þær*, he illustrates this precisely with the Old English example *Is hit lytel tweo þæt*…. quoted as example (8) above. The late occurrence of existential *þær* in our dataset is in accordance with the chronology of its appearance registered in the literature. Traugott (1992: 217–219) notes that *þær* became more frequent – yet by no means obligatory – in Late Old English only. Moreover, it has been observed that negative existentials (such as (13)-(16) below) lagged behind affirmative ones in adopting existential *there* (e.g. Breivik 1983; López-Couso 2006: 182; 2011: 96).

The variant which contains only *be* and a NP with *tweo*, e.g. (13), is likewise an existential clause.[8] As pointed out by, amongst others, Breivik (1983: 278, 319, 1989: 50), López-Couso (2006: 182) and Traugott (1992: 217–219), this variant was the most common type of existential in Old English, which it also is in the small dataset surveyed in Table 5.

The variant that has received least attention and that we would like to draw particular attention to is the one with the genitive of the demonstrative *that*, *ðæs* 'about that', e.g. (14). The referential function of *ðæs* in the existential matrix is wholly equivalent to that of subject *þæt* in the predicative matrix (11): they both realize emphatic cataphoric reference to the upcoming *that*-clause. The fact that this cataphoric reference to the *that*-clause in apposition is realized by a genitive shows that the matrix in (14) does not have a predicative structure because the demonstrative would have been in the nominative then. It is precisely because the matrix is existential that its subject position cannot be used to point forward to the complement clause.

(13) *nan twio næs* þæt he þurh þone sceolde cuman to hefegum martyrdome.
'no doubt (there) was (lit 'not-was') that he should come to grievous martyrdom through it.' (YCOE, 850-950)
(14) *Nis ðæs* ðonne *nan tweo*, gif suelc eaðmodnes bið mid oðrum godum ðeawum begyrded, ðæt ðæt bið beforan Godes eagum soð eaðmodness, [...]
'(There) is (lit: not-is) about that no doubt then, if such humility is encompassed with other good virtues, that that is true humility before God's eyes, [...]' (YCOE, 850-950)
(15) ða cwæð he: Forðæm *hit is nan tweo* þæt ða goodan beoð symle waldende, & þa yflan nabbað nænne anwald;
'Then he said: Therefore there is no doubt that the good ones are always powerful, and the evil ones do not have any power.' (YCOE, 850-950)
(16) Mid þy þa seo gesomnung eall gehyrde swa openlice þa stefne, þa *næs þær nænig tweo*, þæt hit nealæhte þara forðfore, þe þær gecigde wæron.
'Since the whole congregation then heard the voice so openly, there was no doubt then that it drew near to the death of them who were named there.' (YCOE, 1050-1150)

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[8] We will not enter into the different analyses that have been proposed in the literature for this syntagmatic pattern in Old English. In the tradition represented by an author such as Breivik (1983, 1989) *nan twio* in (13) would probably be analysed as the subject NP and no covert expletive would be posited. By contrast, in the tradition represented by Hulk & van Kemenade (1993) and Williams (2000) the picture is more complex. On the one hand, they hold that some Old English existentials, such as (13), contain a syntactic position for enclitic *it* or *there* but leave the expletive subject unpronounced, which is why they speak of a null-subject. On the other hand, some existentials are considered not to have such a syntactic position and to be expletiveless, i.e. without a null subject. We will not go further into this discussion as our focus is on the semantic and discursive contrasts between predicative and existential clauses.

The analysis we propose for the distinct syntactic paradigms associated with the predicative and existential matrix in Old English is summarized in Table 6 in terms of the presence or absence of clitic or demonstrative pronouns. This table can also be read as the predictions we formulate about the distribution of these elements in predicative and existential matrices, whereby we not only specify possible but also impossible elements and combinations. Table 7 gives the quantitative attestation of the subtypes in the *wundor* and *tweo* datasets.

[Table 6 here]

Table 6. The Distribution of Matrix Types in Old English Complementation Constructions

Matrix	Predicative	Existential
no clitic pronoun	Ø BE wundor/ wundor Ø BE	(Ø) BE tweo/ tweo (Ø) BE
(h)it	*(h)it* BE wundor/ wundor *(h)it* BE	*(h)it* BE tweo/ tweo *(h)it* BE
There	Excluded (*þær BE wundor)	*þær* BE tweo
demonstrative pronoun referring to complement	*þæt* (NOM case) BE wundor	*þæs* (GEN case) BE tweo
excluded combinations	**þæt (h)it* BE wundor	**þær (h)it* BE tweo

[Table 7 here]

Table 7. The Distribution of Matrix Types in Complementation Constructions with *Wundor* and *Tweo* in OE Datasets

Matrix + post-verbal complement	Predicative: *wundor*	Existential: *tweo*
no clitic pronoun	23 (36%)	12 (57%)
(h)it	11 (17%)	4 (19%)
There	0	1 (5%)
demonstrative pronoun referring to complement	30 (47%)	4 (19%)
Total	64 (100%)	21 (100%)

With regard to the pronouns that can occur as subjects, it is generally accepted that predicative clauses can have *it* or *that* (not both together), but not *there*. *It* or *that* simply make explicit the person and number marking associated with the finite verb in the matrices without overt subject. Existentials in Old English could have *it* or *there* (not both) as subject, and not *that*. These generalizations are borne out by the *wundor* and *tweo* data.

The presence of *it* and *there* in the existential matrices can be related to the distribution of pronouns surveyed by Larsson (2014) for weather expressions and existentials in Germanic languages: these pronouns include (the counterparts of) *it*, *there*, and in some Germanic languages *here*, but never *that*. This distribution is suggestive of the semantics which, in accordance with our cognitive-functional theoretical position, we ascribe to the clitic subjects of existentials (see e.g. Langacker 1991: 352ff). Rather than viewing them as semantically empty, we propose to extend the 'ambient' meaning that Bolinger (1973: 261-264) ascribes to *it* in weather expressions to existential *it* and *there*, which likewise index the environment to which the semantics of the relation between *be* and the existent NP is related (see below).

Subjects *that* and *it* in the predicative matrices, by contrast, refer, in our view, to the proposition in the complement clause. In Old English complementation constructions with predicative matrices, this pronominal link was not an inherent part of the construction: the matrix could have no pronominal subject (36% of the *wundor* data). The link between matrix and complement clause is already coded by the complementation construction as such, and by the complementizer, if one is present. Any pronominal coding is in addition to this. That the demonstrative *that* refers forward to the proposition is generally accepted. In the *wundor* data, the option of using the emphatic cataphoric demonstrative is the most common one (47%). The other option is the use of clitic subject *it*. As surveyed by Kaltenböck (2003), the question has been hotly debated if *it* is a place-filler or has some meaning, and if the latter, whether or not it is referential. We side with Kaltenböck's (2003: 244-252) arguments for viewing *it* as weakly cataphoric: in an example like (12) *it* indicates that 'something' was 'full much wonder', and its identity is then provided by the following *that*-clause.

The existential matrices can also contain a pronoun referring to the proposition, which in Old English was always the demonstrative. As the subject position is not available for this, the cataphoric demonstrative appears in the genitive, which functions as an adjunct 'about that'. In our dataset *ðæs* occurs only in the variant without *it* or *there* (14).[9] The option of a pronoun referring to the proposition is chosen in 19% of the Old English data. It should be borne in mind that the link between the matrix and the proposition is in any case expressed by the complementation construction as such.

Having established that *wundor* is systematically used in predicative matrices and *tweo* in existential ones, the next question is what different grammatical semantics they code.

Predicative clauses are generally ascribed a 'categorizing' meaning: they put the entity referred to by the subject into a specific type or category. In complementation constructions with predicative matrices, the covert or overt subject is what Lyons (1977: 443) refers to as a "third order entity", "such abstract entities as propositions, which are outside time and space" of the situation represented in the matrix. For the grammatical semantics of a predicative complement realized by a full NP, we follow Langacker's (1991: 68) elucidation: the full NP 'conjures up' an instance conception for the purposes of making a type attribution. As Langacker (1991: 68) puts it, in such predicative clauses, a categorization relation is implied by the coded correspondence relation between instances. In the *wundor* data, the predicative complement can include premodifiers such as *micele mare* (10) or *full mycel* (12) that describe the size of the instance of wonder involved. In other words, in an example like (12), *Full mycel wundor hit wæs þæt þæt mæden gebær cild*, the third-order entity designated by the subject of the matrix (the birth of Jesus from a virgin) is said to correspond to, to be an instance of, 'a real great wonder', which implies that it is categorized as 'very wondrous'. The context of (12) suggests that the implied assessor is the speaker/preacher, who involves his audience into this assessment. In present-day example (1), *It was a wonder to them that I get to do all this stuff*, the addition of *to them*,

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[9] There does not seem to be any grammatical principle against *þæs* occurring in existentials with subject *it* or *there*, but the juxtaposition of two pronouns, one salient and one clitic, may generally have been avoided. *Þæs* is found in personal matrices with *habban tweo* ('have doubt'), as illustrated in (iii), where it points forward to the *that*-clause, realizing the discontinuous appositional relation discussed by Méndez-Naya (1995).

(iii) Hwylc geleaffullra manna is þæt *þæs ænigne tweon* an his mode *hæbbe*, þæt heofon ontyned sie to ðære stemne þæs sacerdes <on> þa tid þære halgan onsægdnesse, [...]
'Who of believing men is (one) that about that has any doubt in his mind, that heaven will be opened to the voice of the priest at the moment of the holy offering […]' (YCOE 950-999 HomM 11 (ScraggVerc 14) 80)

explicitly identifies the speaker's children as the experiencers of the wonder at their father's professional activities. In example (3), *It's no wonder Norwegians hunt whale, it's no wonder* is more likely to be interpreted as a purely speaker-related, subjective mirative qualification of the following proposition.

In sum, matrices with predicate phrases such as *be a/much/no wonder* allow the language user to set up a correspondence relation between an emotional reaction to, or a subjective assessment of, the proposition, whereby the premodifiers of the predicative NP can convey degree modification of the emotion or evaluation. The very fact that the predicative matrix is impersonal, and typically does not code any experiencers[10] allows for both lexical and grammatical interpretations. In the former, experiencers are contextually inferred, while in the latter, the impersonal coding squares with the Langackerian (2002) notion of subjectivity, according to which the speaker remains 'offstage' in a subjective construal.

What then are the grammatical semantics of the existential matrices? In Davidse (1992, 1999) the existent NP was argued to code the quantified instantiation of a type of entity which is set within a specific spatio-temporal domain by the information coded or implied by the whole existential clause. Example (16) suggests a lexical contextualization of *næs ðær nænig tweo*, in which it is the congregation that knew for sure *that it drew near to the death of them who were named there*. The matrices of examples such as (14) and (15) convey speaker-related, 'subjective', meanings: the domain of instantiation is the here and now of the speaker's assessment, within which 'no doubt' (14)-(15) exists. The matter which the speaker qualifies with great certainty is the proposition in the complement clause, explicitly referred to by *ðæs* in (14). Thus, these existential matrices convey cognition states such as 'not doubt/know', or modal qualifications such as 'certainty', which are related to the proposition contained in what is structurally the complement clause. The premodification of the existent NP can convey degree modification of the emotion or cognition process, and of the modal evaluation. Again, we note that the impersonal nature of the existential matrix allows for both lexical readings, in which cognizants are contextually inferred, and grammatical interpretations. Both lexical and grammatical readings are attested from the earliest period on.

Whilst the impersonal predicative and existential structures code, strictly speaking, different grammatical semantics, the above discussion has shown that they can be used to evoke very comparable meanings. In the next section we turn to the shared structural and functional features of the two types of complementation constructions.

3.2.2. The macro-level: constructions with matrices *(it)/(there) be* + NP followed by a complement clause

In the Introduction, we have already indicated that the primary structural assembly relation in these complementation constructions is between the matrix (irrespective of whether it is predicative or existential) and the complement clause. In other words, we reject the extraposition analysis of the subtype with predicative matrix according to which the *that*-clause stands in a subject relation to verb and predicative complement, yielding a structural analysis with three basic constituents (e.g.

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[10] Unless they are coded by an adjunct, as in (1) *It was a wonder to them*.

Huddleston & Pullum 2002: 1403). In our view, it is only in the so-called 'non-extraposed' variant, as in (17), that the complement clause is the subject of the construction.

(17) he knew such an antidote for it ... *That the snakes did not do him any harm was no wonder*, but how he managed it with the vipers ... I know not. (WB)

Following Halliday (1994) and Langacker (1991), we analyse the *that*-clause functioning as subject in examples like (17) as a nominalized clause. *That the snakes did not do him any harm* is reclassified as a nominal both externally, allowing it to function in the nominal subject slot, and internally, as it discharges all the basic functions of nominals, i.e. type specification, instantiation, quantification and grounding to the deictic centre. The "proposition conveyed by the nominalized clause can be regarded as a detailed type specification for the resulting noun. … The specified type … has only a single instance, with the consequence that the derived noun is inherently definite" (Langacker 1991: 148-149).[11]

Our position is that complementation constructions with impersonal predicative and existential matrices consist of two primary constituents, the matrix and the complement clause. The Old English data provide formal support for this analysis in that, irrespective of the matrix type, the same two variants of the complex sentence structure are attested. In the first variant, the clause corresponding to the matrix appears as an independent sentence discursively 'juxtaposed' to the preceding sentence, which contains the proposition it relates to, as in (18) and (19). In (19), the juxtaposed sentence *Nis þæs nan tweo* contains the demonstrative *that* in the genitive case, which refers back to the preceding proposition about which there is no doubt. The second variant is a parenthetical clause, which comments on the proposition it interrupts, like the parenthetical *as*-clause in (20).[12] As argued by Brinton (2008: 124-127, 154-157, 235-237), *as*-clauses can be viewed as parenthetical comment clauses: they function in the same way as adverbial disjuncts (Quirk et al. 1985: 612ff) to express a speaker comment applying to the proposition. Importantly, the so-called 'non-extraposed' variants, as illustrated in (17), are not attested in the Old English data. The syntactic paradigms of the complex sentences with predicative and existential matrices are thus fully identical. This supports a structural analysis of the macro complementation construction in terms of the two clauses, matrix and complement clause, as main building blocks.

(18) Þanon he welt þam gewealdleðerum ealle gesceaftu. *Nis nan wundor*, forþam ðe he is cyning & dryhten & æwelm & fruma & æ & wisdom rihtwis dema
'Henceforth he rules all creation with reins. It is no wonder (lit: Not is no wonder), for he is the king, the lord, the beginning, the creator, the law, wisdom, and the righteous ruler.' (YCOE 850-950)
(19) þa cwæð he: Genog rihte þu hit ongitst, nu þu ongitst þæt þa good ealle sint <þæt> ilce þæt gesælð is, & sio gesælð is ðæt <hehste> good, & þæt hehste good is God, & se <God> is semle on anum untodæled. ða cwæð ic: *Nis þæs nan tweo*; ac ic wolde nu þæt ðu me sædest hwæthwugu uncuðes.
'Then he said: You understand it correctly enough, now that you realize that all the good things are the same as happiness is, and the happiness is the highest good, and the highest good is God, and the God

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[11] For detailed argumentation for the nominalized status of such *that*-clauses, see Heyvaert (2003).

[12] As these variants do not constitute complement constructions, they are not included in Tables 4 to 7 above.

is always one alone undivided. Then I said: There is no doubt about that; and now I would like you to tell me something unknown.' (YCOE 850-950)

(20) Wæs he gefeonde, *swa hit nænig wundor is*, denunge fota ðara ðe he swa micelre tide benumen wæs

'Was he rejoicing, as it is no wonder (lit: as it not any wonder is), at the service of the feet, which he was deprived of for such a long time.' (YCOE, 850-950)

Building on our analysis of the lexical and grammatical readings of the predicative and existential matrices (Section 3.2.1), we can conceptually motivate why the matrix and the complement clause are the basic structural components of the macro-construction and why a syntactic paradigm of juxtaposed and parenthetical structures is associated with it.

Let us start with the lexical, representational, reading of the complementation construction. As we saw in 3.2.1, both the predicative and the existential matrix allow the *inference* of an emotional state (e.g. 'proposition surprised X') or cognitive state (e.g. 'X knows proposition') and its – implied – experiencers or cognizants. The complement clause represents either the factive proposition or the content of the knowing. On these readings, the whole construction is interpreted as a factive or reporting construction. Importantly, for the data with matrices containing *be* + the nouns *wonder* and *tweo/doubt*, the factive and reporting readings seem to need the complex sentence structure in which the complement clause is structurally subordinated to the matrix clause. If this assumption is correct, then, we would expect that lexical readings will be possible of the 'non-extraposed' variants, when they appear much later in the piece (see Section 4).

By contrast, the speaker-related readings of the impersonal clauses as mirative, evidential or modal qualifications are associated with both the complex sentence structures, e.g. (14)-(15), and the juxtaposed (18)-(19) or parenthetical (20) variants. It appears, indeed, that the impersonal clauses are a 'natural' coding means of subjective qualifications in which the speaker remains off-stage (cf. Langacker 2002: 9). That such qualifications are often conveyed by juxtaposed and parenthetical clauses is well-known. But due to discursive foregrounding of complement clauses, structural matrices can function as grammatical qualifiers too (Boye & Harder 2007: 584-589).

In conclusion, in this section we have set out our description of the complementation constructions with *wundor* and *tweo* in our Old English datasets. We have shown, that at the meso-constructional level, all the forms of *(it/that)* + *be* + *wundor* can be analysed as historical variants of a predicative matrix and those with (*of that*) + (*it/there*) + *be* + *tweo* as historical variants of an existential clause. We have set out cognitive-functional analyses of their semantics, which bring out differences as well as functional similarities. We have, then, at the macro-constructional level, posited one schematic complementation construction whose primary structural units are the impersonal matrix and the complement clause. We have elucidated its lexical as well as its grammatical readings.

4. **The development of complementation constructions with *it be wonder* and *there be doubt* from Middle to Present-day English**

In this section we trace the further development of the complementation constructions from Middle to Present-Day English for the *wonder*-data and for the data extracted on *be* + *doubt*, which complement the Old English *tweo*-data.

Table 8 summarizes how the variants of the matrix with *be* + *wonder* developed from Middle English up to the present. In contrast with Old English, it was the predicative matrix with *it* that predominated, by and large, from Early Middle English on. The frequency of matrices with cataphoric *that* declined strongly. This variant is not attested in our Modern and Present-day datasets, even though it is still very infrequently found, as illustrated by the Internet example quoted in footnote 6. Subjectless matrices disappeared in Late Middle English, when the subject became an obligatory element of clause structure (Van linden 2012: 133-134). The picture is thus one of crystallization towards the form with predicative *it*-matrix. This confirms the stability and entrenchment of the predicative matrix with *wonder* in complementation constructions.

[Table 8 here]

Table 8. The Distribution of Matrix Types in Complementation Constructions with *be* + *Wonder* in ME to PDE Datasets

Matrix	1150-1500 ME		1500-1710 EModE		1710-1920 LModE		1993- PDE	
	n	%	n	%	n	%	n	%
Ø is (no) wonder	13	**34.2**	0	**0**	0	**0.0**	**0**	**0.0**
that is (no) wonder	2	**5.3**	0	**0**	0	**0.0**	**0**	**0.0**
it is (no) wonder	23	**60.5**	14	**100**	90	**97.8**	**88**	**98.9**
there is (no) wonder	0	**0.0**	0	**0**	2	**2.2**	1	**1.1**
TOTAL	38	100	14	100	92	100	89	100

Yet, we witness the emergence in Late Modern English (more specifically in the subperiod 1710-1780) of the existential variant *there is no wonder*, which we illustrate with the later example (21). Our Present-day dataset contains one such example, which suggests that it is a very marginal variant, which may disappear again. What are we to make of the recent appearance of an existential variant, however marginal, in the construction in which the predicative matrix had hitherto been so stable? We suggest that it has arisen as the result of confusion between predicative and existential matrices, but as 'motivated' confusion so to speak. As argued in Section 3.2.1, the inferred representational meanings of impersonal predicative and existential matrices are very similar. Hence, in (21) the matrix is readily understood as [that the king …] 'shouldn't surprise us', with the speaker/writer involving his readers in this emotional reaction. We propose that it is precisely because of the structural and semantic similarity of the routinized patterns with predicative and existential matrices that there is this marginal confusion of the two.

(21) That the king of Kandy did not reside at Newera Ellia *there is little wonder*, as a monarch delighting in a temperature of 85 Fahrenheit would have regarded the climate of a mean temperature. (CLMETEV, 1850-1920)

When we consider the syntactic paradigm of the whole complementation construction, it can be noted that the juxtaposed variant, illustrated with the Old English example (18), continues to be the main multi-clausal alternate, even though its frequency declines throughout this whole period (for detailed discussion, see Gentens et al. 2016). The 'non-extraposed' variant, e.g. (22), appears only in Late Modern English, in the subperiod 1780-1850, and remains very infrequent.

(22) That you should possess such varieties of taste *is no wonder*, considering what an abundance of intellectual honours you inherit. (CLMETEV, 1780-1850)

Example (22) illustrates the structure in which the *that*-clause functions as a nominalized subject-clause (see Section 3.2.2), which is treated as the 'basic' variant in the traditional extraposition approach. One of its well-known information structure features is that the 'fronted' *that*-clause contains given information while the main clause predicate presents new, focal information (Kaltenböck 2000: 162-165). Interestingly, example (21) with existential matrix has the same basic word order with the same information structure. Syntactically, of course, the *that*-clause cannot function as subject in the existential clause in (21).

Table 9, then, summarizes how the variants of the matrix with *be + doubt* developed through time. The existential clause without subject clitic is still common in Middle English, where it accounts for 36.5%, but it disappears at the end of Middle English. (23) is an interesting example because it contains the Middle English counterpart of *þæs,* viz. *therof.* This is an adverbial compound consisting of preposition *of* and the pronominal use of *there* realizing entity-deixis, which is glossed in the *OED* as 'of that'; it is counted as an example without subject clitic in Table 9 below.

(23)   … for *therof is no doubt*, that it is deedly synne in consentynge.
'for of that (there) is no doubt, that there is deadly sin in consenting [to evil].' (PPCME, *c*1405 Chaucer *CT.Pars.* (Elsm) 295.C2)

Existentials with *it* virtually disappeared after 1570, when they generally ceased being used in negative existentials, where they had held out longest (López-Couso 2011: 96). In Present-day English, the existential matrix with *there* is the only form attested in the Wordbanks data. However, it is interesting to note that on the Internet examples with *it's/is no doubt* can be found, of which at least some seem to be produced by native speakers, such as (24). In other words, just as we saw a marginal existential variant, as in (21), emerge of predicative *it be (no) wonder* in recent corpus data, we see that a marginal predicative variant of existential *there be (no) doubt* is cropping up in Internet data. In our view, this suggests that language users are aware of the fact that the inferred representational and grammatical meanings of existential matrices are very similar to those of predicative matrices, and are routinizing the two constructions as subtypes of one macro-construction.

(24) *It's no doubt* that we have a talented team here at Old City Web Services. (http://oldcitywebservices.com/finding-meaning-mission-work/)

[Table 9 here]

Table 9. The Distribution of Matrix Types in Complementation Constructions with *be + Doubt* in ME to PDE Datasets

Matrix	1150-1500 ME		1500-1710 EModE		1710-1920 LModE		1993- PDE	
	n	%	n	%	n	%	n	%
Ø is (no) doubt	3	33.3	0	0	0	0	0	0
it is (no) doubt	4	44.4	5	29	1	0.3	0	0
there is (no) doubt	2	22.2	12	71	310	99.7	88	100
TOTAL	9	100	17	100	311	100	88	100

Turning to the syntactic alternates of the complementation construction (see Davidse et al. 2015), we find that the parenthetical variant is the only one in Middle and Early Modern English, e.g. (25). The first example with fronted subordinated complement clause (26) occurs only in the period 1710–1780 in our data. It is structurally fully analogous with example (21) with *there is little wonder*, with the complement clause and impersonal matrix as the two primary structural units.

(25)   The especes that sourden of Pride, soothly whan they sourden of malice ymagined, avised, and forncast, or elles of usage, been deedly synnes, *it is no doute*.
'The types [of sin] that originate in pride, truly when they originate in imagined, devised and planned malice or else in habitual action, are deadly sins, it is no doubt.' (PPCME, *c*1405 Chaucer *CT.Pars.* (Elsm) 302.C1)
(26) That he was a lover of the muses, *there is not the least doubt*, as we find him patronizing the poets so warmly. (CLMETEV, 1753 Cibber, *The lives of the poets of Great Britain and Ireland*)

In sum, the complementation constructions with *wonder* and *doubt* show a parallel development from Middle English to Present-day English. The association with respectively predicative and existential clause is stable in them, yet with both, the other matrix type has recently cropped up as a marginal variant. Equally stable are the juxtaposed and parenthetical alternates, whereas the non-extraposed structure in the strict sense is a late and marked variant in the *wonder*-data. This distribution supports our claim that the complementation constructions with predicative and existential matrix form a macro-construction with shared structural features and the same schematic semantic functions.

5. Conclusion

In this article, we have described complementation constructions with predicative and existential matrices followed by a complement clause from a diachronic point of view. More specifically, we have reconstructed, on the one hand, the development from Old to Present-day English of such constructions with matrices containing *be* + NP with *wonder*, whose main variant has been *it's a/no wonder that* […] from Middle English on, i.e. the construction traditionally viewed as *it*-extraposition. On the other hand, we have traced the development through Old English of such constructions with *be* + *tweo* and from Middle to Present-day English of constructions with *be* + NP with *doubt*. We have proposed a comprehensive analysis of them at two levels of generality.

At the highest level of generality, we have given arguments for viewing complementation constructions with impersonal predicative and existential matrices as one macro-construction. This entails a rejection of the *it*-extraposition account in its strict form. We have argued that the two impersonal matrix types allow the inference of lexical readings (as specific emotional or cognitive states) and are also natural coders of their grammatical readings as modal, mirative or evidential qualifications. Historically, these two readings are present from the start. The proposed analysis of matrix and complement clause as the primary structural units explains the parenthetical and juxtaposed alternates that are attested throughout their history. By contrast, the 'non-extraposed' form in which the nominalized *that*-clause appears as subject of the predicative matrix is a late and informationally marked development, which cannot plausibly be posited as the basic form defining the structure and meaning of the constructions with impersonal matrix.

At a lower level of generality, the meso-constructional level, we found that the variants of the matrices with *wonder* and *tweo/doubt* show a diachronically stable persistence of predicative matrices in the former and existential ones in the latter, with, however, some recent intermingling of the two. We discussed the different grammatical semantics coded by the two matrix types, while also noting the presence of very similar functional elements, such as the quantification and degree modification afforded by the full NP in both. This, in turn, feeds back into the proposed macro-analysis, as these functional-structural resources code the intensification of both the lexical readings (emotion and cognition states) and the grammatical readings (interpersonal qualifications) of the matrix.

With the diachronic case studies presented here we have launched our case for the macro- and meso-constructional analysis of complementation constructions with predicative and existential matrices proposed here. We are aware of the fact that case studies such as these may show quirks specific to the nouns studied. Clearly, the investigation will have to be extended to other lexical types such as *It is a fact/mystery/puzzle/*etc. *that* and *there is no question/chance/*etc. *that*. More cases will have to be studied to further verify, refine or modify the proposed analyses, and to formulate robust quantitative generalizations.

6. Corpora and datasets

Corpus of Late Modern English Texts, Extended Version (CLMETEV): https://perswww.kuleuven.be/~u0044428/clmetev.htm

Oxford English Dictionary (*OED*): www.oed.com

Penn–Helsinki Parsed Corpus of Middle English, second edition (PPCME2): www.ling.upenn.edu/hist-corpora/PPCME22-RELEASE-3/

Penn–Helsinki Parsed Corpus of Early Modern English (PPCEME): www.ling.upenn.edu/hist-corpora/PPCEME-RELEASE-2/

WordBanks Online (WB): www.wordbanks.harpercollins.co.uk

York-Toronto-Helsinki Parsed Corpus of Old English Prose (YCOE): http://www-users.york.ac.uk/~lang22/YCOE/

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