On the Variant Spellings and Their Sounds of Old English *-ht* in the Early Middle English Period: a Brief Survey

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Introduction

The Present Day English spelling <-ght>, such as in *light* and *thought*, etymologically derives from OE -*ht*.[1] We learn the part <gh> which once had a fricative sound was at some point lost and the precedent vowels were lengthened. One handy handbooks for the history of English spelling would be D. G. Scragg's *A History of English Spelling* (1974). He refers to the variant spellings for the fricative as follows:

> These two sounds [i.e. [x] and [ç]] gave considerable difficulty in Middle English; among the many graphemes representing them are Anglo-Norman <s>, the Old English <h>, the new grapheme <ʒ>, and the last two combined as <ʒh>.
>
> (Scragg, 1974, p. 23)

He also continues to further explain the origin of the modern spelling <gh>:

> Anglo-Norman represented the sound [i.e. [x]] by <gh>, as English orthographic development and fixing of <gh> in 15th century London English . . . owes much to its use in Anglo-Norman.
>
> (Scragg, 1974, p. 49)

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[1] There are of course exceptions: one of the well-known example is *delight*, which derives from Old French *delit,* the form etymologically without fricative sound. According to the *OED*, 'the etymological *delite* is found as late as 1590, but earlier in 16th c. it had generally been supplanted by *delight*'.

It is, however, inconceivable that it was such as a simple case as Scragg's explanation. The aim of the present paper is to show the development of and the spelling variants for a fricative sound, written as <h> in West Saxon dialect, of the Old English consonant cluster -*ht*, in early Middle English period, with special reference to the pronunciation: whether the part in question retains the fricative sound or has lost its sound already. Not so much as the notorious case of the word THROUGH, it is known that the words containing OE -*ht* have various ways to spell out in early Middle English.[2]

This survey will be a trigger to reconsider how the loss of the fricative sound and related matters are deeply connected with the starting period of the consequent phonological event, and ultimately what we call the Great Vowel Shift. It is now becoming a common understanding that the Great Vowel Shift did not occur simultaneously throughout the British Isles, so that individual texts in existence should be investigated so as to be able to clarify the following matters: (1) what kind of phonological environments (front vowel + -*ht* vs. back vowel + -*ht*, etc.) affect the sound change and (2) which dialect or dialects have a tendency towards loss the fricative sound earlier than other dialects.

Methodology

The methodology I have utilized is that of Margaret Laing and Roger Lass, which is shown in their article entitled "Tales of 1001 nist: the phonological implications of *litteral* substitution sets in some thirteenth-century South-West Midland texts".[3] This is also a basic philosophy that underlies *A Linguistic Atlas of Early Middle English* (hereafter *LAEME*).[4] This article gives a great insight into interpretation of the chaotic status of the Middle English spelling system. They applied the theory of 'Littera' by A Donatus, a Roman grammarian in 4th century, to the early Middle English spelling. The notion is found in his *Ars Minor*, Liber 1, which is repeated in *LAEME* as follows:

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[2] For the variant spellings of THROUGH, see *Linguistic Atlas of Late Mediaeval English* (*LALME*), vol.4, p. 96-101.

[3] Laing and Lass (2003)

[4] The attitude towards the variant spellings is expressed in the introduction to *LAEME* website.

> Littera est pars minima vocis articulatae ... littera est vox, quae scribi potest individua ... accidunt cuique littera tria, nomen figura potestas, quaeritur enim, quid vocatur littera, qua figura sit, qua possit.[5]

Therefore, the nature of 'littera' is divided into three parts: 1. name of the letter, 2. shape of the letter and 3. sound value of the letter. As for the relationship between the texts and writers / scribes or listeners / readers, Laing and Lass stand on the following 5 suppositions below:

a. texts were written or copied by English speakers
b. they wrote the texts for English listeners or readers
c. writers / scribes and listeners / readers share the corpus of linguistic knowledge
d. disorder in appearance is due to our lack of understanding
    Expectations of both writers / readers in medieval period and those in Modern era are different from each other: that is to say, scribal system is prodigal, but at the same time it is systematic.
e. scribes were good at linguistic analysis

This is the ground point that the writers / scribes can read what they write and copy.

Survey

Let us now look at the actual spelling examples. The tables are grouped into two, according to the environments whether the precedent vowels are front or back. In the present paper, only three words are listed for the illustration. Under each item, the variant spellings for the reflex of OE -*ht* are shown and allocated in each dialect: Northern, West Midland, East Midland, Kentish, and Southern. On the right hand side of the variant spellings, you can see the total frequency. In parenthesis, the number of
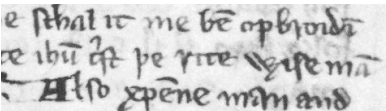
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[5] See *LAEME*, Introduction, Part 1, Chapter 2, p. 9. English translation is given here: "*Littera* is the smallest unit of articulated sounds … *Littera* is (a) sound which is capable of being written alone … *Littera* has three properties name, shape, power [=sound value]. For one must ask what the *littera* is called, what its shape is, and what its power is".

manuscripts is shown. A brief glance will give an impression that a chaotic situation is obvious as one might expect.

● Front Vowels + OE -ht

As a general tendency to front vowel environment, you can see less <-t> in Northern, Kentish, and Southern. Both West and East Midland dialects have a wide variety of the variant spellings, and show a high rate of occurrence of OE type spelling <-ht>. But at the same time, <-t> appears in some manuscripts as well as in the image below. What is definitely different between East and West Midlands is the frequency of <-th>. This <-th> scarcely shows in West Midland dialect. On the other hand, in East Midlands, <-th> is one of the major variant spellings. Instead, the spelling <-ʒt> is a major variant, but its use is limited in East Midland dialect.

. . . ih*es*u c*ri*st þe **rite** wise ma*n*

Trinity College Cambridge, B 1 45, f. 24v

Table 1

BRIGHT	KNIGHT	MIGHT
<Northern>	<Northern>	<Northern>
-ht: 10x (in 4 MSS.)	-t: 1x (in 1 MS.)	-ght: 24x (in 1 MS.)
-ʒt: 3x (in 1 MS.)	-ht: 13x (in 3 MSS.)	-cht: 2x (in 1 MS.)
	-th: 3x (in 2 MSS.)	-ht: 80x (in 3 MSS.)
		-th: 3x (in 2 MSS.)
		-ʒt: 24x (in 1 MS.)
<West Midlands>	<West Midlands>	<West Midlands>
-t: 5x (in 2 MSS.)	-t: 6x (in 2 MS.)	-t: 8x (in 3 MSS.)
-gt: 5x (in 1 MS.)	-cht: 6x (in 4 MSS.)	-cht: 24x (in 6 MSS.)
-ht: 53x (in 13 MSS.)	-ct: 1x (in 1 MS.)	-ht: 411x (in 14 MSS.)
-th: 2x (in 2 MSS.)	-ht: 132x (in 14 MSS.)	-th: 1x (in 1 MS.)
-þt: 1x (in 1 MS.)	-th: 1x (in 1 MS.)	-þt: 6x (in 1 MS.)

-ʒt: 2x (in 2 MSS.)	-þt: 1x (in 1 MS.)	-ʒt: 202x (in 5 MSS.)
	-ʒt: 69x (in 4 MSS.)	
\<East Midlands\>	\<East Midlands\>	\<East Midlands\>
-t: 1x (in 1 MS.)	-t: 3x (n 2 MSS.)	-t: 6x (in 3 MSS.)
-ght: 3x (in 1 MS.)	-gt: 1x (in 1 MS.)	-cht: 3x (in 2 MSS.)
-ht: 23x (in 8 MSS.)	-ct: 10x (in 1 MS.)	-ht: 172x (in 12 MSS.)
-th: 4x (in 2MSS.)	-ht: 17x (in 8 MSS.)	-gt: 16x (in 1 MS.)
	-th: 48x (in 2 MSS.)	-ct: 26x (in 1 MS.)
	-ʒt: 1x (in 1 MS.)	-th: 77x (in 5 MSS.)
		-ʒt: 13x (in 2 MSS.)
\<Kentish\>	\<Kentish\>	\<Kentish\>
-ht: 14x (in 2 MSS.)	-ʒt: 6x (in 1 MS.)	-t: 1x (in 1 MS.)
		-cht: 2x (in 1 MS.)
		-ht: 9x (in 2 MSS.)
		-ʒt: 20x (in 1 MS.)
\<Southern\>	\<Southern\>	\<Southern\>
-ht: 8x (in 1 MS.)	n.d.	n.d.
-th: 1x (in 1 MS.)		

● Back Vowels + OE -ht

As a general tendency of back vowel + OE -ht, the use of the single letter <-t> is observable in every dialect. Although OE type spelling <-ht> is certainly a major variant, frequency of other variant spellings such as <-ʒt> shows an equally high rate. Especially in West Midland dialect, the frequency goes beyond the OE type <-ht>. The spelling <-ght> that is going to be mainstream from the late Middle English period can be found in all the manuscripts in Northern dialect. One instance of <-ght> is in East Midlands.[6]

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[6] The only <-ght> in East Midland appears in Cambridge, Trinity College, MS. B. 14.52 (*Trinity Homilies*, hand A. Dialect: Noth-West Essex. Date: C12b2). However, judging by the existing instance, it seems that the usual form of hand A in Trinity manuscript is <-ht> (e.g. *broht* 'brought' 5x, *wroht* 'wrought' 1x).

Table 2

BRIGHT	KNIGHT	MIGHT
<Northern>	<Northern>	<Northern>
-ght: 16x (in 1 MS.)	-t: 1x (in 1 MS.)	-t: 1x (in 1 MS.)
-ht: 9x (in 3 MSS.)	-ght: 7x (in 1 MS.)	-ght: 4x (in 1 MS.)
-th: 1x (in 1 MS.)	-ht: 12x (in 1 MS.)	-ht: 18x (in 2 MSS.)
-ʒt: 24x (in 1 MS.)	-ʒt: 3x (in 1 MS.)	-th: 1x (in 1 MS.)
		-ʒt: 1x (in 1 MS.)
<West Midlands>	<West Midlands>	<West Midlands>
-t: 16x (in 4 MSS.)	-t: 7x (in 4 MSS.)	-t: 19x (in 6 MSS.)
-ht: 14x (in 6 MSS.)	-cht: 4x (in 3 MSS.)	-cht: 4x (in 4 MSS.)
-ʒt: 5x (in 2 MSS.)	-ht: 36x (in 11 MSS.)	-ht: 26x (in 11 MSS.)
	-ʒt: 25x (in 3 MSS.)	-ʒt: 99x (in 3 MSS.)
<East Midlands>	<East Midlands>	<East Midlands>
-t: 1x (in 1 MS.)	-t: 3x (in 3 MSS.)	-t: 8x (in 4 MSS.)
-ct: 5x (in 3 MSS.)	-ct: 4x (in 1 MS.)	-ct: 2x (in 2 MSS.)
-ht: 11x (in 6 MSS.)	-gt: 9x (in 1 MS.)	-gt: 22x (in 1 MS.)
-ʒt: 1x (in 1 MS.)	-ght: 1x (in 1 MS.)	-ht: 31x (in 7 MSS.)
	-ht: 7x (in 4 MSS.)	-th: 19x (in 3 MSS.)
	-ʒt: 3x (in 2 MSS.)	-ʒt: 2x (in 2 MSS.)
<Kentish>	<Kentish>	<Kentish>
-ht: 1x (in 1 MS.)	-ht: 1x (in 1 MS.)	-ʒt: 2x (in 1 MS.)
	-ʒt: 1x (in 1 MS.)	
<Southern>	<Southern>	<Southern>
-ht: 1x (in 1 MS.)	-ʒt: 1x (in 1 MS.)	n.d.

● Comparison between the two above

The pronunciation of OE -*ht*, obtained by utilizing the methodology of Laing and Lass, is that almost all the dialect texts have two different types of pronunciation. Namely one with the fricative sound and one without it, i.e. loss of the fricative sound: [çt ~ xt] and [t].

    As a whole, the number of manuscripts with a single letter <t> which shows the

loss of fricative sound, is more in the back vowel environment than in front vowel environment. This difference can be evidence that proves the time lag of the loss of the fricative sound depending on the environment. In West Midland dialect texts, we can confirm the occurrence of <-th> in the front vowel environment (just one occurrence in each manuscript though), but not a single instance can be found in back vowel environment.

The spelling <-ʒt> is said to be an Anglo-Norman scribal habit by Scragg. This variant spelling is preferred in West Midlands, but it does not seem to be so popular in East Midland dialect. It is necessary to consider the value of the letter used here <ʒ> (yogh) in terms of pronunciation, partly because this letter appears somewhat tricky in its form and nature.[7] What kind of possible sound value did this letter <ʒ> have? One thing is that it is said that the spelling <-ʒt> was brought to the English spelling system by Anglo-Norman scribes. <-ʒt> was the replacement of <-st>. According to Pope, the <-st> spelling represented the sound /ht/ by the end of the fourteenth century in Anglo-Norman language.[8] Therefore, it is interpreted that <-ʒt> is with the fricative sound. The other view is the case with the initial yogh such as in the word YOUNG. This means the initial letter has the sound value of /j/, in other words, this is a semi-vowel (or strictly speaking, a consonant). If it is placed after a front vowel, it is possible to think that the spelling is in the course of change from /ç/ to /j/ and finally to /i/. Thus, in the case of the word MIGHT for example, one can see the process of /miçt > mijt > miit (=mi:t)/ and it is as one step before reaching to the long vowel /i:/. As has been mentioned earlier, the letter yogh <ʒ> is tricky because, as the example already mentioned above shows, yogh was used for the replacement of <s> and <z>[9], as well as <g>.

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[7] Gumbert and Vermeer (1971) dealt with the difference in the forms of <g> and yogh in the British Library, Arundel MS. 292. The discussion conclude the scribe carefully distinguishes 'hooked g' and 'hookless g': the former indicates [g], and the latter covers the various sounds [ç] [x] [j] and [ɣ].

[8] See Pope (1952, p 449, § 1178 (ii), citing the gloss of the *Orthographia Callica* 'Et quant *s* est joynt ala *t* ele avera le soun de *h*, come est, plest serront sonez *eght*, *pleght*'.

[9] Traxel (2004, p. 141n.) "In fact, the only difference between the shapes of ʒ and *z* around the beginning of the fourteenth century was that the bow of *z* below the baseline exhibited an additional final curve to the right, which ʒ was missing at this stage. Charles Johnson and Hilary Jenkinson pointed out that the form of ʒ employed in the fourteenth and fifteenth centuries 'are quite indistinguishable from the contemporary *z*' (Johnson and Jenkinson, English Court Hand I, p. 57): MED states: 'In later ME script, ʒ and *z* are indistinguishable in form' (entry: 'ʒ (n.)').

The shape of insular <g> is similar to <ʒ>, and the insular <g> was used for the initial <ge-> in order to make the past participle in Old English time, whose pronunciation is of course /je/ not /ge/, and words like *day* (< OE dæge) and *eye* (< OE ēage). I whould like to refer to some examples of the soft *g* from Cambridge University Library, Ii 1 33, which contains Latin and Old English works. It is not certain whether the manuscript's provenance is Ely or not, but the place name Ely appears in the main text. One is *eligmynstre* in f. 35r20[10], and the other is *elig* in f. 155v11[11]. And *fairne* (= 'beautiful') is found instead of WS *fægerne*. In the last example, <g> is already changed to <i>, that can be taken as an attestation of vowelization from the semi-vowel /j/ to full vowel /i/. According to Ker's catalogue, the manuscript was copied around the second half of the twelfth century. Therefore, the letter <g> already had the quality of a vowel where appropriate by the time of manuscript production.[12]

Furthermore, it seems to be important to mention the habit of the Anglo-Norman spelling system: Although Scragg and other scholars on English spelling tell us that the present day English spelling <-ght> succeeded from the Anglo-Norman spelling system, what our materials suggest is that the main use of <-ght> is limited to the Northern dialect texts in the fourteenth century, except for few instances in late twelfth century in East Midlands, and in late thirteenth century in West Midlands. Therefore, it is becoming questionable to say that the spelling <-ght> is the result of following the Anglo-Norman scribal habit.

Nakao (1980) stated that there is a difference in speed of change depending on the environment, i.e. front or back vowels.[13] The loss of [ç] began from late Middle English to Modern English: From late fourteenth century onward, /ç/ became /j/ to /i/ (finally vowelized). The inverted spelling, such as *whight* for *white*, can be taken as another example of fricative loss, which is often seen in the fifteenth century. The loss of /x/ in back vowel environment followed the course of /x > ɣ/ and finally vowelized as /u/.

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[10] Cf. *LS* I, p. 434, line 38.

[11] Cf. *LS* II, p. 332, line 262.

[12] Another evidence of vowelizing of <g> to /i/ can be found in the thirteenth century manuscripts, Cambridge, University Library, Ff. ii. 33 and London, British Library, Additional 14847, which is OE word *byrig* is always spelt as *biri*, suggesting that the OE <g> became /i/. See Kano (2014, p. 305).

[13] See Nakao (1980, pp. 413, § 222151.16 (item: loss of [x])).

Nakao said that this happened in around 1400 in the East Midlands, and around the beginning to the end of the fifteenth century in other dialect areas. However, as far as the present tables shown here are concerned, the loss of the fricative sound after front vowels is confirmed to have begun in late thirteenth century in East and West Midland dialects. And it is probable that the loss of fricative after back vowels began at least in the early thirteenth century in the West Midland dialect.
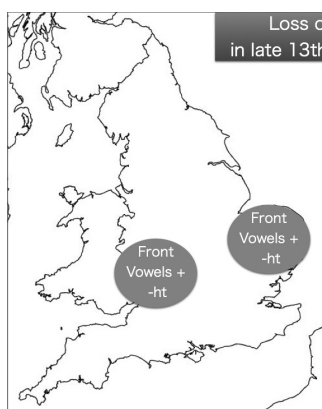
Map 1
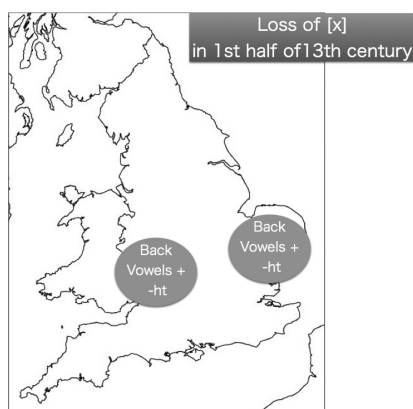
Map 2

Conclusion

The possible pronunciation for OE -*ht* for this period is either [VC-t] or [VV-t], i.e. [içt-o(u)xt], [i:t] and [u:t], etc. There are two layers of pronunciation. But is it possible? Many texts show the mixture of spellings both with fricative sound and without it. The vowels before this OE -*ht* should be lengthened to the same extent as other Middle English high long vowels, which were subject to the Great Vowel Shift. Therefore, I think earlier timing of the loss of fricative sound should be anticipated to have taken place about quarter to half a century earlier.

The basic principle of *A Linguistic Atlas of Late Mediaeval English* (hereafter *LALME*) is that it does not concern sound(s) but only the form(s) of the words. It means that the phonological value is not a subject of analysis. In other words, *LALME*

concentrates on the scribal habit or 'house style'. But it is interesting that the editors of *LAEME* had to return to the matter that should be dealt with from the phonological point of view in order to solve and to map the seemingly entangled and confusing spelling system of the early Middle English period.

It is inevitable that pronunciation is changing. The spelling disorder was caused under such circumstances as two or more different elements concerning scribal attitude towards texts were mixed. It is true that the English writing system, especially retained in late Old English period, were disintegrated, but this situation tells us that the pronunciation of this period was fluctuating and was not uniform even in a small scribal community or in a single manuscript. As Laing and Lass explains, if the scribes fully understood complex spelling system which seems to us nothing but havoc, whatever various letters were applied to a sound they were capable of reading it. Suppose there was some agreement, for example, spellings such as <ht, st, gt, ȝt, ght> are to use for the indication or as diacritics that the precedent vowels should be lengthened, scribes relatively freely employed their optional/arbitrary stock of spellings. This is really difficult to understand with the eyes of today, but, allowing that we grasp this seemingly chaotic status in the age and the context of Early Middle English period, it is acceptable as a mirror that reflected the progressing scribal attitude towards what was the linguistic situation then.

Bibliography

Arngart, O. (ed.). 1968. *The Middle English Genesis and Exodus. Re-edited from MS. C.C.C.C. 444 with introduction, notes and glossary*. (Lund Studies in English 36), Lund: University Press.

Bates, D. (ed.). 1998. *Regesta Regum Anglo-Normannorum*. Oxford: Clarendon Press.

Brown, C. 1924. *English Lyrics of the XIIIth Century*. Oxford: Clarendon Press.

--------. 1928. 'Texts and the Man', *Bulletin of the Modern Humanities Research Association*, vol. ii, no. 5., pp. 99-111.

Clark, C (ed.). 1970 (2nd ed.), *Peterborough Chronicles, 1070-1154*. Oxford: Clarendon

Press.

--------. 1992. 'The myth of "the Anglo-Norman scribe'. In Rissanen, M., et al., (eds.) *History of Englishes: new methods and interpretations in historical linguistics*. Topics in English Linguistics 10. Berlin and New York: Mouton de Gruyter.

Dobson, E. J. 1968, 2nd ed. *English Pronunciation 1500-1700*, 2 vols. Oxford: Clarendon Press.

--------. (ed.) 1972. *The English Text of Ancrene Riwle*. EETS o.s. 267. Oxford: Oxford University Press.

Dobson, E. J. and F. Ll. Harrison (eds.). 1979. *Medieval Songs*. London: Boston: Faber and Faber.

Fisher, John, H. 1977. 'Chancery and the Emergence of Standard Written English in the Fifteenth Century', *Speculum*, vol. 52, no. 4, pp. 870- 899.

Gumbert, J. P., and P. M. Vermeer. 1971. 'An Unusual yogh in the Bestiary Manuscript - a Palaeographical Note', *Medium Aevum* 40, pp. 56-57.

Hall, A, et. al (eds.) 2010. *Interfaces between Language and Culture in Medieval England: a festschrift for Matti Kilpiö*. Leiden: Boston: Brill.

Ikegami, M. T. 1984. *Rhyme and Pronunciation: some studies of English rhymes from Kyng Alisaunder to Skelton*. Tokyo: Hogaku-Kenkyu-Kai, Keio University

Jordan, R., trans. by Crook. 1974. *Handbook of Middle English Grammar: Phonology*. Mouton

Kristensson, G. 1979. 'Another Piece of Evidence for the Study of Middle English Spelling', *Neuphilologische Mitteilungen*, 82, pp. 159-161.

--------. 1995. *A Survey of Middle English Dialects 1290-1350: The East Midland Counties*. Lund: University Press.

Laing, M. 1992. 'A Linguistic Atlas of Early Middle English: the value of texts surviving in more than one version' in Matti Rissanen, et al. (eds.) *History of Englishes*. Berlin: New York: Mouton de Gruyter.

--------. (ed.) 1993. *Catalogue for the Linguistic Atlas of Early Middle English*, Suffolk: D. S. Brewer.

Laing, M. and R. Lass. 2003. 'Tales of 1001 nist: the phonological implications of

litteral substitution sets in some thirteenth-century South-West Midland texts',
English Language and Linguistics, 7.2, 257-278.

Lowe, K. A. 1992. 'Two Thirteenth-Century Cartularies from Bury St Edmunds',
Neuphilologische Mitteilungen 93, pp. 293-301.

--------. 1998. 'The Nature and Effect of the Anglo-Saxon Vernacular Will', *Leg. His*.
19, pp. 23-61

--------. 2003a. 'The Anglo-Saxon Contents of a Lost Register from Bury St Edmunds',
Anglia 121, pp. 515-534.

--------. 2003b. 'Sawyer 1070: a ghost writ of King Edward the Confessor', *Notes and
Queries* 50, 150-152.

LS: Ælfric's Lives of Saints, ed. W. W. Skeat, 2 vols. in 4 parts, EETS os 76, 82, 94 and
114 (London and Oxford, 1881-1900); reprinted as 2 vols. (London, 1966)

MED: *Middle English Dictionary*. http://quod.lib.umich.edu/m/med/lookup.html

Milroy, J. 1992. 'Middle English Dialectology', In Blake, N. (ed.). *Cambridge History
of English Language, vol. II: 1066-1476*. Cambridge: Cambridge University Press.

OED: *Oxford English Dictionary,* 2nd ed. http://www.oed.com/

Pope, M. K. 1934, 1952 (2nd ed.). *From Latin to modern French with especial
consideration of Anglo-Norman: phonology and morphology*. Manchester:
Manchester University Press.

Prior, O. H. 1924. *Cambridge Anglo-Norman Texts*. Cambridge: Cambridge University
Press.

Saltmarsh, J. 1935. 'Two Medieval Love-Songs set to Music', *The Antiquaries Journal,*
vol. xv, no. 1, pp. 1-21.

Scragg. D. G. 1974. *A History of English Spelling*. Manchester: Manchester University
Press.

Skeat, W. W. 1911. 'A New 'Havelok' MS.' *Modern Language Review* 6, pp. 455-457.

--------. 1912. 'Elegy on the Death of King Edward I', *Modern Language Review*, vol.
7, pp. 149-152.

Smith, J. J. 2007. *Sound Change and the History of English*. Oxford: Oxford University
Press.

Smithers, G. V. (ed.). 1987. *Havelok*. Oxford: Clarendon Press.

Traxel, Oliver M. 2004. *Language Change, Writing and Textual Interference*, Frankfurt am Main: Peter Lang.

Wirtjes, H (ed.). 1992. *The Middle English Physiologus*. EETS o.s. 299. Oxford: Oxford University Press.

Wyld., H. C. 1920, 1936 (3rd ed). *History of Modern Colloquial English*. Oxford: Basil Blackwell.

狩野晃一 Kano, Koichi. 2014.「Bury St Edmundsで写されたウィリアム征服王のWritsについて」『チョーサーと中世を眺めて―チョーサー研究会20周年記念論文集』（チョーサー研究会／狩野晃一（編））川崎、麻生出版, pp. 300-316.

中尾俊夫 Nakao, Toshio. 1985.『音韻史』（英語学大系11）東京、大修館書店

Atlases

A Linguistic Atlas of Early Middle English (http://www.lel.ed.ac.uk/ihd/laeme1/laeme1.html)

McIntosh, A., *et al*. 1986. *A Linguistic Atlas of Late Mediaeval English*, 4 vols. Aberdeen: Aberdeen University Press.