

## The meaning(s) of MUST in Middle English

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### Overview of paper

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### 1 Background

- English modals: a popular research topic (e.g. Plank 1984; Traugott 1989; Warner 1993; Bybee, Perkins & Pagliuca 1994; Traugott & Dasher 2002).
- MUST textbook example of “root” > epistemic modality (e.g. Heine & Kuteva 2002; Ziegeler 2016). Recently study: stepwise shift from dynamic modality in 17th c. (Furmaniak 2011).
- Old English MUST also much discussed – usually translated as PDE ‘may’, but exact semantics contested.
- Middle English: semantic shift from ‘may’ to ‘must’. Shift from permission to obligation under negation? (Standop 1957; Goossens 1987; *OED*, s.v. *mot* v.1) – or because of “invited inferences of obligation” in contexts of permission? (Traugott & Dasher 2002: 123–127)
- This paper: Detailed study of semantics of MUST in a diachronic corpus of Early and Late Middle English.

## 2 Corpus and analytical categories

### 2.1 Corpus

- Middle English material: texts from six electronic corpora (listed in references).
- 200 examples from Early Middle English (c. 1150–1350 AD) and 200 examples from Late Middle English (c. 1350–1500 AD).
- Both prose and verse, but MUST never in alliterating or rhyming position. No more than 12 examples from the same source.

### 2.2 Analytical categories

- Classification of modal meanings based on recent work on Dutch (Nuyts et al. 2005, 2010; Nuyts & Byloo 2015).
- Fine-grained and open-ended classification, similar in spirit to van der Auwera & Plungian (1998). Semantic distinctions comparable to the ones made in the Danish functional tradition (Bech 1949; Hansen & Heltoft 2011; Obe 2011, 2013).
- Three categories important here: dynamic, directive, and volitive meanings.
- **Dynamic** meanings: event can or has to occur because of how the world (in the broadest sense) is constituted. Both participant-internal (1), imposed (2), and situational (3) subtypes.

(1) *Why some people **can** whistle easily while others struggle to make even the slightest toot is somewhat of a mystery.*<sup>1</sup>

(2) *When the renovation began, the contractors had no blueprints to work with, so they **had to** improvise [...]*<sup>2</sup>

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<sup>1</sup> <https://www.healthline.com/health/how-to-whistle> (22/08 2018)

<sup>2</sup> <https://www.nytimes.com/2007/02/01/garden/01treasury.html> (22/08 2018)

(3) *With a team named Fireflies, it **had to** happen at some point — the perfect partner for a park promotion had to be an insect company.*<sup>3</sup>

- **Directive** meanings: permission (4) or obligation (5) that an event occurs; factor can be speaker, some other person or institution, a deity, etc. Jespersen (1924: 320): an “element of will” is involved

(4) *You **can** even smoke cigarettes in hospitals in Pakistan [...]*<sup>4</sup>

(5) *In New Zealand you **have to** wear a safety belt if your vehicle was fitted with one.*<sup>5</sup>

- **Volitive** (or optative) meanings: event is wished or hoped for, e.g. in performatives. Present-Day English *may* can be used in this way, cf. (6).

(6) ***May** you all enjoy your golf for the rest of the summer.*<sup>6</sup>

- “Deontic” modality usually synonymous with “directive” category (e.g. Warner 1993; van der Auwera & Plungian 1998; Palmer 2001). Nuyts et al. (2010) only use “deontic” for moral/ethical evaluations, which are very marginal in my data.
- Epistemic modality not attested in my data.

<sup>3</sup> <https://www.thestate.com/living/food-drink/article212249949.html> (22/08 2018)

<sup>4</sup> <http://presspartners.org/fellow-blog-khalid-khattak-hookahs-and-cigarettes/> (22/08 2018)

<sup>5</sup> <https://www.drivingtests.co.nz/resources/seat-belt-law-in-new-zealand/> (22/08 2018)

<sup>6</sup> <https://www.burleygolfclub.co.uk/news.php?newsitem=132> (22/08 2018)

### 3 Old English MUST

- OE MUST usually translated as ‘may’ in PDE editions/translations, but much discussion about its semantics.
- “**Ambiguity theory**” (Bosworth & Toller 1898; Goossens 1987; *OED*; Ono 1958; Standop 1957; Van Herreweghe 2000): MUST generally expressed possibility, but necessity uses are attested occasionally.
- “**Possibility theory**” (Solo 1977): MUST always expressed possibility; attestations with apparent necessity meaning can be explained as textual errors or stylistic choices (litotes, irony).
- “**Variable-force theory**” (Yanovich 2016): MUST was a “variable-force” modal, expressing possibility with the “presupposition of inevitable actualization” (at least in “Alfredian” OE, c. 900 AD). Sometimes best rendered by PDE ‘may’, sometimes by ‘must’.
- In any case: polysemy in terms of modal meaning categories: dynamic (7), directive (8), as well as volitive (9) uses.

(7) {*Æfter þeosan gewinne gewearð þætte Perse gebudan frið eallum Crecas folce, næs na for þæm þe hie him ænigra goda upen, ac for þæm þe hie wunnon on Egypti,*}

*þæt hie most-en for him þy bet þæm*  
COMP they MUST.PST-PL.SBJV for them the better DEM.DAT

*gewinn-e fullgong-an*  
war-DAT accomplish-INF

‘{After this war the Persians offered peace to all the Greeks, not because they wished to do them any good, but because they were at war with the Egyptians}, so that they would better **be able to** attend to that war instead of them [i.e. the Greeks]’. (*Old English Orosius*; Or 3, 1.55.15)

- (8) & mon **mot** feoht-an orwige, gif he gemeted  
and man MUST.PRS fight-INF exempt if he meets

oper-ne æt his æw-um wif-e, betyned-um  
other-M.ACC by his lawful-N.DAT wife(N)-DAT locked-DAT

dur-um oððe under an-re reo-n  
door-DAT.PL or under INDF-F.DAT blanket(F)-DAT

‘And a man is **allowed to** fight without forfeit if he finds another man with his lawful wife behind locked doors or under a blanket’ (*Laws of Alfred the Great*; LawAf 1, 42.7)

- (9) ... in helleflod **mote** he drinklen with þe traytour Iudas  
‘... **may** he drown in the rivers of Hell with the traitor Judas!’  
(Charter, Abbey of Bury St Edmunds; Ch 1608)

#### 4 Middle English results

##### 4.1 Early Middle English (c. 1150–1350 AD)

- Dynamic uses almost exclusively necessity (10–11). Directive (12) and volitive (13) uses continue as in OE.

- (10) alswa þe gode ancre ne fleo ha neauer se hechze . ha **mot** lichten  
oðerhwiles dun to þeorðe of hire bodi . eoten . drinken . slepen .  
wurchen . spoken & heren of þ hire neodeð . of eorðliche þinges  
‘Likewise, the good anchorite, even if she never flew so high before [spiritually], she **has to** come down to the earth at some point on account of her body, and eat, drink, sleep, work, and speak and hear of what she needs of earthly things’  
(*Ancrene Riwe*; PPCME2 [CMANCRIW-1, IL107.1322])

- (11) Me schon I **mot** me self ofdrawe  
Ase y neuer zet ne dede.  
{After all the servants have left;} ‘My shoes I [the earl] will **have to** take off myself, / as I have never done before’  
(*Beues of Hamtoun* 3035–36; CMEPV)

- (12) He 3af gret trolliage to Rome  
Þre hundred pound ich 3er,  
Er þat he **most** be quite & sker  
{After Cassivellaunus has been taken captive by Caesar;} ‘He paid a great tribute to Rome / three hundred pounds each year, / before he **was allowed** to go free’  
(*Short Metrical Chronicle* 982–84; Burnley & Wiggins 2005)

- (13) þis weater **mote** iwurðe me wunsum & softe  
‘**May** this water become mild and agreeable to me’  
(*Life of St Margaret*; PPCME2 [CMMARGA, 86.492])

Table 1: Early Middle English meanings

	dynamic	directive	volitive	other
POSS	3 (1.5%)	28 (14%)	76 (38%)	10 (5%)
NEC	80 (40%)	3 (1.5%)	(total: 200)	

##### 4.2 Late Middle English (c. 1350–1500 AD)

- Permission uses have all but disappeared – MUST is now clearly a necessity modal, both in dynamic (14) and directive (15) uses.
- Volitive survive into Late Middle English (16), but less frequently. Sporadically attested in the modern period (*OED*, s.v. *mot* v.1).

- (14) *And theñ take hem vp oute of the pañ, and caste hem to þe wessell with the sirippe, altogidre, in a dissh; And therefore thi sirripe **most** be rennyng ynow, and noȝt to stiff*  
 ‘And then remove them [the pancakes] from the pan and put them in the pot with the syrup, all together, [and put it] in a dish; and for this reason your syrup **has to** be sufficiently runny, and not too stiff’  
 (Cookbook, Harley MS 4016, p. 91; ICMEP)
- (15) *Euery brother and suster þat hathe ther helthe, of what coundre or place that so euer they be, yf they may goodly, **must** here masse euery day*  
 ‘Every brother and sister who is in good health, no matter which country or place they come from, if they are properly able to, **have to** attend mass every day’.  
 (Third Order of Seynt Franceys, p. 52; ICMEP)
- (16) *Grett goddys curse **mut** go with the*  
 ‘May great God’s curse follow you!’  
 (Ludus Coventriae, p. 204; Helsinki Corpus)
- Examples of possibility meaning (17) found in three texts, all of them peripheral (N and W England). The *English Dialect Dictionary* records such uses even in 19th c. Scots and northern English.
- (17) *God sent hym swilk contricion þat euer when he began to shryfe hym, he sighed & wepid so sore þat he **mott** not speke a wurd*  
 ‘God sent him such a sense of guilt that whenever he was about to confess, he would sigh and weep so bitterly that he **could** not speak a word’ (Alphabet of Tales, p. 57; ICMEP)

Table 2: Late Middle English meanings

	dynamic	directive	volitive	other
POSS	4 (2%)	2 (1%)	21 (10.5%)	15 (7.5%)
NEC	119 (59.5%)	39 (19.5%)	(total: 200)	

## 5 Discussion and Germanic parallels

### 5.1 Causes of the change

- POSS > NEC happens first in dynamic, then in directive uses.
- Reinterpretation from permission to obligation unlikely, whether for pragmatic reasons or influenced by negation.
- Obligation sense rather spreads from dynamic necessity: change from dynamic to directive is well-known – cf. e.g. history of Dutch (Nuyts & Byloo 2015), and Heine & Kuteva (2002: 27–8, 215–16).

### 5.2 Germanic parallels

- Possibility > necessity change has West Germanic parallels: cf. Dutch *moeten*, German *müssen*, West Frisian *moatte*.
- Diewald (1999: 340–343) on (High) German *müssen*: necessity meaning appears already in OHG period. Perhaps reinterpretation in contexts with only one possibility.
- In EME frequent collocation with necessity adverbs, as in (18) (survives as PDE *must needs* and *needs must*). Perhaps originally to disambiguate from possibility uses?

- (18) *& nede **most** hit polien. þʰ te per-in itimeð.*  
 {Warning to women against having children;} ‘And you **necessarily have to** suffer it, whatever happens to you in this [i.e. childbirth]’ (Hali Meiðhad; PPCME2 [CMHALI,155.399])

**Table 3: EME MUST + necessity adverb**

Adverb	Att.
<i>nede</i>	12
<i>nedes</i>	2
<i>neodeliche</i>	1
<i>nedunge</i>	1
<i>for fine nede</i>	1
<i>nedes costes</i>	1
<b>Total</b>	<b>18</b>

- Another parallel: Danish MÅ (cognate of English MAY and German MÖGEN) – from dynamic possibility to dynamic necessity.
- Middle Danish meanings dynamic possibility, directive possibility, and volitive. Dynamic possibility meanings as in (19) are now obsolete (replaced by KAN).

(19) {*Och wel hun sydhæ neth foræ dywreth tha gangher thet til oc faller paa synæ knæ och leggher sith howith i hennæ skøth oc wordher saa fast at sowæ*}

*ath hun maa dræw-æ thet dywr*  
that she MÅ.PRS kill-INF DEM.N beast(N)

‘{And if she [a virgin] sits down before the beast [a unicorn], then it will approach her, fall to its knees and lay its head in her lap, and fall into a sleep so deep} that she **can** kill the beast.’ (*Lucidarius*, MS. c. 1450; cited from Obe 2011: 258)

- Directive possibility (permission) still found in Modern Danish, cf. (20).

(20) *Det eneste, han måtte skriv-e i fængsl-et, var et*  
DEF.N only he MÅ.PST write-INF in prison-DEF was INDF.N

*ugentlig-t brev til sin kone [...]*  
weekly-N letter(N) to REFL.POSS.C wife(C)

‘The only thing he **was allowed to** write in prison was a weekly letter to his wife [...].’  
(KorpusDK, newspaper article, 1991)

- Dynamic uses of MÅ now have necessity meaning (21).

(21) *Montør-en fik sved-et hår-et, mens lejlighed-en-s*  
fitter-DEF get.PST singe-PTCP hair-DEF while flat-DEF-POSS

*22-årig-e mandlig-e beboer måtte behandl-es for chok.*  
22-y.o.-DEF male-DEF occupant MÅ.PST treat-PASS for shock

‘The gas fitter had his hair singed, while the 22-year-old man living in the flat **had to be** treated for shock.’  
(KorpusDK, newspaper article, 1991)

- In other words: Middle Danish MÅ like Old English MUST; Modern Danish MÅ like Early Middle English MUST.
- Obe (2011, 2013): dynamic POSS > NEC in late Middle Danish, possibly in the late 15th c.
- Critical contexts hard to identify, but the language of the period is relatively well-documented. However, we need a (bigger) corpus.

## 6 Conclusions

- Necessity meaning of MUST develops first in dynamic uses (OE > EME), and then spreads to directive ones (EME > LME)
- End of ME: MUST necessity modal, except in idiomatic expressions and in a few texts from peripheral dialect areas.
- Polyfunctionality at all stages; semantic rather than in terms of grammaticalization.
- Germanic parallels: German, Dutch, and West Frisian cognates of MUST, but also Danish cognate of MAY (2–3 c. later). Middle Danish pattern similar to OE, Modern Danish pattern similar to EME.

### Old English and Middle Danish

dynamic POSS	permission	volitive
dynamic NEC	obligation	

### Early Middle English and Modern Danish

dynamic POSS	permission	volitive
dynamic NEC	obligation	

### Late Middle English

dynamic POSS	permission	volitive
dynamic NEC	obligation	

- Future work from cross-linguistic and comparative Germanic perspectives: How common is POSS > NEC? Older pattern preserved in peripheral Germanic dialects?
- Historical corpus of Danish needed.

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## Contact information

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*Helsinki Corpus of English Texts*. 1991. University of Helsinki. Published by the Oxford Text Archive. <http://ota.ox.ac.uk/desc/1477>

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ICMEP = Markus, Manfred (ed.). 2010. *Innsbruck Corpus of Middle English Prose*, version 2.4. Universität Innsbruck. CD-ROM.

PPCME2 = Kroch, Anthony, and Ann Taylor (eds.). 2000. *Penn-Helsinki Parsed Corpus of Middle English*, 2nd edn. University of Pennsylvania. CD-ROM.

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