'Thone vpon thother': on pronouns *one* and *other* with initial *th*- and *t*- in

Middle English

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Abstract

A frequent result produced by a search of the digital corpora of Middle English

(henceforth ME) for instances of reduced th' is a nominal involving the

pronouns one or other with initial th- or t- attached. In this study I argue that

two different mechanisms, that is reduction of the definite article and

misanalysis of the preceding demonstrative, need to be taken into account when

scrutinizing the emergence of what turns out to be four different pronouns,

namely thone, thother, tone, and tother. First I flesh out the ways in which these

pronouns were used in ME. Then I analyze textual evidence which sheds light

on the question when and how these pronouns emerged. Finally I argue that

while initial th- is always a definite determiner reduced as expected given the

DP cycle, initial t- can be either a definite determiner or, less likely, part of a

lexicalized pronoun.

1. Introduction

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This study originates in an investigation of a reduced variant of the definite article in ME and EModE. As shown in Viereck (1995), van Gelderen (2011), Nykiel (2015, 2016), throughout the ME and EModE periods definite nominals where the definite article has its form reduced to a proclitic realized orthographically as p, δ and later as th and th'^1 are attested. A typical example would be (1a) and (1b) where reduced th' attaches to the host noun *abbotrice* 'abbey' and *admyrall* 'admiral', as well as (1c) where the host to reduced th' is the attributive adjective *alde* 'old'. Such examples can be found throughout ME and until the 18^{th} century.

- (1) a. 7 begæt **Thare** priuileges Of alle þе privileges And obtained Their Of all the one lands *babbotrice* of lands of the-abbey "and obtained their privileges, one for all the lands of the abbey," ?a1160 *Peterb.Chron.*(LdMisc 636) an.1137 (CMEPV)
 - b. made grete slaughter of the turkes & ... [they] slaughter of **Turks** ...they made great the and whan thadmyrall of thepersans. And sawe this, the Persians and when the-admiral this saw "they slaughtered many Turks and Persians. And when the admiral saw this." 1489 Caxton Sonnes of Aymon (Caxton: Richardson) 504/9 (CMEPV)
 - c. Unnderr all **balde la3hess** fresst/ Wærenn alle be

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¹ Beginning with the middle of the 16th century reduced *th'* comes to be spelt with an apostrophe following Hart's (1569) advice (Salmon 1992: 30). For reasons of convenience, *th'* is used is this study when no particular orthographic variant of the reduced definite article is meant.

Under all the-old laws first all the were prestess priests

"According to the old laws, all the priests were first" ?c1200 *Orm.* (Jun 1) 481 (CMEPV)

Nykiel (2015) finds pragmatic differences between the use of nominals with the full form of the definite article and the use of nominals with reduced th'. Reduced th', when used in an anaphoric nominal, tends to appear with a shorter antecedent distance than the full form, it also tends to appear with discourse topics and it is used if there are no competing references in the preceding discourse. Nykiel (2016) goes beyond anaphorically used nominals with reduced th' and reports on a correlation between the choice of reduced th' and givenness of information.

Reduced th' as such is not however a focal point of this study. While searching for examples of reduced th' nominals in the corpora of ME, a common finding is a variant of the pronouns one and other with initial t- or thsuch as tane/tone/toon/thone and tother/tothur/tothir/tothyr/thother². At first sight they seem to be instances of reduced th' where the host is a pronoun rather than a noun or an adjective as in examples (1) but such a straightforward account turns out not to be accurate. I argue for a division between the forms with initial th- on the one hand, which I will refer to as thone and thother in this

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² Variants with alternative spelling with an initial thorn or eth are not listed here but they were common throughout ME.

study and the forms with initial t- on the other, handled under the umbrella terms tone and tother. The former two are not noted in the literature apart form a brief entry for *thother* in the Middle English Dictionary (henceforth MED). Tone and tother do get mentioned by Barry (1972) and Jones (2002) but are far from central to their discussions and are somewhat dismissed as forms arising from incorrect syllable division. Central to this study is the claim that thone, thother, tone, and tother are four different pronouns in ME. I present evidence showing that thother appears earliest as a product of reduction of the definite article. The pronouns with initial t- cliticized are only partly attributable to incorrect syllable division, and partly also to reduction of the definite article. In this study I aim to argue that initial th- is a more straightforward case of a definite article whose reduction can be accounted for by the operation of the DP cycle. Initial t- on the other hand is a more complex case. It is a reduced definite article often preceded by a full form of the definite article but it can also be construed as incorporated into the form of the pronoun, having no clear syntactic function.

This paper is structured in the following way. In section 2 I introduce the notions of the DP cycle and double articulation pertinent to the analysis of *thone, thother, tone,* and *tother*. Then I proceed to an examination of the meaning and functions of the four pronouns in ME in section 3. Section 4 is taken up with an attempt to trace the origins of *thone, thother, tone,* and *tother*.

This section combines insights from the literature, an examination of select early ME texts and data retrieved from the digital corpora of ME. In section 5, I verify the validity of the idea that reduced *th'*, also realized as initial *t*-, after a period when it cliticized onto nouns and adjectives only, was extended to the pronouns *other* and *one*. A final stage in this study is an attempt at accounting for the development of the pronouns in terms of the DP cycle (section 6). For reasons of convenience I refer to *one* and *other* as pronouns throughout this study regardless of whether they head the NP or modify the head noun in the NP.

2. Setting the Stage - the DP Cycle and Double Articulation of Definiteness

From a theoretical standpoint, the development of *tother/thother* and *tone/thone* intersects with two phenomena, namely the DP cycle and double articulation of definiteness. In this section both are fleshed out.

It has been observed in the literature that cross-linguistic developments affecting definite determiners are common whereby definite articles are seen to develop from demonstrative pronouns and at a later stage they tend to become clitics and affixes (Greenberg, 1978, Diessel, 1999 Lehmann, 2015). As definite articles become clitics or affixes, they may however further grammaticalize into

gender markers, case markers or noun class markers, that is they may lose the definiteness marking function. Such developments are referred to as the DP cycle in Lyons (1999) and van Gelderen (2011). At a stage where a definite article is a clitic/affix it will need a host such as a noun or an adjective in an NP. An often cited case in point is the suffixed definite article in the Scandinavian languages (see e.g. Taraldsen, 1990, Julien, 2005, Lohrmann 2011), as illustrated with a Swedish example in (2).

(2) film-en

film-DEF

"the film"

(example taken from Lohrmann 2011: 112)

Van Gelderen (2011: 201) notes that at this point, that is at the stage of the cycle where a definite article is a clitic/suffix, definiteness can be renewed and reinforced by the use of an additional definiteness marker. This may lead to double articulation of definiteness.

Plank (2003) offers a cross-linguistic typology of NPs which mark (in)definiteness twice, which is the essence of double articulation. Double articulation is most common if an NP contains an attributive adjective and a noun, and it has often been discussed in connection with NPs in the Scandinavian languages by e.g. Julien (2005), Lohrmann (2011), and

Schoorlemmer (2012). This is illustrated with an example from Swedish in (3) where apart form the definite article suffix *-en*, there is also a definite article preceding the adjective.

(3) den rolig-a film-en

DEF funny-w[eak] film-DEF

"the funny film"

(example taken from Lohrmann 2011: 112)

Plank (2003) goes on to note however that there are languages where an NP has definiteness marked twice even if the NP is composed of the head noun only.

The DP cycle and double articulation are relevant to this study for two reasons. Firstly, as I argue below that *tother/thother* and *tone/thone* emerge also via reduction of the definite article, this development will be seen as an instantiation of the DP cycle. Secondly, since the pronouns are attested with a preceding definite article, I will regard such NP as cases of double articulation of definiteness. It is to be noted that I will not use the notion of DP in this study apart from recurring references to the DP cycle. DP standardly indicates a determiner phrase where a determiner heads its own functional layer complemented by NP (see Abney 1987 for the DP hypothesis). Instead I use a more traditional notion of the NP.

3. Pronouns Tone/Thone and Tother/Thother in ME

I begin this section with describing the ways of obtaining data for this study. As a next step I survey the ME uses of *tother/thother* and *tone/thone* based on the instances of the pronouns retrieved through a search of two digital corpora. Finally I proceed to briefly relate those uses to the functions of *other* and *one* in Present-day English.

I have made use of two digital corpora in order to obtain instances of tother/thother and tone/thone necessary for this study, namely the Penn-Helsinki Parsed Corpus of Middle English (henceforth PPCME2) and the Corpus of Middle English Prose and Verse (henceforth CMEPV). The former is a small corpus as it contains around 1.2 million words. Since PPCME2 breaks the ME period down in to four sub-periods, that is M1 (1150-1250), M2 (1250-1350), M3 (1350-1420), M4 (1420-1500), I used this corpus to show an overview of the use and changing frequency of the pronouns in ME. As PPCME2 contains mostly samples of texts, I did not consider it sufficient when it came to an investigation of the origins of tother/thother and tone/thone. I carried out such an investigation, as shown in section 4, with the aid of CMEPV. Even though the information about the exact number of words this corpus contains is not available, it is obviously a much larger corpus than PPCME2. It has the advantage of offering access to the full texts of 146 ME

works, including the texts pertinent to the origins of *tother/thother* and *tone/thone*.

The instances of *tother/thother* and *tone/thone* obtained from PPCME2 allow for a number of generalizations. Typically *tother/thother* is used anaphorically with a reference to the second of two entities mentioned earlier in the text. Very often *tother/thother* co-occurs with the pronoun *one* or its variant *tone/thone* where the latter stands for the first of the two entities mentioned. This use is illustrated in Example 4a where *tane* and *toper* have *body* and *saule* respectively as antecedents.

(4) *Force* saule, hele, It be in body and in and force in body and in saule and health if It be will, and offe tober. bi of be tane be of the thy will the-one and Of the the-other "Strength of the body and soul, and health, if it is your will, of one and the other."

CMEDTHOR,39.549 (PPCME2)

b. Tanne schal Down þе li3t Of Crist fro goo then shall the light Of Christ Down from go dwellyng in bis schynen tobur world, and in be dwelling in this World and Shine in the the-other world by mene Of þе day of doom. world the of Doom by means Of day

"Then the light of Christ will leave this world and will shine in the other world due to the day of doom."

CMWYCSER,379.2752 (PPCME2)

c. Þa hirdess þatt, Haffdenn hæfedd hird *(...)* an those kins That Had one Head kin Abufenn bobre, tatt was alle Above all the-others that was

"Those kins that had a head kin that was above all the others," CMORM,I,17.259 (PPCME2)

d.	þои	sall	understande	fowre	þynges.	pe	fyrst	þyng
	you	shall	understand	four	things	the	first	thing
	es:	what	pyng fyles	\boldsymbol{A}	man.	þе	toþer	
	is	what	thing defiles	A	man	the	the-other	
	pyng:	what	Makys	hym	clene.	þe	þyrd:	what
	thing	what	Makes	him	clean	the	third	what
	haldes	hym	in clennes.	þe ferþ:				
	holds	him	in cleanliness	the fourth				

[&]quot;You will understand four things. The first thing is what it is that defiles a man. The second thing is what it is that makes him clean. The third thing is what it is that keeps him clean. The fourth..."

CMROLLEP,96.563 (PPCME2)

Optionally, while there is no anaphorical reference, *tother/thother* can still indicate the second of two entities as long as the presence of such two entities is understood. This is the case of Example 4b where the mention of this world implies existence of the other world as part of the Christian doctrine. Yet another possibility has *tother/thother* employed with reference to the remaining members of a set after one or more members of the same set have been first singled out. Example 4c displays *popre* 'the others' interpreted as pointing to the remaining kins after the head kin has been selected out of the set of kins. Finally *toper/thother* appears in the context of enumeration where it is an ordinal numeral indicating a second item on a list. Needless to say, the list of items is not limited to just two, as in (4d).

The pronoun *tone/thone*, as noted earlier in this section, can co-occur with *thother/tother* or *the other* and convey a reference to the first of two entities

either present in the earlier discourse, i.e. via anaphora or inferable from the context. Parallel co-occurrence of *one* and *other* goes back to OE, as noted by Mustanoja (1960 [2016], p. 216). Example 4a above serves as an illustration of *tone/thone* used anaphorically. *Tone/thone* can obviously occur without *the other/tother/thother* but its application seems limited to contexts where it serves to select the first entity out of a set of two. Both of these aspects are visible in (5) where *tone* without co-occurring *the other/tother/thother* points to one member in a set of two knights. *Tone/thone* does not for example surface in a context of enumeration where more than two items are listed.

(5) 'A! seyde sir 'thou Arte To me moste welcom Tarquyne, To welcome Ah said sir you Are me most Tarquyne of knyght for we shall Never departe Tylle ony of any knight for we shall Never depart Till dede the tone of be us the the-one of be dead us

"'Oh!' said sir Turquyne, 'you are the most welcome of all knights to me for we will never depart until one of us is dead.'"
CMMALORY,192.2833 (PPCME2)

It should be also said that *tother/thother* and *tone/thone* can serve as the head of an NP, as in (4a), as a modifier preceding the head noun, as in (4b) and (4d), or as an element that seems to show some properties of both the NP head and a modifier, as in (4c). *Popre* 'the others' in (4c) can be interpreted as the head of the NP but it can also be argued to be a modifier with the head noun ellipted. Any further exploration of this issue is however outside the scope of

this study³. These examples also show that the pronouns frequently admit definite determiners. Even without a definite determiner, however, the pronouns typically convey a reference to a definite entity, which follows from the way these forms of the pronouns *one* and *other* arose, as elaborated on in section 4.

Most of the uses and features of *tother/thother* and *tone/thone* presented in this section are compatible with what Quirk *et al* (1985) and Huddleston and Pullum (2002) say about the use of *one* and *other* in Present-day English. One notable exception is the use of *other* as an ordinal numeral synonymous to 'second' when a list contains more than two items. While Quirk *et al* (1985, p. 262)) do classify *other* as a general ordinal numeral, the OED (*s.v. other*) notes that such an ordinal use of *other* is obsolete with the examples not extending beyond the year 1500⁴. It is at this time that the ordinal numeral *other* seems to be replaced with the numeral *second*, attested since the late thirteenth century (OED *s.v. second*).

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³ There is a significant lack of consensus in the literature as to how to approach such cases. A grammar of Present-day English such as Huddleston and Pullum (2002) talks about the head being fused with the modifier. There is a sizable body of literature which argues for an empty category, the head noun being present without taking any form, e.g. Lobeck (1995), Nerbonne and Mullen (1999). There are also those who see consider such NPs cases of head noun ellipsis where the information about the head noun is distributed over the NP, e.g. Branco & Costa (2006).

⁴ An external reviewer notes that the last example of the numeral *other* in the OED from 1875 comes from a translation of Virgil and is with much probability intended as archaic usage.

4. The Origins of Tone/Thone and Tother/Thother

With the ME use of *thone/thother/tone/tother* fleshed out in section 3, I investigate how and when these pronouns came to be. First, I consult the literature and dictionaries where the pronouns are mentioned or discussed, then I verify this information against evidence from the early ME texts, and finally I elicit instances of the pronouns from the two digital corpora of ME with a view to corroborating the findings. I first look into the origins of the variants of *other* as these variants seem to be older than those of *one*.

The OED and MED argue that we in fact have two different items. The first one is *thother* with initial *th*- attached, which is argued to be a result of coalescence (OED, *s.v. other*) or contraction (MED, *s.v. thother*) of the definite article. *Thother* never, at least in PPCME2, co-occurs with a definite article, or any determiner, and is an actual case of reduced *th'*. If *other* has initial *t*-, surfacing as *tother*, it is argued to have been a result of misanalysis of the demonstrative pronoun *that* which precedes *other* whereby the final *-t* is misinterpreted as the initial consonant of *other* (MED *s.v. tother*, *OED s.v. tother*). Similar accounts of the emergence of *tother* can also be found in Onions (1966, *s.v. tother*) and Barry (1972), the latter account pointing to incorrect syllable division as the source of misinterpretation. At the same time

however, the MED does not rule out the possibility that tother is also a product of the reduction of the definite article whereby the reduction leaves only a voiceless plosive attached to other. Such reduction is even more likely given that early ME had a variant of the definite article spelt as te where the consonant was a voiceless plosive. This form occurs first in The Peterborough Chronicle, the same text that exhibits the first attestations of the definite article in English according to van Gelderen (2011, p. 163). Viereck (1995) and Jones (2002) show that it is typically assimilation to a preceding alveolar plosive /d/ or /t/ that accounts for the form te of the definite article. Tother is typically preceded by a definite article in PPCME2, as in (6a), but there are also cases where there is no determiner preceding, as in (6b). The presence of the definite article validates the misanalysis hypothesis while the lack of the definite article in front of tother lends support to the possibility that tother results from reduction of the definite article. I have not found any examples with the demonstrative that preceding tother, which is another argument in favor of the misanalysis hypothesis.

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(6)
     a.
          In
              þе
                    fyrst
                            degre
                                                    lickend
                                                              to
                                                                  þе
                                      er
                                            men
                                                                        sternes;
              the
                    first
                            degree
                                                   likened
                                                              to
                                                                  the
          in
                                                                        stars
                                      are
                                            men
              the
                    tober,
                                                                        til
          in
                                till
                                      þе
                                            mone:
                                                     in
                                                         þе
                                                               thyrd,
          in
              the
                    the-other
                                to
                                      the
                                            moon
                                                     In
                                                         the
                                                               third
                                                                        to
          þе
                sonne.
          the
                sun
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CMROLLEP, 107.723 (PPCME2)

[&]quot;In the first degree men are likened to the stars, in the second to the moon and in the third to the sun."

sho est heaid Ouir tobir. b. for be mare bat be mare for the more that she is high over the-other the more азh cumandement sho at Halde be of be reule. Hold commandment ought she to the of the rule "for the more she is raised above the rest, the more carefully she should observe the precepts of the rule." CMBENRUL,44.1354 (PPCME2)

By and large the same applies to *one* to the extent that the variants listed at the beginning of this section represent two different items. The pronoun *one* is quite frequent with the initial plosive, where the plosive originally belonged to the preceding demonstrative but was later misanalysed as part of the pronoun (MED *s.v. ton*, OED *s.v. tone*). *Tone* is typically preceded by a definite article in ME as a check of PPCME2 indicates. Still, as the MED cautiously remarks, the option cannot be excluded that *tone* represents a reduced definite article attached to the pronoun for the same reasons as those discussed in connection with *tother*. As for the other of the two items, i.e. *thone*, the pronoun *one* is also attested in ME with initial *th*' attached, despite there being no note to this effect in either the OED nor the MED. Needless to say, the form *thone* suggests that the definite article is reduced and attaches to the pronoun *one* as well. Examples of *thone* are rare however. There are none in PPCME2 but I have been able to find a few in CMEPV as well, for example (7).

bayarde & braiforde their maisters at (7) *whan* sawe the when Bayard and Braiforde their the saw masters grounde / incontynent thev went **Thone** thother / and to immediately ground they went the-one to the-other and began to byte eche other, & Cast their fete

began to bite each other and Cast their feet **thone** vpon **thother** the-one upon the-other

"when Bayard and Braiforde saw their masters on the ground, they immediately went at each other, and began to bite each other and kicked at each other" 1489 Caxton *Sonnes of Aymon* (Caxton: Richardson) 267/4 (CMEPV)

The changes whereby the new forms of the pronouns *one* and *other* arose, as indicated in the literature cited in this section above, are summarized Table 1.

Change	Mechanism held accountable

bæt ober > (*be*) *tober* misanalysis triggered by incorrect

syllable division

te oper > toper reduction of definite article be oper > boper reduction of definite article

bæt ane > (*be*) tane misanalysis triggered by incorrect

syllable division

 $te \ ane > tane$ reduction of definite article $pe \ ane > pane$ reduction of definite article

Table 1: The origins of *tober*, *bober*, *tane*, and *bane*

With a view to obtaining some independent evidence for the speculated origins of thother/tother and tone, I consider it worthwhile to look into some early ME sources where the forms are attested for the first time. Admittedly, there are no occurrences in the Peterborough Chronicle, a text which I have pointed to elsewhere as the earliest to display reduced th' in English (Nykiel, 2015, p. 110). The earliest examples of any of the pronouns investigated in this study are those of thother in the Ormulum, an early thirteenth century East Midland text

whose author is considered to have applied a very meticulous orthography faithfully representing the dialect used by the author (Anderson & Britton, 1999). There are 11 occurrences of *thother* in the Ormulum and no occurrence of *tother* or *thone/tone*. Each time *thother* appears in a plural NP where it is never preceded by a definite article, as illustrated in (4c), repeated here as (8a), as well as in (8b). This strongly suggests that the reduction of the definite article is operative in the case of *other*, as it is with NPs headed by nouns (cf. Nykiel, 2015, p. 111). There is no evidence for misanalysis of the demonstrative in the Ormulum however as firstly, forms of *other/one* are not attested with initial *t*-, and secondly, *that* precedes *other* thirty two times and it precedes *one* sixteen times and neither *other* nor *one* take any initial *t*-.

- (8) Þа hirdess batt, *(...)* Haffdenn hæfedd hird a. an those kins that Had one head kin Abufenn bobre, tatt alle was above all the-others that was "Those kins that had a head kin that was above all the others." CMORM,I,17.259 (PPCME2) ?c 1200 Orm. (Jun 1) 585 (CMEPV)
 - **Þiss** *he3hesst* b. lott off all Crisstene follc Iss this lot of all Christian folk highest unnderr Criste. Forr itt iss sett her att te ster at the helm under Christ for it is here set To sterenn babe bobre. to steer both theother

"This lot of all Christian folk is highest under Christ for it is set here at the helm to govern the other two."
?c 1200 Orm. (Jun 1) 15259 (CMEPV)

Two other early ME texts, namely the Ancrene Riwle and Lagamon's Brut, confirm the findings based on the Ormulum. A digital edition of the Cotton Cleopatra manuscript of the Ancrene Riwle, available through PPCME2 and estimated to have been composed between 1225 and 1230 (Dobson, 1972, p. x), reveals seventeen occurrences of thother. Much as in the Ormulum none of them take a preceding definite article but unlike the instances in the Ormulum, thother in the Ancrene Riwle is not limited to plural NPs. Lagamon's Brut, whose text is available in CMEPV through two late thirteenth century manuscripts, namely Cotton Caligula and Cotton Otho (McColl Millar, 2000, p. 120), contains only one instance of thother elicited from the Otho manuscript and no relevant instance in the Caligula manuscript. While the three texts testify to the use of *thother* in early ME, it is difficult to pinpoint the earliest instances of thone. As was remarked above, a search of PPCME2 turns up no instances and the ones shown in Example 7 can be placed in late ME. The earliest examples of tone and tother come from 1300 according to the MED (MED s.v. ton, tother) and I have not found any attestations prior to that date. The example cited by the MED is shown in (9).

(9) Wanne i ðinges is dat ðenke ðre... Đe Ton when think things three the theis that one sal awei, ðe tober is i ne wot I shall away the theis Ι know other wilk dei, ðe ðridde is mi moste kar

which day the third is my most care "When I think of three things, first I must go away, second I don't know when, the third is my greatest worry."

a1300 Wanne i ðenke ðinges ðre (Arun 292) 4 (CMEPV)

All in all, a conclusion that an analysis of the early texts and of Examples 8 and 9 permits is that reduction of the definite article affects *other* before misanalysis of the demonstrative and a definite article preceding *other* is reduced earlier than that preceding *one*.

With the exception of thother, the new pronoun forms tother, thone, and tone mentioned in this section so far were extremely infrequent in early ME, with the main thrust of such occurrences attested in the latter half of the fourteenth century and later. This statement is based on a search of such instances in PPCME2, a corpus that breaks the ME period down in to four subperiods, as noted in section 3. The number of occurrences of the pronouns in the four sub-periods of ME obtained through a search of the PPCME2 is shown in Table 2. It is to be noted that all the twenty-three instances in M1 are those of thother. Six of them come from the Ormulum and seventeen from the Ancrene Riwle. There is no relevant instance in M2. The periods designated as M1 and M2 in the corpus cover the timeframe of the early texts analyzed above so the fact that only instances of thother are registered at that time is expected. It is in fact in M3 and M4, i.e. after the year 1350 that instances of the other pronouns, that is tone, and tother in addition to thother begin to show up more copiously

in the corpus. We can see that at each stage *tother/thother* is more frequent than *tone* and there are more instances of both in the last period of ME, i.e. M4, than in M3. That the greater number of instances in M4 reflects an actual rise in frequency is borne out by the graph in Figure 1, which shows the normalized frequencies of both items per 100000 words in the sub-periods of ME. The increase in gross numbers in Table 2 correlates with an increase expressed in normalized form. Both *tone* and *tother/thother* undergo a frequency increase toward the end of ME if this period is compared with the 14th century and in the early 15th century.

	M1 (1150-	M2 (1250-	M3 (1350-	M4 (1420-
	1250)	1350)	1420)	1500)
tone/thone	0	0	19 (tone only)	23 (tone only)
tother/thother	23 (thother only)	0	49 (thother and tother)	79 (thother and tother)

Table 2: Occurrences of *tone/thone* and *tother/tother* in PPCME2 (gross numbers)

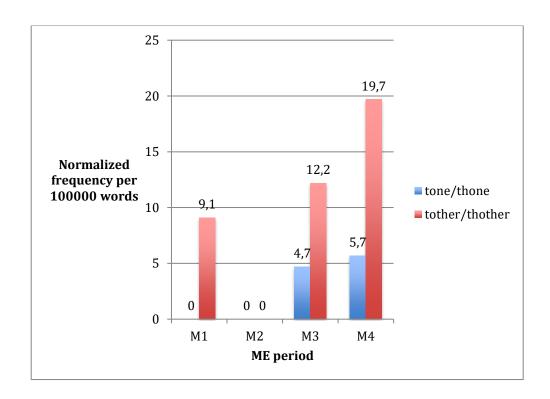


Figure 1: Normalized frequencies of tone/thone and tother/thother in ME

In this section it has been argued that reduction of the definite article can be held responsible for the formation of *thother* and *thone* as well as some instances of *tother* and *tone*. The evidence elicited from the Ormulum, Ancrene Riwle, and La3amon's Brut, points in the direction of reduction of the definite article as a mechanism contributing the earliest instances of the four pronouns. In section 5, the focus is on whether the formation of the forms of pronouns may have been reinforced by reduction of the definite article on nouns.

5. A Correlation Between Reduced th' and Development of Tone/Thone and Tother/Thother

As I have noted elsewhere (Nykiel, 2015), reduced *th'* is first attested with nouns in the twelfth century and is present throughout the ME period. In this section, I juxtapose the ME lifespans of reduced *th'* and the forms of *tone/thone/tother/thother* triggered by reduction of the definite article. Before such a juxtaposition can be achieved however I compare the frequency of the two structures in PPCME2.

In order to enable comparison in terms of frequency between reduced *th'* and *tone/thone/tother/thother* in ME, I have culled instances of reduced *th'* NPs from PPCME2. The NPs are limited to those that have the definite article attaching to a head noun. The results in the form of gross numbers broken down so as to reflect the ME sub-periods follow in Table 3. It can be observed that the instances spread out over each ME sub-period with a peak in M3, unlike in the case of *tone/thone/tother/thother*, as shown in Table 2. That this peak is however misleading can be gathered from Figure 2 where the frequency of the reduced *th'* instances is presented in normalized form. The motivation behind this mode of presentation is again feasibility of comparison with the normalized frequencies of *tone/thone/tother/thither* displayed in Figure 1. Figure 2 shows that the use of reduced *th'* begins in early ME, as expected, and then it has a

sudden frequency peak in M2, after which its frequency gradually decreases. These results are partially unexpected and skewed, a consequence of PPCME2 containing a relatively small sample of words in comparison with CMEPV. First of all the frequency peak in M2 is more apparent than real as all the ninety instances of reduced th' in this sub-period come from one text only, namely The Earliest Complete English Prose Psalter. What is more, reduced th' attaches to one host noun only in this text, namly erðe 'earth'. Secondly, there are grounds to say that the very low frequency of reduced th' in M4 should be regarded with skepticism for two reasons. The first reason is that despite a small number of instances of reduced th' elicited from M4, they spread over as many as seven different texts. Admittedly this is a higher number than in any earlier subperiod. The other reason is that it has been shown in Nykiel (2015) that the use of reduced th' continues in EModE until it eventually wanes toward the end of the period. This can be seen in the graph in Figure 3 where the normalized frequency of reduced th' in EModE is shown. The frequency in Figure 3 is calculated on the basis of the data adduced in Nykiel (2015, p. 114) taken from the Penn-Helsinki Parsed Corpus of Early Modern English, which contains over 1.7 million words.

	M1 1250)	(1150-	M2 1350)	`	M3 1420)	`	M4 1500)	(1420-
reduced <i>th</i> '	21		90		128		10	

Table 3: Reduced th' in PPCME2 (gross numbers)

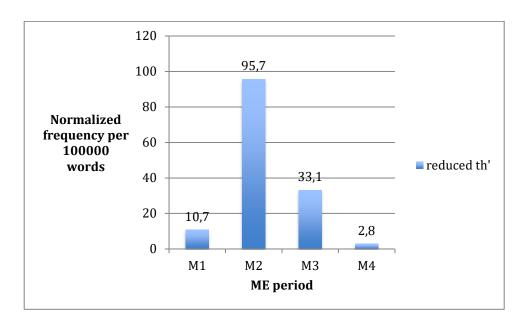


Figure 2: Normalized frequencies of reduced th' in PPCME2

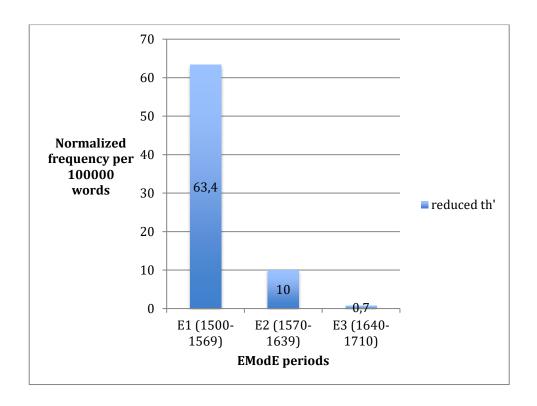


Figure 3: Normalized frequencies of reduced *th*' in EModE

A solid observation that a comparison of the graphs in Figure 2 and Figure 3 yields is that reduced th' on the one hand and forms of thother on the other hand both arise in early ME, i.e. M1, with reduced th' being attested slightly earlier than thother. It is also remarkable that in that period thother is attested only in those texts that also have reduced th', namely the Ormulum and the Ancrene Riwle. There are grounds to say therefore that once reduced th' becomes acceptable with a noun as a host, the range of hosts is extended to the pronoun other, and also to one in late ME. After 1350, that is from M3 on, the use of both reduced th' with nouns and with the two pronouns spreads to a greater

variety of texts, until in M4 the frequency of *tone/thone/tother/thother* exceeds that of reduced *th*'.

6. Toward an Account of Thone/Thother and Tone/Tother

In this section I relate the reduction of the definite article in the case of *tother/thother* and tone/*thone* to the DP cycle and argue that the reduction ultimately leads to double articulation of definiteness.

In a study on reduced *th*¹ nominals in ME and EModE (Nykiel, 2015) I argue, following van Gelderen (2011, p. 214), that a reduced definite article, i.e. a phonologically weakened definite article, is an expected stage in the development of the DP cycle in that free standing definite articles are likely to turn into clitics. It seems that the same applies in the case of *thone* and *thother*, that is when we have to do with reduction of the definite article. If *thone/thother* is the head of an NP, as could be seen in Example (7), it is a pronoun that takes a reduced definite article. In this respect ME *one* and *other* behave in a way similar to the pronoun *one* in Present-day English. I follow Déchaine and Wiltschko (2002, pp. 419ff) who take this pronoun to be what they call a Pro-NP, that is a pronoun of a special type which shares the syntactic features of nouns. *One*, among other things, has no referential content, takes modifying

adjectives and accepts definite and indefinite determiners and thereby it functions as the head of NP. ME *one* and *other* at the very least share acceptance of a determiner with Pro-NPs, which merits their construal as NP heads. If *thone/thother* functions as a modifier in an NP, I also interpret it as having a reduced article.

When it comes to *tone* and *tother*, there are more interpretational possibilities. The first point that should be reiterated is that *tone* and *tother*, as noted in section 3, can either take a definite determiner or occur without it. If *tone/tother* has no determiner preceding, note that the NP is still definite. *Tother* in (10) has a definite interpretation as it refers to the remaining nuns.

(10) When be with mikil priuresse es ordainde, reuerence sal when the prioress is ordained with much shall reverence sho dobat tabbesse cumandis hir. Þе ... for mare she do that the-abbess commands her For the more bat sho est he3id tobir, Þе a3h ouir mare she is high the-other The more ought that over sho halde cumandement reule. at be of be hold the commandment of the Rule she to "When the prioress is ordained, she will with great reverence do whatever the abbess commands her to do ... for the more she is raised above the rest, the more carefully she should observe the precepts of the rule." CMBENRUL,44.1354 (PPCME2)

It can be gathered that initial *t*- contributes a definite interpretation so it is a variant of the reduced definite article attached to the pronoun. It would follow then that *tone/tother* which comes without a preceding definite article but which has a definite reference results from reduction of the definite article.

Admittedly, examples such as (10) are rare in the ME corpora but the OED adduces more examples taken from the later periods.

It is much more often that *tother* as well as *tone* is preceded by the determiner *the*, as in (11).

(11)...*no* Fulle lordys, mon may serue wel twev no man may serve well two Full lords for obur heschal hate **be** toon and loue either shall hate the love for he the-one and be tobur, the the-other

"no man can serve two masters well for either he will hate one and love the other,"

CMWYCSER,279.950 (PPCME2)

There are two possibilities of interpretation in this case. The first possibility is that we have two definite articles, namely full *the* and reduced *t*-. This interpretation would make these NPs cases of double articulation of definiteness. that is to say definiteness in these NPs is marked twice. This interpretation also runs parallel to what I have suggested in the case of nouns, such as *emperor* in (12) which has reduced *th* attached and is at the same time preceded by the definite article *the* (Nykiel, 2015).

Brought **Pe** (12)The king was moost sory/ & The king and Brought the was sorry most **Themperour** his chambre. to chamber the-emperor to his

'the king was very sorry and took the emperor to his chamber,' 1500 *Three Kings' Sons* (Harl 326) 202/23

The difference between the NPs containing *tone* and *tother* as in (11) and the NPs with reduced *th'* cliticizing onto nouns as in (12) is that the former NPs are common in ME and beyond while the latter are very rare in that there are only two such instances in CMEPV and one in the Penn-Helsinki Parsed Corpus of Early Modern English (see Nykiel 2015 p. 133). This makes the pronouns *tone/tother* with a preceding definite article perhaps the clearest examples of double articulation in the history of English. The reduced article turns out to require reinforcement by means of a full article. The weakening of the article following from the development of the DP cycle results in double articulation of definiteness.

The other possibility is that we have to do with lexicalization, that is incorporation of the part the demonstrative into the structure of the pronoun, and the definiteness follows from the use of the full form of the definite article. The part of the demonstrative incorporated into the pronoun is fossilized having no contribution to the meaning or function of the pronoun. It could be argued that the misanalysis of the demonstrative pronoun which has final -*t* attached to the pronoun leads to lexicalization following Greenberg (1991, pp. 304-305) and also Brinton & Traugott (2005, p. 53). This possibility however is much less likely given that there are no attestations of *tone/tother* with an indefinite article.

7. Conclusion

The main argument of this study has been that neither the forms of the pronouns *one* and *other* serving as a host to initial *t*-, nor those taking initial *th*-, as attested in ME, can be thoroughly accounted for in a straightforward way by saying that they result from misanalysis of the preceding demonstrative. Evidence has been presented pointing to reduction of the definite article as responsible for the earliest instances of these pronouns. The development of reduced *th*' attaching to nouns slightly predates the development of *other* with initial *th*- yet both emerge in early ME and continue unabated throughout the ME period. The use of pronoun *one* with reduced *th*' is a later development in ME. It has been also noted that the definite article can materialize into initial *t*-attached to *one* and/or *other*.

At the very least four different pronouns should be distinguished, namely thone, thother, tone, and tother. The former two are clear cases of reduction of the definite article while the instances of the latter should be split into two groups, i.e. those which were triggered by reduction of the definite article and those contributed by misanalysis of the demonstrative. The reduction of the definite article follows from the DP cycle and in the case of tone and tother, which often display a preceding free-standing definite determiner, results in NPs where definiteness is marked twice.

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