

How ‘can’ becomes ‘have to’: Middle Danish *mughe* and its West Germanic parallels

Sune Gregersen (University of Amsterdam)
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Overview of paper

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1 Background

- The history of the Germanic modal verbs: a popular research topic (cf. e.g. Bech 1951; Standop 1957; Plank 1984; Goossens 1987; Traugott 1989; Warner 1993; Fritz 1997; Diewald 1999; Traugott & Dasher 2002; Yanovich 2016)
- Parallel development across West Germanic from ‘can, may’ to ‘must, have to’: English *must*, German *müssen*, Dutch *moeten*, West Frisian *moatte*, etc.
- Similar change in late Middle Danish *mughe*/MÅ (cognate of English *may*, German *mögen*, etc.)
- Question: How did the change ‘can, may’ > ‘must, have to’ happen? Not settled in the case of West Germanic; in Danish not investigated systematically.
- Material: Late Middle Danish texts (early 16th c.) in order to identify possible contexts licensing the change.

2 From ‘can’ to ‘have to’ in West Germanic

- OE MOT can usually be translated ‘can’ or ‘may’, as in (1):
 - (1) *Of ælcum treowe ðises orcerdes ðu **most** etan.*
‘Of every tree in this garden you may eat.’ (DOE Corpus; Gen 2.16)
- From early ME onwards, necessity uses start appearing, i.e. with the meaning ‘must’ or ‘have to’, cf. (2):
 - (2) *Ah heo **mot** nede beien, þe mon þe ibunden bið*
‘But the man who is bound necessarily has to yield.’ (Lazamon *Brut* (Calig.) 1051; *OED*, s.v. *mote* v.¹)
- Similarly in Middle High German: OHG MUOZ expresses possibility or permission (3); in MHG necessity meanings appear (4):
 - (3) *See dine gungirun · tuoant · daz sie **nimozun** tuoan · in fera tagum*
‘Look, your disciples are doing what they are not allowed to do on feastdays’ (Referenzkorpus Althochdeutsch; MF 4,4–5)
 - (4) *Leider ich **muoz** mich entwenen / meniger wunne, der mîn ouge an sach.*
‘Unfortunately I have to do without many joys that my eyes used to look at.’ (Vogelw. 89,II; Bein 2013: 433)
- Various suggestions about the West Germanic developments:
 - » “Negation” theory: The meaning ‘not allowed to’ reanalysed as ‘obliged not to’ (Standop 1957; Goossens 1987; *OED*, s.v. *mote* v.¹).
 - » “Euphemism” theory: Conventionalisation of ‘euphemistic’ use of permission for obligation (Bréal 1903; Klarén 1913; Traugott & Dasher 2002: 123–127).

» “Single possibility” theory: Logical overlap between necessity and possibility in some contexts – ‘can only’ ≈ ‘have to’ (Paul 2002 [1897]; Fritz 1997; Diwald 1999).

- Problem: Less than ideal *Quellenlage* for the early ME and early MHG periods. However, parallel change in Danish happened much later (15th/16th c.).

3 Classification of modal meanings

- Competing classifications of modality. I follow the model used by Byloo & Nuyts (2011, 2014) in their investigations of Dutch.
 - Important: Semantic distinction between **possibility** (5) vs. **permission** (6) and **necessity** (7) vs. **obligation** (8).
- (5) *Why some people **can** whistle easily while others struggle to make even the slightest toot is somewhat of a mystery.*¹
- (6) *You **can** even smoke cigarettes in hospitals in Pakistan [...]*²
- (7) *When the renovation began, the contractors had no blueprints to work with, so they **had to** improvise [...]*³
- (8) *In New Zealand you **have to** wear a safety belt if your vehicle was fitted with one.*⁴
- Easy to overlook in English because of polysemy: The **dynamic** meanings possibility and necessity may often be expressed by the same forms as the **directive** meanings permission and obligation.
 - Polysemy also in the earliest Middle Danish texts, cf. Table 1 and the two examples in (9).

¹ <<https://www.healthline.com/health/how-to-whistle>> (01.06.19)

² <<http://presspartners.org/fellow-blog-khalid-khattak-hookahs-and-cigarettes/>> (01.06.19)

³ <<https://www.nytimes.com/2007/02/01/garden/01treasury.html>> (01.06.19)

⁴ <<https://www.drivingtests.co.nz/resources/seat-belt-law-in-new-zealand/>> (01.06.19)

Table 1: Modals in early Middle Danish (13th c.)

dynamic	directive
possibility MÅ	permission MÅ
necessity SKAL	obligation SKAL

- (9) *oc trøstær han sich til thær ofnæ at han **ma** utæn kunæ
and trusts he REFLto there upon that he MÅ without wife
wæræ. tha **ma** han hennæ ut af garthæ sciutæ i særki
be then MÅ he her out of property expel in smock
enæ oc mættæl
only and mantle*

‘And if he is confident after this that he can [= ‘is able to’] live without a wife, then he may [= ‘is allowed to’] expel her from the house in nothing but her smock and mantle’ (c.1300 ErL; Bjerrum 1967: 35)

- MÅ first attested with necessity meaning in the late 15th century:
- (10) *wdger worde seg mannelege ok slogh xx i hællaff them
Ogier defended REFL valiantly and struck 20 dead of them
tha war han so trøtther at han **motthæ** giffue segh fangen
then was he so tired that he MÅ.PST give REFL caught*
- ‘Ogier defended himself valiantly and killed twenty of them; then he was so tired that he had to surrender’ (1480 KMagnus; Obe 2013: 151)
- Present-Day Danish: MÅ expresses necessity, as in (11), or permission, as in (12). Replaced by KAN in its earlier ‘possibility’

function. Modern system summarised in Table 2 (cf. Hansen & Heltoft 2011: 783–784).

Table 2: Modals in Present-Day Danish

dynamic	directive
possibility KAN	permission MÅ
necessity MÅ	obligation SKAL

(11) *Mit fly var aflyst, så jeg måtte vente til kl. 18.35.*
my flight was cancelled so I MÅ.PST wait until clock 6.35.
'My flight was cancelled, so I had to wait until 6.35 p.m.'
(KorpusDK)

(12) *På sabbat må ortodokse ikke tænde lys*
on Sabbath MÅ orthodox.PL not light candles
'During the Sabbath Orthodox Jews are not allowed to light candles'
(KorpusDK)

4 Middle Danish material

- Four late MDa (early 16th c.) prose texts, all from editions published by the Society for Danish Language and Literature.
- *Jon Præst* (JPræst): Description of the wonders of the East written by the (fictitious) king of India, John the Presbyter. Adaptation of a Swedish translation from Latin (Karker 1978).
- *Jesu Barndoms Bog* (JesuB.): Chapbook with legends about the lives of Mary and Jesus. Adapted from an earlier Danish verse translation of Philipp von Seitz's *Marienleben* (cf. Jacobsen & Paulli 1915).

- *Kvinders Urtegård* (KvUrteg.): Fairly close translation of Eucharius Rößlin's *Der Schwangern frawen vnd hebammen rosztgarten* (Strasbourg, 1513), the first printed handbook on midwifery.
- *Om kranke og fattige Mennesker* (HelieKr.): Treatise by the bishop Paulus Helie on the treatment of the poor and destitute. Danish original, but more rhetorically ornate than the other texts.

Table 3: Abbreviations and text information

	Title	Date	Edition	Witness	Words
JPræst	<i>Jon Præst</i>	c.1500	Nielsen 2015	Thott 585,8°	c.1,600
JesuB.	<i>Jesu Barndoms Bog</i>	1508	Boeck 2015	LN 21 (eks. 1)	c.15,000
KvUrteg.	<i>Kvinders Urtegård</i>	c.1515	Boeck 2017	Thott 245,8°	c.17,000
HelieKr.	<i>Om kranke og fattige Mennesker</i>	1528	Kristensen 1933	A.12-2	c.10,000

5 Findings

- 103 examples of MÅ. Of these, 95 examples were analysed as shown in Table 4. (The remaining 8 occurred in idiomatic expressions or other minor meaning categories.)
- 'Possibility' the most frequent category in the texts; only 7 unambiguous instances of 'necessity'.
- 18 examples ambiguous between 'possibility' and 'necessity', cf. (12) and (13). None of these contains a negation.

Table 4: Meanings of late Middle Danish MÅ

	dynamic	directive
	possibility	permission
	51	8
prediction	possibility/necessity	
11	18	
	necessity	obligation
	7	0

- (12) *Tha sagdhe iomfrw maria thijll iosep huor komme wij*
 then said virgin Mary to Joseph how come we
offuer thenne beck. iosep swaredede wi mo wade oss scal
 across this creek Joseph replied we MÅ wade us shall
intheth skade
 nothing hurt
 ‘Then said the Virgin Mary to Joseph, “How are we going to get across this creek?” Joseph replied, “We can [or ‘have to’] wade; nothing is going to hurt us.’ (JesuB. 13)

- (13) *en qwynne, som megit vansmectigh er ok toor ok mager, hwn*
 a woman who very feeble is and dry and thin she
mo ok rædis for vtidigt barn
 MÅ also worry about premature child
 ‘a woman who is very feeble, dry, and thin may [or ‘has reason to’] worry about premature birth as well’ (KvUrteg. 10)

- Surprisingly, 11 examples appear to be better analysed as expressing ‘prediction’. (14) especially clear because the German original (15) has a periphrastic future rather than a modal:

- (14) *Er thet so, at ther er ingen knwder poo, tha fonger hwn*
 is it so that there are no knots on then gets she
aldri flere børn, men er ther fult knuder po, tha mo
 never more children but are there full knots on then MÅ
hwn fonge it barn for hwor knwde
 she get a child for every knot

‘Is it so that there are no knots on it [the umbilical cord], then she will get no more children, but are there knots on it, then she will get a child for every knot.’ (KvUrteg. 17)

- (15) *Siend aber rüntzlin od(er) knöpf dar an/ so würt sie nach*
 de(m)selben kind so vil kinder mache(n) so vil der nabel ru(n)tzlen
 od(er) knöpf hat.
 ‘But are there folds or knots on it, then she will bear as many children after this one as the navel has folds or knots.’ (Rößlin 1910 [1513]: 74)

6 Conclusions

- Necessity meaning of MÅ develops out of possibility, perhaps partly through an intermediate stage of ‘prediction’, as indicated by the dotted arrows in Table 5.
- The notion of ‘obligation’ plays no role in this development (*pace* the “euphemism” theory).
- Apparently no interaction with negation: possibility/necessity ambiguity only in non-negated contexts.
- For Middle Danish MÅ, the “single possibility” theory (Paul 2002 [1897]; Fritz 1997; Diewald 1999) preferable to the other two.

Table 5: Development of necessity and permission MÅ

dynamic	directive
<p>possibility</p> <p>prediction</p> <p>necessity</p>	<p>permission</p> <p>obligation</p>

- Of course, not certain that OE/ME MOT and OHG/MHG MUOZ followed the same trajectory. But insights from comparative investigations may help us reconsider earlier assumptions.
- In particular: Are some early ‘necessity’ instances perhaps better analysed as ‘prediction’?

(2') *Ah heo **mot** nede beien, þe mon þe ibunden bið*

‘But the man who is bound necessarily **has to** yield.’

~ ‘But the man who is bound is necessarily **going to** yield.’?

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Contact information

sune.gregersen@gmail.com

Sources

Bein, Th. 2013. *Walther von der Vogelweide: Leich, Lieder, Sangsprüche*. Berlin: Walter de Gruyter.

DOE Corpus = A.d. Healey et al. (eds.). 2009. *Dictionary of Old English Web Corpus*. Toronto: Dictionary of Old English Project. <<http://tapor.library.utoronto.ca/doecorpus/>>.

HelieKr. = P. Helgesen [Helie]. 1933 [1528]. *Om kranke og fattige Mennesker*. In M. Kristensen (ed.), *Skrifter af Paulus Helie*, vol. 3, 1–37. Copenhagen: Det Danske Sprog- og Litteraturselskab. <http://adl.dk/solr_documents/helgesen03>.

JPræst = M.A. Nielsen (ed.). 2015. *Jon Præst*. Copenhagen: Det Danske Sprog- og Litteraturselskab. <<https://tekstnet.dk/jon-praest-thott>>.

JesuB. = S.S. Boeck (ed.). 2015. *Jesu Barndoms Bog*. Copenhagen: Det Danske Sprog- og Litteraturselskab. <<https://tekstnet.dk/jesu-barndomsbog>>.

KorpusDK. Copenhagen: Det Danske Sprog- og Litteraturselskab. <<http://ordnet.dk/korpusdk>>.

KvUrteg. = S.S. Boeck (ed.). 2017. *Kvinders Urtegård*. Copenhagen: Det Danske Sprog- og Litteraturselskab. <<https://tekstnet.dk/kvinders-urtegaard>>.

Referenzkorpus Altdeutsch. Berlin: Humboldt University of Berlin. <<https://www.deutschdiachrondigital.de/>>.

Rößlin, Eucharius. 1910 [1513]. *Der Swangern frawen vnd hebamme[n] roszgarte[n]*. Strasbourg. (Facsimile published by Carl Kuhn, Munich.)

Other references

- Bech, G. 1951. *Grundzüge der semantischen Entwicklungsgeschichte der hochdeutschen Modalverba*. Copenhagen: Munksgaard.
- Bjerrum, A. 1967. *Grammatik over De sjællandske Love*. Copenhagen: Gyldendal.
- Bréal, M. 1903. Un changement de signification : le verbe allemand *müssen*. In *Album – Kern: Opstellen geschreven ter eere van Dr. H. Kern*, 27–28. Leiden: Brill.
- Byloo, P. & J. Nuyts. 2011. The diachrony of Dutch *mogen*. *Antwerp Papers in Linguistics* 113.
- Byloo, P. & J. Nuyts. 2014. Meaning change in the Dutch core modals: (Inter)subjectification in a grammatical paradigm. *Acta Linguistica Hafniensia* 46. 85–116.
- Diewald, G. 1999. *Die Modalverben im Deutschen: Grammatikalisierung und Polyfunktionalität*. Tübingen: Niemeyer.
- Fritz, G. 1997. Historische Semantik der Modalverben: Problemskizze – exemplarische Analysen – Forschungsüberblick. In G. Fritz & Th. Gloning (eds.), *Untersuchungen zur semantischen Entwicklungsgeschichte der Modalverben im Deutschen*, 1–158. Tübingen: Niemeyer.
- Goossens, L. 1987. Modal tracks: The case of *magan* and *motan*. In A.-M. Simon-Vandenbergen (ed.), *Studies in honour of René Delorez*, 216–236. Gent: Vitgeuer.
- Hansen, E. & L. Heltoft. 2011. *Grammatik over det Danske Sprog*. 3 vols. Copenhagen: Det Danske Sprog- og Litteraturselskab.
- Klarén, G.A. 1913. *Die Bedeutungsentwicklung von können, mögen und müssen im Hochdeutschen*. Lund University dissertation.
- Obe, R. 2013. *Modalverbernes semantiske system i gammeldansk*. Roskilde University dissertation.
- OED = *Oxford English Dictionary*, online edn. <<http://www.oed.com>>.
- Paul, H. 1992 [1897]. *Deutsches Wörterbuch*. 9th edn. Tübingen: Niemeyer.
- Plank, F. 1984. The modals story retold. *Studies in Language* 8(3). 305–364.
- Standop, E. 1957. *Syntax und Semantik der modalen Hilfsverben im Altenglischen* *magan*, *motan*, *sculan*, *willan*. Bochum-Langendreer: Pöppinghaus.
- Traugott, E.C. 1989. On the rise of epistemic meanings in English: An example of subjectification in semantic change. *Language* 65. 31–55.
- Traugott, E.C. & R.B. Dasher. 2002. *Regularity in semantic change*. Cambridge: Cambridge University Press.
- Warner, A.R. 1993. *English auxiliaries: Structure and history*. Cambridge: Cambridge University Press.
- Yanovich, I. 2016. Old English **motan*, variable-force modality, and the presupposition of inevitable actualization. *Language* 92(3). 489–521.