

Graphic Substitutions in Middle English

Suksan Kim

(Seoul National University)

Of the innumerable instances of graphic substitutions to be met with in Middle English manuscripts, some are undisputable scribal blunders, being downright mistakes or errors arising from scribes' ignorance or carelessnesses, while others can be accounted for on some graphic or phonological grounds, as for the substitution of the letter *z* for *p*.

In most handbooks, both these types have commonly been lumped together on a par as simple scribal blunders. For example, the aforementioned graphic substitution of *z* for *p* has been adjudged simply "an error" (Brunner 1963: 38 Note 5; 5 Note 2) or a usual "mistake" (Skeat 1906: 2*) by Anglo-Norman scribes unfamiliar with the two letters.¹ This way of explaining is not wholly satisfactory in view of the fact that these so-called errors or mistakes are not just confined to a few negligible number of scribes or limited to some isolated instances; moreover, no scribe would substitute almost methodically one

¹ Continental Norman, developed with settlement of the Danes in Upper Normandy in 910 and Lower Normandy in 923, was not a homogeneous dialect but "in phonetic development lay...across the border line of Western and North-Eastern French" (Studer 1920:5). Anglo-Norman is this Norman French retained or developed separately in England during the Middle English period. Some scholars, however, unhappy about the use of the term 'Anglo-Norman' to refer to the entire period, apply yet the term 'Anglo-French' (i.e. the French of Paris as developed in England) to the latter part of the period in the 13th and 14th centuries when the influence exerted by the speech of Paris on Anglo-Norman was growing increasingly, restricting 'Anglo-Norman' to the early part of the period till about the time of the loss of Normandy in 1204 after which "the individuality of Normandy itself was merged into that of the Île-de-France" (Menger 1904:4).

That the Norman dialect in England didn't die out completely with the loss of Normandy in 1204 is evidenced by the fact that "Anglo-Norman literature became much richer in the 13th century than before" (Vising 1923:20) and that the Norman dialect of the 11th century and the French spoken in England at the close of the 14th century were "substantially the same in every part of the country" (Studer 1920:12). Even though Anglo-Norman had been displaced by 'Francien' (the speech of the Île-de-France) or Anglo-French as a literary medium in the later 14th century (Pope 1952 #1186), Anglo-Norman remained until the middle of the 14th century as a living language used by a considerable portion of the population as the natural medium of expression (Studer, p.11; however, see Berndt 1965: 145-63).

The term 'Anglo-Norman' normally refers to the French of Norman origin before the end of the 14th century, for the French loan-words introduced into English before the end of the 14th century, according to a careful study of the vocabulary of Middle English by Prof. Behrens, point, almost without exception, to a Norman origin (cited in Studer 1920: 15). Anglo-Norman, despite of late survivals, however, was practically a dead language by the middle of the 14th century (Studer 1920: 12).

letter for another without some cogent orthographical or palaeographical reason.

Graphic substitutions are due to two causes: graphic *confusion* and graphic *association*. In manuscripts, letters can be confused with one another on account of their graphic similarity, as between *c* and *t*, *p* and *y*, and *u* and *n*. For instance, the graphic forms of *p* and *y* appear so alike in manuscripts that the latter is distinguished from the former only by the superscript dot. A graphic error or mistake arises commonly from such a graphic confusion. Graphic confusion, however, is to be distinguished from what I would like to call direct and indirect grapho-phonetic association. Direct grapho-phonetic association arises when alternant letters are used for the same sound, as *h*, *z*, *gh* for /x/, while indirect grapho-phonetic association arises when nonalternant letters are being associated with one another, as *z* with *p* and *s*, or *p* with *s*. An example of the former is a substitution of *z* for *p*, which is due to the fact that in late Middle English, *y* was used for both the palatal fricative, written *z*, and the dental fricative, written *p*, which often assumed the *y*-form in script. An example of the latter is a substitution of *p* for *s*, which is due first to the fact that to indicate the unfamiliar fricative *h* (commonly written *z*) before *t*, Anglo-Norman scribes often employed its French equivalent *s*,² secondly to graphic confusion of *y* (for *z*) and *p* on account of their graphic similarity (see #VI.1 below), and finally to subsequent association of *p* with *s*, as shown in cl300 Lay. *Brut* (Otho) 2/30: *mistie* ~ 21/25: *miptie* (OE *mihtig*; ME *mizti*) (see #VI. 4 below of this paper).

To the present writer's knowledge, no comprehensive analysis of graphic substitutions in Middle English has been made to determine what various values the letter *z*, for example, stands for and also how it came to be used as substitutes for various other letters. The purpose of this paper is, then, to describe in six sections and an appendix the graphic substitutions of the following seven letters in Middle English: #I. *z* for *y*, palatalized *l*, diacritics (vowel length and hiatus), *i*, and *h*, and also *s* ~ *z*, *w* ~ *u*, *g*, *j*, *p* ~ *ð*, and for various abbreviations; #II. *y* for *p* ~ *ð*, *h*, *j*, and long *i*; #III. *h* for *w*, *p* ~ *ð*, *y*, and for diacritics (vowel length and hiatus); #IV. *s* for *h*; #V. *w* for *y*, *j*, and *f*; #VI. *p* for *y*, *h*, *w*, *s*, *f*, and *d* and *t*; and Appendix: *z*.

The texts from which data have been taken for illustration are mainly from the published and unpublished parts of the *Middle English Dictionary* (A through K part 1),³ facsimiles,⁴ and also from (diplomatic) editions.⁵

I. *z*

The letter *z* is used for the following letters and values: 1. *y*; palatalized *l*; diacritics;

² On the French use of *s* for [h], see #IV below of this paper.

³ Hereafter this work will be identified as *MED* in parentheses.

⁴ Greg 1913, cited by section and line and identified as *G*.

⁵ Sisam 1955, to be identified as *S*; Dickins and Wilson 1954, to be identified as *DW*; Mossé 1952, to be identified as *M*; and others as cited.

and *i/i*; 2. *h*; 3. *s ~ z*; 4. *w ~ u*; 5. *g*; 6. *j*; 7. *p ~ t*; 8. abbreviations.

1. *y*; palatalized *l*; diacritics (vowel length and hiatus); and *i/i*.

1.1. *y*.

Whether an intervocalic *z* functions as off-glide or on-glide depends on the following *e* being pronounced or not. There is said to be no diphthong in ME *bowe* (<OE *boga*) or in *dayes* (<OE *dægēs*) since the *o* and *w* of *bowe*, or the *a* and *y* of *dayes*, belong to different syllables. However, with loss of the unstressed *e* in *bow* by apocopation and in *days* by syncopation, the *o* and *w*, or the *a* and *y* have come to fall in the same syllables (Malone, p. 262).⁶ By apocopation: a1400(a1325) *Cursor* 1773: *au* [Göt: *aue*; Frf: *aghe*; Trin-C: *awe*] (ON **aga*; cf. OI *agi*; MED *aue* 'fear'); a1400 *Cursor* (Göt) 1977: *bou* [Frf: *boghe*; Vsp: *bou*] (OE *boga*; MED *boue* n. (1)); by syncopation: ?a1300 *Sirith* 324: (fourth) *daus* (cf. a1400 *Cursor* (Trin-C) 18100: *dawes*), a1400(a1325) *Cursor* 3155: *dais* [vrr. *days*, *dayes*] (OE pl. *dagas*).

Final *e* is said to have disappeared gradually from the 12th century, first in words with weak sentence stress, later but still in the 12th century in trisyllabic words with a long first syllable, and the remaining instances (i.e. in trisyllabic words with a short first syllable and also in dissyllabic words) disappeared in the North in the 13th c. and in the South gradually during the 14th c. (Brunner, p. 32).⁷

1.1.1. Word medially and finally.

a. OE *j*, and OI, ON *i*.

?c1200 *Orm.* 10018: *bez3sc* (OI *beisk-r*); a1225(?a1200) *Lay. Brut* 1468: *brain* [c1300: *brazen*] (OE *brægen*); c1400(?c1390) *Gawain* 1215: *zeze* (OI *geyja* 'to cry'); a1435 (c1395) *WBible*(2) Tob. 7.19: *anoie* [WB(1): *noze*] (OF *anoi*); (a1382) *WBible*(1) Judith 16.11: *gaze* (OF *gai*).

b. OE /j/, vocalized to /y/ after front vowels.

⁶ Thus Malone says, "The nom. sg. *day* and the gen. sg. *dayes* differed in that the *ay* of the former was diphthongal, whereas the *ay* of the latter was not" (Malone 1959).

However, some others are of the opinion that this situation prevailed only in Old English, in which the syllable boundary came before the intervocalic consonant; hence, the intervocalic *z*, like any other intervocalic consonants, belonged to the following syllable. In Middle English, however, due to the shifting of the syllable boundary, the intervocalic consonant came to belong to the preceding syllable. "One of the ways diphthongs are developed is by the shifting of the syllable boundary...In OE, words like *wegen* 'to weigh', *glōwan* 'to glow' seem to have been divided *we-gan*, *glō-wan*; then at the end of the OE period *weg-e(n)*, *glōw-e(n)*, and later on when finals were weakened or dropped, *wei-e*, *glow-e*, which resulted in new diphthongs being evolved" (Mossé, p. 27; also see Fisiak, p. 52). Stockwell even goes as far as to say that a diphthong which he identifies as /ow/ had already arisen in Old English in *clawu* 'claw' and *strawu* 'straw' before 10th century lengthening (p. 16). Also Jordan (p. 103): "Zum Teil schon im Altenglisch".

⁷ In the Northern dialects, the unstressed final *e* was silenced about the middle of the 14th century (Morsbach, #7); final *e* was yet still kept in the greater parts of Western and Middle South in the 14th century, and was kept intact in the greater parts of Kentish until the middle of the 14th century (Morsbach, #9); final unstressed (historical) *e* is in general no longer sounded in the Northwest Midland in *Gawain* (Tolkien, Gordon, and Davis, p. 133); this final *e* was completely silenced in the South in the 15th century in the spoken English (Jordan, #290).

a1225(?a1200) *Lay. Brut* 30810: buze (< OE bycgan 'to buy'), cf. 1372 *In bedlem is* 68: to byze, (c1300) *Havelok* 53: beye.

c. OE velar fricatives [ʒ], [x], next to ME front vowels.

c1250 *Owl & N.(Clg)* 426: eze (< OE ēage). Both the *ey* from OE ēog and ēag by vocalization of OE voiced velar fricative g to y after front vowels and the new *ey* from OE ēax with the excrescent front glide y developed before ʃ and after ē were later monophthongized to ī, first in the Southwest (Brunner, #13 Note 13).⁸

OE ēah: c1330 *Orfeo* (Auch) 24/355-56(S): size 'saw' [rime: heize 'high']; c1400 (?c1390) *Gawain* 1922: niez 'nearly' (~ 929: nez 'near').

OE ēag: c1400(c1378) *PPL.B*(Ld) Prol. 161, 165: biges [vrr. beizes, behes, byes, bezes], beiz [vrr. bye, bighes] (OE bēag 'an arm ring').

OE ēog: c1300 *Sleg.Inf.Chr.*(Ld) 113: drize, c1400(?c1390) *Gawain*(Nero) 1750: drez (~ 1460: dryze), a1450(?a1349) ?*Rolle Luf es Lyf* 12: dreghe [rime: nyʒ; Lamb: drie], 1500(?a1400) *Morte Arth.*(2) 2621: dreghe [rime: hyghe] (OE drēogan, OI drjúgr); also cf. OI ey(j): a1300 *Floris*(Vit) 77/84: idized (ppl.), c1400(?c1390) *Gawain* (Nero) 996: deze (~ 2460: dyze) (OI deyja).

That *ey* became ī is confirmed by the reverse spelling *ez* (~ey~ei) for ī:⁹ c1330(?a1300) *Tristrem* 760, 766: heize... hy, a1400(c1300) *NHom.*(1) *Abp. & N.* p. 90: in hey [vr. hize] (< OE hīgan); a1400(a1325) *Cursor* 3862: gleied [Göt: gleyed; Trin-C: glized] (< OI glija 'to shine'); (c1300) *Havelok* 53: beye (< OE bycgan 'to buy').

1.1.2. Word (or morph) initially, from OE and OI /y/, or epenthetic glide /y/.

a. OE and OI /y/.

c1450(?a1400) *Wars Alex.* 4745: zoten, a1400(a1325) *Cursor* 7443: eten [vr. a zoten] (zoten from OI ȝotun, and eten from OE ēotan); c1400(?c1390) *Gawain* 1122: zet (OE gēt); *ibid.* 89: zonge (OE geong); *ibid.* 530: azayn (OE on-gegn); *ibid.* 2410: zare (OE gear(w)e); (c1384) *WBible*(1) Mat. 5.37: zea 'yes' (OE gēa).

b. Epenthetic ʒ /y/ before front vowels (mostly ē) in the Southern dialects.¹⁰ Development of epenthetic /y/ initially before front vowels is probably regional Kentish in origin from the 12th century but its results are also found in the Southwest in the 14th century, where initial ē became ié (Wyld, p. 218; Brunner, p.17 Note 20, and p. 23).

OE ea: c1400 *Femina* 65: zextre ... zex (OE eax).

OE ēa: (I340) *Ayenb.* 257: yeren (OE ēare), cf. c1380 *Firumb.*(1) 996: yre, c1325 *Horn* (Hrl) 969: earen [vrr. eren, ires];¹¹ c1150(?OE) *PDidax.* 3/7: yem, cf. a1225

⁸ Scribes often adhere to the spellings *ei*, *ey*, etc. even "when the rhyme shows that the pronunciation [ī] was intended" (Wyld, p.126).

⁹ On the spelling *iz* for /ī/ with the ʒ performing a dual function of vowel length and hiatus, see #1.1.3.1b below of this paper.

¹⁰ This ʒ interchanges with *h*; To what extent this alternating letter *h* represents the sound commonly signified by that letter, namely [h], is not conclusive. In many instances, *h*'s occur in free variation with ʒ's for /y/.

¹¹ The English scribes followed the example of Anglo-Norman scribes who wrote *ie* for ē and

(?a1200) *Lay. Brut* 251: eames [c1300: hemes](OE ēam); ?a1500 in *Camb.* 25, 54, 89 143f.n.l: zerwygge, ?a1400 *Boxon* (Hrl 1288) p.203: herewyckys (< OE ēarwicaga); (1340) *Ayemb.* 124/20: yeast (OE ēast); a1225(?c1175) *PMor.*(Lamb) 227: edi [vrr. zedi, eadi] (OE ēadig); a1225(c1200) *Vices & V.*(1) 3/16: iec, (1410) *York MGame* 3: heke (OE ēac, ēc).

OE *eo*: a1225(?c1175) *PMor.*(Trin-C) 324: gierles [vrr. eorles, erles], c1475(?c1400) *Wycl.Apol.* 7: zerle, a1500 *Degrev.*(Cmb) 1897: zorle [Thrn: erle] (< OE eorl; MED ērl); a1225(?c1175) *PMor.*(Trin-C) 280: ærre [vrr. georre, here, erre] (OE eorre).

OE *ēo*: c1400(?c1390) *Gawain* 815: zede(OE ēode); *ibid.* 1065: zoure ~ 836: yowre (OE ēowre).

OE *e*: (a1387) *Trev.Higd.* 6.387: He was ... i-zete, cf. *ibid.* 6.405: ete [vr. yte], (c1300) *Havelok*(Ld) 457: hete, a1425(c1378) *PPL.B*(Ld) 1.152: yeten [vrr. eten; heten] (OE eten); c1475(?c1400) *Wycl.Apol.* 28: zend, (1425) *Paston* 2.20: an hende, (1417-20) *Will in Bk. Lond. E.* 221/14: inde (LOE ēnde).

OE *æ*: c1250 *Owl & N.* 1180: zaure (OE æfre), cf. 1500 *Scrope DSP Abbrev.* 304/23: he yet 'ate' (OE æt).

OF *ai, ei*: they levelled in Anglo-Norman through "*ei* to *e*" (Pope, #1223): (c1426) Audelay *Poems* 43/925: zeesy, (1447-8) *Shillingford* 88: yese, a1325 *Horn*(Ld) 1298: heyse, a1400(a1325) *Cursor* 13305: hess [vr. ese], c1400 *Bible SNT*(1) 2 Tim. 4.2: hese, c1450 *St.Editha* 4835: heyssy (OF aise; MED ēsī).

1.2. To indicate palatalization of *l*: 1375 *Bruce* 459: assalze 'to assaile'. Under a direct French influence, the Scotch tried to keep the palatalized consonant *l̥* and rendered it by *l̥z* (Mossé, p.31). Palatal *l* and *n* are represented by *ly*, *ny* (Tolkien, Gordon, and Davis, p.129).

1.3. As diacritic symbols.

1.3.1. *iz* for long */ī/*.

a. In the sequence -*iz* { $\begin{smallmatrix} C \\ \# \end{smallmatrix}$, that is, before a consonant or word finally, the preconsonantal or pre-word final *z* represents only vowel length.

Long */ī/* is often represented by a sequence of graphs *iz*, already in Old English as early as the late 9th century in the Hatton manuscript of the *Pastoral Care*, as in (ðær)*big* 'thereby' 43/14, *stigge* 23/16, *stiggende* 101/14 (<stigan).¹² Conversely, original *iz* became long *ī* by compensatory lengthening through the loss of a postvocalic *z*, in the same Hatton manuscript, as in (ofer)*hyð* 113/3, (ofer)*hydig* 301/8 (cf. *inngehygde* 95/15, 111/22).¹³

sometimes left out the *e* of the *ie* diagraph (especially if followed by *r*), so that *i* was used to denote the *ē* sound (Van der Gaaf, *ESTs* 18:40, cited in Trnka 1959:442).

¹² See also the reverse spelling *ie* for *ī* in the Cotton manuscript of the *Pastoral Care*, in (ðær)*bie* 42/14, reflecting the change of EWS *īe* to LWS *ī*. Page and line references are to Sweet 1871.

¹³ Also see *æz*→*æ* in *mæden* 415/18 (<mæden). Likewise in early Middle English, scribes

a1400 *Mary moder well* 26: hiȝ 'they' (OE hīe); ?a1425 (c1400) *Mandev.* (Tit) 103/256 (S): kyȝn (< OE sg. cȝ); OF /i/ → ME /ī/: c1300 *SLeg.Cross*(Ld) 195: deliȝt [Ashm: delit] (OF delit); c1450 *Jacob's W.* 72/16: dyspyȝt (cf. 981: despiȝt) (OF despit); (c1384) *WBible*(1) Math.15.29: fyȝ (OF fī); also from OE /i/ in secondary stressed words: ?c1200 *Orm.* 19842: bliȝeliȝ (OE blīpelice).

b. In the sequence -iȝV, where V is a vowel, the intervocalic ȝ performs a double function of vowel length and hiatus in the following French loan words. ȝ for hiatus corresponds to the letter *h* in Old French from the 13th century on as in *trahir*, *cahier*, or in Anglo-Norman as in *juhe* (for *jüe*), or in Latin as in *trahere*, *vehere*, (see Pope, #1171, #730; Kim, p. 95).

c1390(a1376) *PPL.A*(1)(Vrn) 7.255: diȝete [vr. diete] (OF diēter; MED diēten); *ibid.* 5.224: criȝede (OF crīer; MED crīen); c1330 (?a1300) *KAlex.*(Auch) 377/93: defiȝ [LinI: defyȝe], (c1325) Recipe *Painting*(1) in *Archaeol. J.* 1.66: defiȝet(pl.) (OF defier; MED dēfien); a1325 *MS Rwl. B.* 520 1f. 56 [OED col.]: deniȝe (OF denier; MED denīen).

1.3.2. iȝ for short /i/.

In the sequence -iȝV, the posttonic intervocalic ȝ indicates hiatus between two juxtaposed vowels; however, the pre-consonantal or pre-word final ȝ in the sequence -iȝ { $\begin{smallmatrix} C \\ \# \end{smallmatrix}$ } represents only a conservative spelling, or a reverse or analogical spelling.

a. Hiatus.

In *lufian*, the Weak II verb ending -ian is two syllables (Moore and Knott, p. 86 fn. 79); the -iȝan (for -ian) then represents the use of ȝ in hiatus. Already in the late 9th century Old English *Pastoral Care*, the morphographemic alternation of <iȝ> and <iȝe> for /i/ occurred before another vowel in posttonic position, <iȝ> before *e*, and <iȝe> before *a*: <iȝ>: lacniȝenda (~ lacnienda), agimeleasiȝen (Cotton MS: -sien); <iȝe>: lacniȝean (~ lacnian), bodiȝeað (~ bodiað).

A similar diacritical use of ȝ occurs, sometimes analogically, in Middle English, as in a 1400(a1325) *Glo. Chron. B* (Trin-C) VI/22(G): gregorizes, 28: ioiȝe 'joy', 16: wityȝe (< OE witian); c1175(?OE) *Bod.Hom.* 116/23: iburized, cf. a1225(?a1200) *Lay.Brut* 6014: i-buried [c1300: ibured], 27872: burien (inf.)(< OE byr(i)gan, byr(i)gde), in which the *i* of iȝ is an epenthetic vowel developed between a liquid and a palatal consonant after short accented vowels, already in Old English after the 10th century, principally in West Saxon (see Campbell, #365; Luick, #348).

The intervocalic ȝ in posttonic position, hence, is to be interpreted as hiatus marker, corresponding in function to the letter *h*. The two letters *h* and ȝ, thence, are used often interchangeably in Middle English between two juxtaposed vowels, as in: ?a1300 *Sayings St. Bede* 195: herihinge, (a1333) Herbert *Wele heriȝyng* (OE herian), cf. c1250 *Owl &*

often wrote iȝ or yȝ to indicate long *ī*—also *ij*, *iy*, *yy*, the last example in the 15th century, for long medial *ī* (see Morsbach, #16 Anm. 3).

N. 981: heriinge; a1225(?a1200) *Lay.Brut* 3615: (40) dazene 'days' [Otho: daiges], cf. c1225(?c1200) *St. Kath.*(1) 2469: twenti dahene zong, 155: tweolf dehes (cf. OE pl. dagas); a1200 *Body & S.*(2) 8/16: keize, c1350 *How GWife*(1) 168/140: keies [vr. keyzes], cf. c1175 *Body & S.*(1) 14: cæze (OE cæg); c1400 *Pep. Gosp.* 27/7: anoyze, cf. (a1420) *Lydg. TB* 2.6231: anoye, a1425(c1395) *WBible*(2) Tob. 7.19: anoie [WB (1): noze] (OF an(n)oi).

b. Conservative or analogical spellings.

a1225(c1200) *Vices & V.*(1) 137/25: all daiz (cf. OE sg. dæg); c1400(c1378) *PPL B* (Ld) Prol. 165: beiz... biges [vrr. beiges, behes, byes, bezes] (OE bēag, bēah); c1450 *Med. Bk*(2) 171: eyz, cf. c1290 *SLeg.Mich.*(Ld) 396: eyze, c1325(c1300) *Glo. Chron. A* 8334: ey [B: eie, eyz] (cf. OE ēage); also initially: c1400(?c1390) *Gawain* 406: zif ~ 30: if~ 2343: iif (OE gif).¹⁴

Reverse spellings: a1500(?c1378) *Wycl.OPaster* 429: englizsch (OE English & AF Engleis).¹⁵

1.4. For /i/ or /ī/ in unstressed syllables.

a. /i/. In the following, the z after a liquid represents a syllabic vowel, not a glide (since it is not preceded by an intrusive epenthetic front vowel, often developed between a liquid and a palatal consonant), as in *iburized* cited above and in the following: a1450 (a1400) *Siege Jerus.* 1247: balies [vr. baylzes] (OE belg; pl. belgan, byl(i)gan); a1225 (?a1200) *Lay. Brut* 22718: awælzged [c1300: iwellid] (OE gewel(e)gian).

b. /ī/: c1300 *SLeg.*(Ld): hevz; cf. a1225(?a1200) *Lay.Brut* 2795: hefezere (MED hēvī n. 'heaviness').

1.5. zh for /y/. In imitation of the digraph spellings sh, ch, the letter h was analogically introduced to indicate a velar or a palatal fricative with z—the combination gh in the course of the 14th century (Jordan, #17.2).

a1425(c1395) *WBible*(2) Mat. 5.37: zhe, zhe 'yes, yes', (c1456) *Pecock Faith* (Trin-C) VIII/12(G): zhe, cf. (c1384) *WBible*(1) Mat.5.37: zea (OE gēa); (1422) *LRed Bk. Bristol* vol. 1.8.1: zhe shall helpe, (c1456) *Pecock Faith* (Trin-C) VIII/10(G): zhe, *Prick of Conscience* 68: yhe(OE gē); c1400 *Wit & W.* (Cmb) 19/2: zhef (OE gif); c1200 *Orm.* 12945: dizhellnesse, a1225 *Wint. Ben. Rule* 105/13: dihzlice (OE diegellīce; MED dīzellice); a1325(?c1380) *NPass.* 638: gate [vrr. yhate, zhate]. In Scots zh was frequently written instead of z: *Bruce* 274/441(M): zhe 'ye'; *ibid.* 272/232(M): zharnyt 'yearned'; *ibid.* 272/246(M): yheyt 'yet'.

1.6. z represents only the letter i, not its sound.

(a1333) *Shoreham Poems* 61/1704: contragt, cf. *ibid.* 68/1945: contrait (OF contrait). OF ai became ē in Anglo-Norman before dentals t, d, s, and sometimes also before g

¹⁴ Before i, initial z was lost in the 14th century (Jordan, #189 Anm. 1).

¹⁵ Also *parfyt* 'perfect' (OF parfit) with an unetymological z (or gh) after i before t the in 15th century (Brunner 1963:43).

(Bliss, p. 175; Brunner, p. 28).

2. /x/[h], [x], [ç]; or for only the letter *h*, not its sound.

2.1. [h] initially before vowels.

(1340) *Ayenb.* 56/29: *ze*,¹⁶ c1400(c1378) *PPL.B(Ld)* 6.138: *ze shal ete ... He shall ete* (OE *hē*; MED *hē*(1)); a1225(?a1200) *Lay. Brut* 1147: *heo* [c1300: *zeo*], (c1280) *SLeg.Pass.*(Hrl: C. Brown) p. 16: *heo* [Pep: *zeo*], c1325(c1300) *Glo. Chron. A* 635: *zo*, 8977: *heo* [c1425 Hrl: *zoe*], a1325 *Opon a Somer* 42: *ze*, c1330 *Otuel* 1001: *zo*, (c1387) *Trev. Higd.* 1.11: *ze* [=Ruth] (OE nom. & acc. sg. fem. *hēo*, *hīe*, *hī*, *hīo*, *hȳ*, *hēa*; MED *hē* pron.(2) 'she');¹⁷ c1475(?c1400) *Wycl.Apol.* 31-32: *take hede... tak pei zed*, *take pei zede to preche* (MED *hed*(2) 'heed'); *ibid.* 47: *zele* (OE *hæl*(u; MED *hēle*); *ibid.* 28: *zele* (< OE *hælan*); *ibid.* 75: *zēpun* (MED *hēthum*); *ibid.* 8: *zering* (MED *hēring*(e); *ibid.* 56: *zerd* (MED *hērd*(e)); *ibid.* 37, 61: *zere* (MED *hēren* v.), *ibid.* 55: *zet* (MED *hēte* n.(1)); a1450 *St. Editha* 96: *zeyzthen* (MED *hēthen* adv.); a1300(?c1150) *Prov. Alf.*(Jes-O) 73/31: *hw* [Trin-C: *zu*] (OE *hū*); c1440 *Thrn. Med. Bk.* 19/15: *ziskes* 'hiccups' (pres. 3sg.); a1500(a1400) *Eglam.* 528: *zerbys* (OF *erbe* & L *herba*; MED *hērbe*).

2.2. Palatal [ç] and velar [x] remained in Middle English medially only before the group *-ht* and in gemination and (morph or word) finally after vowels or after liquids due to the devoicing of final [ʒ] already in OE; [x] also occurred initially before consonants.

c1250 *pene latemeste dai* 286: *bipezte* (OE *bepæhte*), c1300 *SLeg.Mich.*(Ld) 410: *in-sizt* (OE *insiht*); a1375 *WPal.* *brizt*; c1400(?c1390) *Gawain* 1041: *rizt*; *ibid.* 2465: *dozter*; c1150(OE) *Hrl. HApul* 101.65/7: *dolz*, cf. a1200(OE) *Wor. Aelfric Gloss* 551/20: *dolh-* (OE *dolg*, *dolh*); c1250 *Owl & N.* 537: *hozful* [Jes-O: *houhful*], 1295: *hopful* [Jes-O: *houhful*] (OE *hohful*);¹⁸ c1380 *Firumb.*(1) 321: *alpoz*, c1400(?c1390) *Gawain* 350: *paz*, cf. c1325 *Middelerd for mon* 13: *alpah*; c1300 *SLeg.Jas.*(Ld) 337: *zwanne*, c1300 *SLeg.* 422/55: *zwane* 'when'.

2.2.1. It is commonly held that [ç] in the group /-ixt/ began to fall out in the course of the 14th century¹⁹ in most of the South-Humbrian areas, perhaps through voicing (Jordan, #196), but the loss of [x] after back vowels occurred sooner, as early as the

¹⁶ MED suggests a reading with *ze*. The original form in the manuscript may have been *ze*, which the editor has subsequently normalized to *ze* (see "Appendix" below of this paper), for from the latter part of the 13th century on, the small letter *z* has "its lower horizontal stroke produced below the line in a curve to the left, and generally, a finishing recurve to the right" as *z* (Johnson and Jenkinson 1915: 55).

¹⁷ MED says that in Middle English the fem. *hē* is chiefly Midlands and South, rarely (if ever) North.

Ho probably indicates a reflex of the rising diphthong due to stress shift in late Old English. The earliest instance of the use of *ho* seems to be in *Lagamon A*, which has *ho* once (Serjeantson 1927:201).

¹⁸ On the *p* for *h*, see #VI. 2 below of this paper.

¹⁹ at least by the 15th century (Wyld 1927:217).

13th century in *Lagamon* (see Wyld, p. 217). However, the following data show that the loss of this /x/ had set in as early as the 13th century after front as well as back vowels.

2.2.1.1. After front vowels.

a1225(?c1175) *PMor.*(Lamb) 75: brichte [vrr. *britte*, brihte, brizte), c1250 *Louerd asse pu ard* 71: brit, 10: brist, 117: briste, c1250 *Of on pat is so fayr* 3: brist, (1340) *Ayenb.* 72: bryte, 82: brytnesse (OA brecht, bryht; WS beorht); (c1300) *Havelok*(Ld) 2427: knit (OE cniht); c1250 *On hire is al* 33: idiit [vr. ydyyt], (a1333) *Shoreham Poems* 133/83: ditteþ, ?c1450 *Knt.Tour-L.* 69/16: dite (OE dihtan); c1330(?a1300) *Rich.* (Auch) 115/19: doun riztes [vr. rytes] 'down right'.

2.2.1.2. After back vowels.

a. Before *t*.

c1250 *On hire is al* 35, 36: pu brutist [vr. brohtest] us day, and eue nith; heo brout [vr. brozte] wou, pu brout sid, c1300 *Evang.* 487: brout, c1300 *Gabriel fram evene king* 3: broute, c1250 *Seinte marie leuedi* 5: brovste (OE brohte); ?a1300 *Fox & W.* 85: i-kaut, c1325(c1300) *Glo. Chron.A* 320: cazte [B: cauwzt, cauzt, *caute*], (a1464) *Capgr. Chron.* 187: caute 'caught'; c1250 *pene latemeste dai* 28: isout (ppl.) [rime: ibrou] (< OE gesöhte); a1450 *Yk. Pl.* 404/163: dowty (OE dohtig), *Hali Meidenhad*: naut 'naught'; *Lay. Brut*: broute 'brought' (the last two early 13th century items cited from. Wyld 1927:217).

b. Finally.

a1400 *Cursor* (Göt) 4246: Al pou [Vsp: pof] 'although'; a1400(a1325) *Cursor* 17590: clous [Trin-C: clow] (OE *clōh 'cliff'); c1275 *Ken. Serm.* 217/90: pos croos (OE sg. crōg).

2.2.2. There are two interpretations on the absence, whether phonological or only orthographical, of the *h* in the sequence *-ht*. Skeat(1956, #23) thinks that the *h*-less forms are due to the habits of Anglo-Norman scribes who have written /-xt/ variously as *ht*, *th*, *ct*, *cht*, *cth*, and *t*; hence, in the edition he restores all the 'missing' *h*'s. Jordan (#198 Anm. 1 and #17 Anm. 1) likewise thinks that an omission of *h* before *t* by the French scribes, as in *Lay A.*, *K.H.O.*, *Digby* 86, *Will Pal.*, is not phonological but simply due to their difficulty with the English fricative sound; hence, *-ht* is said to be often written *st*, *t*, or *th*. On the other hand, Brödin (1950) thinks that the Anglo-Norman scribes have frequently written *tʒ* to indicate the mute *ʒ* by placing it at the end of a word, as in *nitʒ* for *nith* or *nit*. He tries to account for this unusual orthographical combination, by saying that in OE words of the type *niht*, *riht*, the palatal consonant was often rendered in ME by retained *h* or *ʒ*. When later this palatal became mute, the vowel was lengthened, and these consonants disappeared or were kept as a sign of lengthening, and were even put at the end of the words, whereby such forms *nit*, *nitʒ*, *nith* came into being; still later *h* and *ʒ* were added to other final *t*.

I believe, however, with Skeat and Jordan that since *-ht* is commonly written *th* and also *t*, rarely *-ht* or *-zt*, in *Havelok*, a manuscript written by a scribe of Norman birth,²⁰ the *th* spelling seems to suggest the scribe's difficulty with the English fricative sounds in question rather than an indication of the mute *ʒ* as Brödin would like to interpret.

The graphic metatheses *th*, *tʒ*, *ʒth*, and *cth*, whatever their implications may be, for ordinary *ht*, *ʒt*, *ʒht*, and *cht* occur as early as the early 13th century both after front and back vowels.

a. After front vowels.

c1250 *On leome* 18: brithē, (c1300) *Havelok* (Ld) 589, 2144: brith, c1325 *Nou skrynkeþ* 55: bryth, c1425 *In place* 123: bryth, (1440) *Capgr. *St. Norb.* 584, 1371: britz, (c1450) Capgr. *St. Aug.* 16/17: brith, a1450 *Hrl.Cook.Bk.(1)* 12: bryth (OA breht, bryht; WS beorht); c1250 *On hire is al* 35: nith (OE niht); a1400 *Cursor*(Trin-C) 17396: kizt (ppl.) [Ld: kyth] 'caught'; 1372 *I am iesu* 3: i-dith, c1425 *In place* 126: dyth... syth, a1500(c1400) *Emare* 395: bryʒth... ydyʒth, a1500 *Rich.*(DC) 98/1: dyth (OE dihtan); (c1300) *Havelok*(Ld) 604: rith (OE riht); ?a1450 *Agnus Castus*(Stockh) 128/25: it helpyzt (for *helpyzt* = *helpyth* < OE *helpan*); *ibid.* 152/1: hardyzt (3sg. of *harden* v.).

b. After back vowels.

(c1300) *Havelok* 2791: brouthen, a1425 *Ben Rule*(1) 38/38: broth, c1440 *PLAlex* 68/4: brozthe, a1450(a1415) *Mirk Fest. Suppl.* 290/21: browthen, a1475 *Ludus C.* 364/257: brouth (OE brohte); (?a1325) *Otuel & R.* 2008: douzthy, c1330(?a1300) *Rich.*(Auch) 117/175: duhti [Brunner: duthi] (OE dohtig); (c1300) *Havelok*(Ld) 149: nouth (OE nāht); *ibid.* 170: douthter (OE dohtor).

The copyist, accustomed to write both French and English, often chose a French representation for an English sound, so that *st* appears for *ht*, as in c1300 *Lay, Brut* (Otho) 21/30(DW): For þe mistie [=mighty] Godes loue, a1275(?1150) *Prov. Alf.* (Trin-C) 72/31: ʒu we mistin in werelde; c1250 **St.Marg.*(2) 219: brousten 'brought'; *ibid.* 218: heiste 'commanded'; c1300(?c1225) *Horn*(Cmb) 10: miste (past of *may*), cf. *ibid.* 8: mizte; c1250 *Judas*(Trin-C) 29-31: miste, cnistes, fiste.

OF *s* had first become only a breathing before it was lost before another consonant in Modern French, as in *dîner* from OF *disner*, *git* from *gist*, *bête* from *beste*.²¹ Anglo-Norman scribes used either the letter *s* or *z* to indicate an analogous development in English, namely, the loss of /x/ before *t*, generally in late Middle English, as shown by the rimes *nyt*: *myzt*, in (1465) *Will Norwich* in *Norfolk Archaeology* 4.332: As I lay in my bed right on a nyt / That me be rest yf of slepe ye force & myzt.²²

²⁰ as in *with* (line 48), *woth* (213), *leth* (252), *neth* (808), and conversely, *th* is written *t* finally, as in *herknet* (1), *wit* (19, 52, 113).

²¹ See Sisam 1955:278; for a detailed account of *-st* for *-ht* by Anglo-Norman scribes, see #IV below of this paper.

²² This, however, leaves the alternation of *heiste* and *heite* in the following early Middle English text (13th c.) unaccounted for: c1250 *Judas*(Trin-C) V/18-19(G): "þe riche ieu pat *heiste* Pilatus / þi louerd pat *heite* iesus." If the alternant *heite* here is genuine and not an orthographical

2.3. *z* represents only the letter *h*, not the sound, in the sequence *sz* and *tz*, the former for *sh* [š] and the latter for *th* [θ].

sz: (a1333) Herebert *pe kynges baneres* 16/7: *wasszen* (OE *wascan*); *tz*: 1372 *At pe time* 25: *detz* (OE *dēap*), (1389) *Nrf. Gild Ret.* 36: a *clotz* (OE *clāp*), (c1440) *Capgr: *St.Norb.* 1239: *witz pe ziftes seuene*.

In a1400 *HEuen it is* 2: *richz* 'rich', the *z* is used redundantly after *h*.

2.4. *zh* for [h].

c1440 *Thrn. Med. Bk.* 19/15: *zhiskyng* 'hiccupping'; c1330 *Assump. Virg.*(2) 276: *zhe* [=Mary]; a1375 *WPal.* 1985: *zhe*, cf. (a1387) *Trev. Higd.* 1.11: *ze* [=Ruth](MED *hē* pron.(2)).

3. [s] and [z].

The letter *s* is substituted for *h* as early as about 1250. Conversely, the letter *z* is substituted for *s*, as in *ics* for *ich* and *dizh* for *dish*: a1300 *Wolrdes blis no last* 3-4: *hich* [vr. *ics*] ... *hic* [vr. *ics*] (OE *ic*); 1349 *Acc.Exch.K.R.* 471/3 *m.* 10 (OED col.): *dighednayl*, cf. 1348 *Acc. Exch. K.R.* 471/1 *m.* 1 (OED col.): *discenail*. The letter *z* is commonly used to represent *y* in native words but *s* or *z* in French loan-words. Palaeographically speaking, the Caroline minuscule form of *z* with a tail is identical with the native *z* in script form, though entirely distinct in origin and sound value.

3.1. [s].

a. In stressed syllables.

a1450(1408) **Vegetius*(1)100a: *strynges i-made of zenewes* and here / *Plente of senewes* and *horshere* for *strenges*; (a1460) *Vegetius*(2)(Pmb-C) 1937, 1977: *zawe*(Lat. *serra* 'saw', a military term); c1440 *Thrn. Med. Bk.* 28/1, 20/20: *zucere* 'sugar'; c1400 (?c1390) *Gawain* 2173: *forz* 'waterfall'.²³

b. In unstressed syllables.

c1400(?c1390) *Gawain* 640: *fautlez* ~ 1761: *fautles*, *ibid.* 280: *berdlez*, *ibid.* 267: *azlez* (< OE *-lēas*). Before the end of the 13th century, final [s] became [z] after vowels of unstressed syllables. Therefore, *z* generally represents [z] in unstressed syllables but [s] in the bound morpheme {-les} (Davis, p.136 in Tolkien and Gordon 1967; McLaughlin, p. 99) as it probably received a stronger stress.

In the Northern dialects, OE *sc* became *s* [s] (already in late OE times, as in *englis* in the *Lindisfarne Gospels*) in unstressed or sentence secondary stress (Satztieftöner) position, especially in the derivatives in names in *Inglis*, *Frankis*, *Denis*, and also in the auxiliary *sal*, *sulde*; elsewhere, it remained [š], spelled *sh*, *sch* in the Midland dialects, and *sh*, *sch*, *ss* in the Southern and Western dialects, and *ss* in Eastern and South and

'blunder' by the Anglo-Norman scribe, then it certainly points to an early ME loss of [ç].

²³ So MED under the entry word *fors*. But Davis (p.125 in Tolkien and Gordon 1967) thinks that the word is from OE *furh* 'furrow', used in the sense of water course, since *z* is not used with this value /s/ after *r* in a stressed syllable. The script forms of the following final -*z*'s may have been *z*'s in the manuscripts: c1300 *SLeg.*(Hrl) 475/348: *surpliz*, 503/342: *croiz* (cf. *ibid.* 503/345: *croice*), *ibid.* 552/71: *voiz*.

Kent.²⁴ In c1250 *Owl & N.*(Clg) 151: *sewi* 'to show', 895: *fleses*, *s* is used apparently for [š], by the Anglo-Norman scribes. The use of *x* for *s* occurs in Anglo-Norman in the *Camb. Psalt.* v.i: *reix* (Menger, p.109; also see Pope, #733), also in (1450) Scrope DSP 170/33: *ambicieux*, (1436) *Will York* in *Sur.Soc.*30] 75: *corporax*, c1450 *Alph. Tales* 462/15: *corprax*, cf. c1330(?a1300) *Guy*(2) *corporas* (OF *corpraus*; MED *corprās*), where *x* points to [s], nol [š]. However, Paues (p.447 fn.2) says that the symbol *x* for the English [š], though infrequent, occurs in *xalt* and *xal*.

c1400(?c1390) *Gawain* 2223: *denez* (OE *daneis*; OE *denisc*), cf. c1325(c1300) *Glo. Chron.* A. 6060: *deueniss* [vr. *dench*], c1330(?c1300) *Guy*(1) 3585: *danis*, a1400(a1325) *Cursor* 24771: *danis*, a1225(?a1200) *Lay. Brut* 12854: *Densce* [Otho: *Dense*].

c. In the sequence *tz*.

The spelling *tz* has generally been interpreted as indicating voiceless [s]. As Gordon has pointed out (1953, p.93), the sequence *tz* is used only for voiceless [s] at the end of stressed monosyllables, as in *watz*, *hatz*, *sat3*, *got3*, as in *Gawain*, where *dot3* (line 2211), *got3* (17), *hat3* (375), *watz* (4) alternate with *dos* (1308), *gos* (935), and *was* (169). That this *tz* represents [s] can be proved by the rimes, for example, in c1400 (?c1380) *Pearl* 440-41: *place... hat3*. In Old French, *z* and *tz* were used to represent the sound [ts], as in *Fitz-Gerald* (Mod. French *filz*). When later this OF [ts] had been assimilated to *ss*, and then simplified to *s*, generally in the 13th century—earlier in the North²⁵—the older traditional spelling *tz* was sometimes kept for *s*.²⁶

3.2. [z].

a. In stressed syllables.

c1380 *Firumb.*(1)(Ashm) 2036: *dozopers* 'twelve peers' (OF *doze* ~ *duz*(*z*)*e*);²⁷ c1375 *The Dancers of Colbek* (Harley 1701) 5/46(S): *azone*; a1400 *PPL. B* (Trin-C) 15.17(= VII/12(G)): *maze*; c1400(?c1390) *Gawain* (Nero) 517: *zeferus* (Lat. *Zephyrus*); c1400 (?1380) *Cleanness* 1648: *dezyre* 'desire'; (c1385) Chaucer *CT.Kn.* A. 1985: *a veze* [vrr. *wese*, *veze*]; c1430(a1400) *Love Mirror* (Brnsn) 193/5: *lazar* 'Lazarus'; ?c1475 **Cath. Angl.* 2a: *azell* [Monson: *aisselle*] (OF *aisil* 'vinegar'); (a1420) *Lydg. TB* 2.4717: *azour*, cf. *ibid.* 1.384: *asour*; *MS Reg.17.B i.f.*14b (British Museum, of the early 15th c.): "3 is figurid lijk a *zed*... which is pe laste lettre of pe a.b.c" (see Paues 1911:442).

b. In final unstressed syllables.

Final [s] is said to have become [z] after vowels of unstressed syllables even before the end of the 13th century, and this [z] was then retained under stress (McLaughlin

²⁴ See Morsbach, #7-9; Jordan, #183, #260. Jordan (#17.2), however, says that French scribes attempted to represent the [š] sound a first by *s*, *ss*, and then, *sh*, *ssh*, using the *h* as a diacritic for palatalization on the analogy of *ch*.

²⁵ See Paues, #194; Davis, p.136; however, Zachrisson (cited in Jordan, #259) says that this French *ts* became *s* in English, already in the 12th century.

²⁶ McLaughlin (p.100), however, concludes that "the weight of the evidence seems to favor the interpretation [of *tz*] as voiced [z]." Cf. c1400(?c1380) *Pearl* 501: *sayt3* ~ 615: *say3* ~ 457: *says*.

1963:99). There are indications that in the course of the 15th century, earlier in the North, the unstressed *e* of the inflectional ending *-es* was lost, and that this final *s*, including those in unstressed words like *was*, *his*, was voiced before the gradual loss of the unstressed vowel *e* (Jordan, #291, #208).

c1400(?c1390) *Gawain* 1139: houndez, 1606: bigynnez, etc.

3.3. *z* represents only the letter *s*, not the sound, in the sequence *sz* (i.e. *ss*): a1500 *Alex.-Cassamus* 518: deszeperys, cf. c1300 Lay. *Brut* (Otho) 1622: dosseperes [Clg: duczepers] (OF *dozeper(s)*).

3.4. *zh* for *sh* [š] (on the diacritical use of *h*, see #1.15 above).

1349 *Acc.Exch.K.R.* 471/3m.10 (OED col.): dizhednayl, cf. 1348 *Acc.Exch.K.R.* 471/1m.1 (OED col.): discenail.

4.1. [w].²⁸

4.1.1. From OE or OI [ɜ].

In OE, [g] occurred only medially²⁹ in two positions: intervocalically, next to back vowels, as in *sagu* and *nigon*, and after liquids *r* or *l* and before any vowel, front or back—finally, [ɜ] had become devoiced to [x]. This [ɜ] was later labialized to *ɜ^w* and vocalized to *u* by way of *w*, first in the Southwest Midland (Worcester), about 1200, as confirmed by the *w*-spellings (Brunner, #13 Note 5), but somewhat later in the North-Midland and the North, and not until toward 1400 in Kent (Jordan, #186). This change is limited in the main to stressed syllables.

This OE [ɜ] then appears as ME [w] in the following environments.

4.1.1.1. Intervocalically, only after back vowels.³⁰

c1400(?1390) *Gawain* 514: innoze [rime: 512 blowe] ~ 1401: innowe (OE *genōh*); (1340) *Ayenb.* 111/31: doze,³¹ cf. a1325 *Gloss. Bibbesw* (Arun) 155: douw (OE *dāg*; MED *dough*); c1400 (?c1390) *Gawain* 1650: wozeɜ ~ 1180: wowes (OE *wāg* 'wall'); c1300 (?c1225) *Horn* 88: aslaze [vr. yslawe] 'slain'; a1225(?a1200) Lay. *Brut* 6471: boze ~ 1453: bowe, cf. a1400 *Cursor* (Göt) 1977: bou (OE *boga*); c1400(?c1380) *Cleanness* 1670; saze ~ 109: sawe (OE *sagu*); a1225(?a1200) Lay. *Brut* 1195: hazel [c1300: hawe]

²⁷ In the course of the 13th century, [dz] became [z] (Pope, #194), which is written *z*. In Old French, *s* in intervocalic position stood for [z] (Pope, #693).

²⁸ Greg (1910:283) explains the substitution of *z* for *w* as involving first "a misreading of *p* for *ɣ* and then a confusion of *z* with *p*."

²⁹ Some, however, think that it also occurred initially before back vowels in very early Old English but that it later became a stop [g] in the second half of the 10th century (Jordan, #184; Wyld, #86 about 1000). Moulton (p.24) concludes from "the evidence" that pre-OE /g/ was a stop initially before back vowels, but he adds that "the evidence that OE initial *g*-plus back vowel or consonant represented a stop is inconclusive; it could conceivably have been a velar spirant" (p.24 fn. 58).

³⁰ Hence, OE [ɜ] as in *nigon* didn't become *w* but *y* since it now came to stand between two non-back vowels in Middle English, subsequent to the change of the unstressed [ɔ] to [ə] in the 12th century, as in a1225(?a1200) Lay. *Brut* 1188, 5149: nizen (< nizon) (see Jordan, #190).

³¹ However, Jordan (#186) says that *z* was still [ɜ] in Kentish until 1400.

(OE hægel & hagol).

4.1.1.2. Medially after liquids *r* or *l* and before a vowel.

a. c1400(?c1390) *Gawain* 145: folzande, c1400(?c1380) *Cleanness* 429: folwande; a1225 (?a1200) *Lay. Brut* 19542: halzen [c1300: halwe] (OE hālga); *ibid.* 6396: abolwen ~ 26175: abolzen [c1300: abolwe] (OE ābolgen, ppl. of āblegan).

b. With an intrusive vowel developed after a liquid and before OE [ɜ] (after short accented vowels): c1250 *Prov. Alf.* 204: areze [Jes-O: arewe], a1225(?c1175) *PMor.* (Lamb) 17: erze [vrr. erewe, arz; arze] (OE earh, infl. earga).

4.1.1.3. Finally after the final *e* had been lost.

c1400(?c1390) *Gawain* 2335: aɜ(lez), cf. (1440) *Let. Bk. Lond. K* 244: awles, c1450 (?a1400) *Wars Alex.* 1459: aze [Dub: aw], a1400(a1325) *Cursor* 1773: au (ON agi + OE lēas); a1400 *Cursor* (Göt) 1977: bou [Frfr: boghe; Vsp: bou], cf. a1225(?a1200) *Lay. Brut* 1453: bowe, 6471: boze (OE boga).

4.1.2. From OE *w*.

(a1382) *WBible* (1) *Ecclus.* 43.22: bleeɜ [WB(2): blew] (OE blēow); c1400(?c1380) *Cleanness* 397: flozed, c1450(?a1400) *Wars Alex.* 2053: flozes [Dub: flowes] (< OE flōwan); a1225(?a1200) *Lay. Brut* 15741: huze, 19889: heuwe; MED heu 'color'.

4.1.3. From OE /-xx-/.

The long *hh* became (*h*)*w* in Middle English: c1400(?c1390) *Gawain* 307: cozed, cf. a1325 *Gloss. Bibbesw.* 1087: kouwe [vr. cowgh], c1400(a1378) *PPL.B* (Ld) 17.325: cougheth [C: kowep; vrr. couep, cowhep, couɜp] (OE cohhetan).

4.1.4. From OE /f/[v].³²

c1380 *Firumb* (1) 4319: aboze, cf. c1400(c1300) *N.Hom.* (1) *Gosp.* p. 96: abowen, (c1444) *Paston* 2.66: abowe (OE (a)bufan). MED says that *abow*, *aboze* are Southwestern.

4.2. /u/.

(1433) ?Phillip *Serm. GF* 253: hudyze, cf. c1450(?a1400) *Destr. Troy* 10014: hidious.

4.3. *ɜ* represents the letter *w*, not the sound, in the sequence *oɜ*; hence, *oɜ* is *ow* for /ū/.

c1400(?c1390) *Gawain* 305: brozes ~ 2306 browe (OE brū).

4.4. *ɜ* for length mark.

a. *uɜ* for /ū/: c1330(?a1300) *Arth. & M.* 9798: duɜste [rime: luzste], 9435: dust (akin to *dūst*? OE *dystan); ?a1450 *Agnus Castus* (Stockh): buɜt (OE būtan).

b. *oɜ* for /ō/: ?a1450 *Agnus Castus* (Stockh): hoɜt (OE hāt), noɜt (OE nāht); (a1333) Shoreham *Poems* 5/137: foɜte (OE fōt), cf. a1225(?a1200) *Lay. Brut* 29314: an heonden and a futen, c1300(?c1225) *Horn* 134: fout, ?c1375 *Abyde gud men*: fute and hand.³³

³² Cf. ME *aw* from OE *af-* before a vowel: OE hafoc → ME havek, hāwek, hawk (see Wyld 1927: 124).

³³ See Roseborough (1938:30): "From the late thirteenth century on, *o* appears to have been raised and rounded to [ū], which was identified with French *ū*". Brunner (1963:15): "OE *o*, about the 14th century, north of a line running west from the Humber, became an [ū] sound, more and

c. *az* for /ā/: ?a1450 *Agnus Castus* (Stockh) 132/3: *hazt* ~ 121/7: *hat* (MED *hāt*, *hait*, 3sg. of *habban*).

4.5. *z* used redundantly after *u* and *w*.³⁴

a1300 *Edi beo þu* 26: *deuz*, c1390 *Disp. Virg. & Cross* 228: *dewz*, ?a1450 *Agnus Castus* (Stockh): *zelwz*, c1450 *Med. Bk.*(2) 222: *deuz* (OE *dēaw*); a1300 *Edi beo þu* 30: *breuz* (OE *brēaw*); c1300 *SLeg. Patr. Purg.*(Ld) 184: *bleuz* (OE *blēow*); c1390 *Castle Love* (1) 711: *heuz* [vr. *hue*] (OE *hēow*; MED *heu* 'color'); c1300 *SLeg. Patr. Purg.*(Ld) 12: *auzter*, (a1389) *Trev. Higd.* 5. 133: *auztres* [vrr. *auters*, *auzteres*] (OF *aut(i)er*, OE *alter*); c1300 *SLeg.*(Ld) 372/176: *blouzman*,³⁵ cf. (a1387) *Trev. Higd.* 1.131: *blomen* (ON & OF *blo*; MED *blō-man*); a1400 *Cursor*(Trin-C) 6043: *gnowze* [Fr: *gnow*] (< OE *gnagan*); c1400 *Trev. Higd.*(Tbr) 1.231: *gokkouz* [StJ-C: *kukkow*]; (1390) *Charter Abbey HG*(Ld) 346: *abouzte*, cf. (1449) *Metham AC* 438: *abought*, a1500 *Go ye before* p. 283: *abowght* [rime: *route*] (OE *onbūtan*); a1375 *WPal.* 4265: *houz*, c1400 *Trev. Higd.*(Tbr) 2.23: *houz* [StJ-C: *how*], c1430(c1400) *Wycl. FCLife* 195: *houz*, a1450 (c1410) *Lovel. Grail* 36.202: *howh* (OE *hū*); c1300 *Body & S.*(5) p.51: *clouzt* [Auch: *clout*] (OE *clūt*); (a1387) *Trev. Higd.* 3.193: *douzte*, (a1415) *Wycl. Lantern* 2/12: *douztis* (OF *dote*, *doute*).

5. /g/.

5.1. From OE /g/.

5.1.1. Word or morph initially before consonants or (original) back vowels.

a1225 *Wint. Ben. Rule* 75/17: *zrefe* 'stylus'; a1150 *Rwl.G.* 57. *Gloss* 25: *zreme* (OE *gremain*); *ibid.* 25: *zret* (OE *grētan*).

a1225(c1200) *Vices & V.*(1) 119/16: *zalle*, c1330(?a1300) *Arth. & M.* 7176: *zalle*; c1225(?c1200) *SWard* 20/184: *zuldene* [vr. *guldene*]; a1250(?c1150) *Prov. Alf.* (*Glb-James) 13: *zan* [Trin-C: *gon*], *ibid.* 100/265: *zin*, a1225(c1200) *Vices & V.*(1) 5/8: (an)-*zin* ~ 115/7: *angin* (OE *onginnan*); c1150(OE) *Hrl.MQad.* 2/19: *zyrdels* (OE *gyrdel*); a1225(c1200) *Vices & V.*(1) 103/7: *zode*, 119/20: *zode* (OE *gōd*); a1250(?c1150) *Prov. Alf.*(Mdst) 83/101: *golde* [vr. *zolde*] (OE *gold*); c1225(?c1200) *SWard* 18/164: *zeað* [vr. *geð*], a1250 *Ancr.*(Nero) 188/20: *zoing* [Recl: *goyng*] (< OE *gān*): c1150(?OE) *PDidax.* 49/17: *zoman*, a1225(c1200) *Vices & V.*(1) 119/23: *zomes* (OE *gōma*).

more commonly spelt *u* or *ui*, which rimes with French [ū]: thus *gude* and *guid* instead of *good* 'good', *blud* and *bluid* instead of *blood* 'blood', and so on. Elsewhere *o* remained as a close [ō].” Jordan (#53) says that, in late ME, closed *ō* is sometimes written *ou* (in Shoreham, Mannyng, Gawain poets, and Southwestern writings of the 14th c.) to distinguish it from open *ō*; therefore, this *ou* spelling didn't represent the shift of *ō* to *ū* which didn't appear until about 1400. If so, the *z* in *fozte* may also represent the letter *w*. He also adds that French spelling *ū* for *ō* occurs, especially in *Genesis and Exodus* and MS Arundel 248 (#53 Anm). The *u*-spellings for *o* occur in the North from the 14th century at first sparingly but later on very frequently, except before *u* (=v), *n*, *m*, and after *w*, and in final position, and very seldom before *z*, *gh* (Luick, #406; see also Jordan, #54).

³⁴ Cf. OE *ēaw*, *ēow* → ME *ou*, *eu* respectively.

³⁵ On the spelling *ou* for *o*, see fn. 33 above.

5.1.2. Medially or finally after *n*.

a1250(?c1150) *Prov.Alf.*(*Glb-James) 27/17: Alfred he was on engzelond a kinz wel swiðe strong; a1150 *Rwl.G.57. Gloss.* 27: intinz (OE intinga); (a1402) *Trev. Dial. MC* 2/3: strenzpe; c1300 *SLeg. Becket*(Hrl) p.67: thenzth; ?c1200 *Orm.* 4508: ganzenn (OE gangan).

5.2. From OI and OF /g/.

a1400(a1325) *Glo. Chron. B* (Trin-C) 6120(=VI/19(G)): zates (ON gata); c1400 (?c1390) *Gawain* 1453: zaule (ON gaula); *ibid.* 1215: zeze (< OI geyja?); ?c1200 *Orm.* 10885: zæress, 8050: gæress (ON görvi, gervi; MED gēre).

c1425 *Glo. Chron. A*(Hrl) p.192: ozyrt, c1450(?a1400) *Wars Alex.* 772: augird (?OF avant-garde; cf. OI āgiart); 1389 *Nrf. Gild Ret.* 76: janzelynge, a1425(?1384) *Wycl. Church* 352: jozelour (AF jogelour).

5.3. *zh* for [z] in early ME in *Ormulum*: azhenn 'own', bozhess 'boughs', ezhe 'eyes' (see Jordan, #190; Brunner, p.43 Note 7).

6. /j/.

c1150 *Hrl. HApul* 130.126/1: drenze (cf. OE drinc; MED drink);³⁶ [ts] and [dz] were retained longer in the English loan-words and in later Anglo-Norman than on the Continent, where they, however, became [s] and [z] respectively in the course of the 13th century (Pope, #1181, #194): (1463) *Acc. Howard* in *RC* 57 180: zayle, cf. (1464) *ibid.* 187: gayel (OF jaiole); c1390 *PPL.A*(Vrn) Prol. 47: seint Ieme [vr. zame], cf. c1325(c1300) *Glo.Chron.A* 10278: at gemes tid (OF James); a1425 *Wycl. Serm.* 1.410: zaping (?OE).

7. /θ/; /ð/.

Brödin (1950) says that the first scribe of the manuscript (?a1450 *Agnus Castus* (Stockh)) uses *z* as a voiceless dental fricative, which use is probably to be regarded as an inverted spelling because in late Middle English *y* was used both for the palatal fricative *z* and the dental *p*, which in writing often took the form of *y*. Similarly, Sisam (p.275) interprets that *z* for *p* initially is more often due to confusion of the letters *p* and *y* and subsequent preference of *z* for *y* in spelling than to direct confusion of *p* and *z*, which are not usually very similar in late Middle English script.

7.1. Initially.

c1350 *Cmb. Ee. 4.20 Nominals* 120: zresschith 'thrasheth'; *ibid.* 591: zauynge 'thawing';³⁷ a1375 *WPAL*(KC) 3799: zourth 'through'; *ibid.* 447: zout 'thought'; ?a1450 *Agnus Castus*(Stockh) 132/3: zow 'though'; ?a1450 *Macer*(Stockh) 194/4: zye 'thigh', 153/11: zies; c1430-40 *Harrowing of Hell* 177/70(S): ze Iewes 'the Jews'—Initial *p* came to be voiced in unstressed words in the 15th century.

³⁶ MED says that a pronunciation *drenʒe* may have existed, by blending with *drenche*.

³⁷ This text is evidently the work of a Norman scribe, who makes the usual mistakes by confusing *p* with *z* (Skeat 1906, p. 2*).

7.2. Medially.

a1400 *Cursor*(Trin-C) 4781: blize [Vsp: blith];³⁸ c1150(OE) *Hrl. HApul.* 119.100/1: bozen, cf. a1500 *Agnus Castus*(Hrl) p. 167: bopen (OE bopen); a1400 *Kindeli is* 4: brizel, c1450 Capgr. *St. Kath.* 4.1531: brethel (MED brēthel); c1130 7 *Sages*(1) 83/A 1744: wizinne 'within'; a1425 *Ben. Rule*(1) 36/19: clazing ~ 38/19: claping (MED clōthing); a1375 *WPal.* 5002: greized, c1380 *Firumb*(1) 1472: greype (cf. OI greiða).

7.3. Word or morph finally.

?a1425(?a1350) *Castleford Chron.* 19924, 19926: Iugelour...pat mikel cuz of gam and gle... Fele burdes and wordes for soȝ he carpes; c1330 7 *Sages*(1) (Auch) 2235: wiz, c1330 *Degare*(Auch) 44: wiz 'with'; c1300 *SLeg.*(Ld) 366/35: dez, c1330 *Degare* 943: dez-dint, c1390 *SLeg. Cross*(Ld) 168: dez (OE dēap); a1375 *WPal.* 261: feiz(liche), 209: feply (MED feithlī < AF feid & fei);³⁹ (1340) *Ayenb.* 234/8, 12: hondraz(te) (= *hondraðte* with ð for d); ?a1450 *Agnus Castus*(Stockh) 132/3: haȝ 'hath' (3sg. of habban).

7.4. In inflectional syllables: [θ].

c1300(c1250) *Floris*(Cmb) 448: he... goþ forþ and letez hire stonde, 635: criez, 459: geȝ.

7.5. ȝh for [ð].

a1400 *NVPsalter*(Hrl) 130.5: heȝhen [Vsp: hethen] (MED hēthen adv.; cf. CI hēðan).

8. ȝ for various abbreviation marks.

In Latin palaeography, punctuation marks were used for abbreviations—the full point, and a colon or a semicolon: the first is the earliest and simplest mark of abbreviation (exp. A•=aut) and the latter two appeared next (exp. B; B;), of which the favorite from was the semicolon, which later developed, by rapid writing, into a ȝ-shaped form from the 11th century on and was employed for various abbreviations: -us, -ue, -que, -et, later also for final m. A survival of the abbreviation ȝ for et, as in sȝ for set (i.e. sed), is seen in the z (for ȝ) in viz for videlicet (see Thompson, p. 99; also Johnson and Jenkinson p. 55). This ȝ-type abbreviation mark appears in English court hand from the 12th century (see Johnson and Jenkinson, pp. 60–61 and xxv). The following data, unless otherwise noted, are from *Statues Realm*, vol. 1 (1810), a collection of early Middle English Latin documents from 1235 on.

8.1. For -us, as in *Abbatibȝ*, *quibȝ*; for -et, as in sȝ for set ~ sed and in possȝ; as a comprehensive mark of abbreviation: *quixȝ* for *quillibet*, *qnȝ* for *quandoque*, and *videlȝ* for *videlicet* (p. lxiii).

8.2. For a name: *ȝorke* (p. 52); c1460 *Erly in a someristide* 154/15, 25: Z.E.R.E. written after brute...ȝ for *ȝorke*, pat is manly and myȝtfull, *ibid.* 155/25: A • ȝ • for yorke.

8.3. For the Tironian sign for the conjunctive and or et (p. 52): a1350 *SLeg. Blase*

³⁸ Or could *blize* be for *blī* adj., reduced from of *blīthe* adj.?

³⁹ Or could *feiz-* be for AF variant *fei*?

(Ld) 22: He wenten ȝ tolde, *ibid.* 91: pei zeden ȝ gadereden.

II. y

The ME script forms of *y* and *p* are nearly, sometimes quite, identical, so that they are distinguished from each other by the former being overdotted. A common script form of *y* in Middle English is *ȝ*, which is also used for /x/; hence, the four letters *ȝ*, *y*, *i*, and *j* are often used interchangeably.

1. p; ȝ.

(1399) *RParl.* 3.452a: all yof 'although'; a1500 *Agnus Castus* (Hrl) p. 167: bopen [vrr. boyme, bothen], cf. c1150(OE) *Hrl. HApul.* 119.100/1: bozen (OE bopen) (on the graphic substitution of *ȝ* for *p*, see #1.7 above); 1389 *Nrf. Gild Ret.* 109: breyeroun (OE brōpor); (1440) *PParv.* 242: hye (MED hīth(e)); c1305 *Als i me rod* 12: yider (OE pider).

2. ȝ (for h).

a1300 *I syke* 60: bibopt [vrr. bi-boyt, boht] (OE beboht) (on the graphic substitution of *p* for *h*, see #VI.2 below); (c1300) *Havelok*(Ld) 1219: mayt; a1325 (?c1300) *NPass.* 102-4: yio [Rwl C. 655: he].

3. j ~ g for /j/.

(1440) *PParv.* 140: enyoyen [vr. enioyn], cf. a1475 *Ludus C.* 118/83: injouyid (OF enjo-ir); (1467-8) *Doc.Finchale* in *Sur.Soc.* 6 p. cccvi: ywnnyng (MED joininge); a1500 (1422) *Yonge SSecr.* 225/26-27: yontures (OF jointure); *ibid.* 240/8: youse, cf. (c1440) *Scrope Othea* 84: ioyeux (OF joios, joie); c1400(c1387) *PPL.B*(Ld) 13.83: Iurdan [C: yurdan] (ML jurdānus; MED Jordan).

4. /i/.

(1440) *PParv.* 242: hȝye (MED hīth(e)); c1475(a1449) *Lydg. St. Giles* 159: deuhy (OE dēawig; MED deuī); (a1398) **Trev. Barth* 41b/b: heuyere, a1300 *SLeg.*(Ld): hevȝ (MED hēvī), cf. a1225(?a1200) *Lay.Brut* 2795: hefezere (where *eȝ*, *iȝ* = *i*, see #I. 1.4b above).

III. h

H is used for *w*, *p*, *y*, diacritic symbols, and an epenthetic *h*, and also redundantly. *H* for *w* and *y* is due to the fact that all the three letters are related to the *ȝ*, which represents /y/, for example, next to a front vowel, /w/ next to a back vowel, and /x/ next to a consonant. *H* for *p* is due to the graphic similarity of the letters *p* and *y*, with subsequent employment of *ȝ* for *y*, and then of the archaic *h* for *ȝ* in spelling (cf. #II above and #VI. 2 below).⁴⁰

⁴⁰ The substitution of *h* for *p* has also been explained as due to confusion caused by the difficulty experienced by French scribes in distinguishing between the two unfamiliar fricative sounds.

1. *w* (for OE or OI [ʒ]).

c1230(?a1200) **Ancr.* 6a: dahunge, cf. c1325 (c1300) *Glo. Chron.A* 4245: dawiiinge (OE dagung; MED dauinge); a1225(?c1200) *St. Juliana* 43/456: feolahe, cf. c1250 **St. Marg.*(2) 27: felawes, c1300(?1225) *Horn* 996: felaze (ON; cf. OI fē-lagi); a1300 *Gloss. Bibbesw.*(Seld) 832: velien [vrr. felouhes, felewes] (OE sg. felg; pl. felga, -an; MED fēlau(e)); c1230(?a1200) *Ancr.* 31/2: haheer [Nero: hawur; Cleo: hazer] (ON; cf. OI hagr; MED hauer); c1230(?a1200) *Ancr.* 166/21: itohe [Nero: itowen], cf. c1250 *Owl & N.* 1725: itozen (ppl.) [vr. itowen] (<OE getēon).

2. *p*~*ð*.

a1225(?a1200) *Lay. Brut* 4058: norh [c1300: norþ] Wales; a1250(?1150) *Prov. Alf.* (Mdst) 83/98: wurhere; c1325 *Mon in pe mone*(Hrl) XXXI/39(DW): teh(OE tēþ); c1325 *Lenten ys come* XVB/22(S): doh (=dop).

3. *y* (i.e. *ȝ*).

a1300 *Owl & N.* (Jes-O) 408: bareh [Clg: bareȝ], cf. c1440(?a1400) *Morte Arth.*(1) 191: barowes (OE bearg. bearh);⁴¹ c1400(c1378) *PPl.B*(Ld) Prol. 161: biȝes [vrr. beiges, behes, byes](OE bēag, bēah); a1300 *Leuedi sainte* 20: dehe (OE dēag, dē(a)h); a1225 *Wint. Ben. Rule* 67/15: dihllice, c1225(?a1200) *St. Marg.*(1) 38/13: dihelnesse, cf. a1225(?a1200) *Lay. Brut* 13539: diȝelliche (OE dīegellīce); c1450 *Ponthus* 96/11, 105/5: convehed, 69/22: conveyd, c1460 *Ipom.*(3) 327/31: convehed; (a1393) *Gower CA* 8.23: conveied (OF conveier; MED cōnveien); c1250 *Glade us maiden* 9: dehit (ppl.), cf. a1300 *Floris*(Vit) 77/84: idized (ppl.) (OI deyja; MED dīen).

4. Diacritic symbols for vowel length and hiatus, or vowel length alone.

a. Vowel length and hiatus (see #I.1.3.1b above).

(a1420) *Lydg. TB* 1.3067: coharte, (?a1430) *Lydg. Pilgr.* 24829: coharte, cf. ?a1425 **Chauliac*(1) 144b/a: coarte (L; MED cōarten); *ibid.* 153b/b: cohite, 94b/b: coite (OF coīt; MED cōite); (1440) *PParv.* 120: dyel [KC: dial, dihol] (OE; MED dīal).

b. Vowel length alone (see #I.1.3.1a above).

c1440(?a1400) *Morte Arth.*(1) 723: daynttehely (MED deintēli < deintē adj.); a1225 (?1200) *Lay. Brut* 19869: iwihthen (OE gewītan; MED iwīten).

5. Word or morph initial epenthetic (excrement) *h*.

Initial excremental fricative *h* occurs already in Old English in the late 9th century Hatton manuscript of the *Pastoral Care*: his 215/19 (Cotton MS: is). This epenthetic *h* is said to take place "only in stressed syllables, and especially in those that have extra strong sentence-stress" (Wyld, p.219). In later Old French from the 13th century on, to obviate the ambiguity of the symbol *u*, the *h* was often prefixed to words beginning

The Normans still pronounced the intervocalic dentals at the time of the Conquest, and that this pronunciation was continued in Anglo-Norman for some time, till toward the middle of the 12th century in any case (Menger, p. 92).

⁴¹ *W* after an epenthetic back vowel but *y* after an epenthetic front vowel.

with this symbol used with vocalic or semivocalic value, as in *huis, huit, huem*.⁴²

(c1309) *Havelok*(Ld) 304: hic; *ibid.* 322: (per)hinne; a1300 *Worldes blis ne last* 3-4: hich [vr, ics] ...hic [vr. ics](OE ic); c1250 *Owl & N.*(Clg) 4: hule; *ibid.* 1177: hartu; *ibid.* 1733: hunke; a1440(?a1400) *Morte Arth.*(1) 3244: enhorilde, cf. c1400(?a1380) *Cleanness* 19: enorled (OF orler; MED enorlen).

6. -ih and hi- for -iz and zi- respectively, for short /i/ (see #1.1.3.2a and b above).

?a1300 *Sayings St.Bede* 195: herihinge, cf. (a1333) Herbert *Wele herizyng*, c1250 *Owl & N.* 981: heriinge; a1300 *Loke to pi louerd* 2: hyf, cf. a1325(?c1300) *NPass.* 385: yif [vrr. zif, if, hiff] (OE gif; MED if).

7. Redundantly after *u* and *w* (see #1.4.8 above).

c1475(a1449) *Lydg. St.Giles* 159: deuhy (OE dēawig; MED deuī); c1400(c1378) *Ppl.B*(Ld) 5.622: dew [C: deuh], a1475(?a1430) *Lydg. Pilgr.* 5403: dewh, cf. c1450 *Med.Bk.*(2) 222: dewz, c1390 *Disp.Virg. & Cross* 228: dewz (OE dēaw; MED deu); a1450(c1410) *Lovel. Grail* 36.202: howh, cf. (1472) *Paston* 5.154: howgh, a1375 *WPal.* 4265: houz, c1400 *Trev. Higd.*(Tbr) 2.23: houz [StJ-C: how] (OE hū; MED hōu).

IV. s

In French, [s] before a consonant (*t*) was velarized to [x] in the 11th or 12th century (Pope, #1178); this 'weakened' *s*, however, was still "sounded" into the 13th century (except in the western region) as indicated by the rhymes of Old French poets (Pope, #377). On the Continent, this stage was evidently ephemeral, but in Anglo-Norman, where these consonants found support in the English sound system, this fricative [ç] (after front vowels) or [x] (after back vowels) persisted into the late 13th or 14th century,⁴³ as attested by the spellings and rhymes of French loan-words in German poems, e.g. *foreht, reht*, or by the testimony of the fifth rule of the 13th (~14th) century Anglo-Norman *Orthographia Gallica* (pp. 8 and 49): "Quant *s* est joynt [a la *t*], ele avera le soun de *h*, come *est*, *plest* seront sonez *eght*, *pleght*" (when *s* is joined to *t*, it has the sound of *h*, and that *est*, *plest* should be pronounced *eght*, *pleght* (see Pope, #378(ii), #1178(ii); Menger, p. 106; Morsbach, #16 Anm. 1.). Anglo-Norman scribes represented this palatal and velar fricatives by the English *h* and occasionally by *gh* or *sh*, as in *miht*, *eshtel* (Pope, #1216(iv); Menger, p. 102), *osaht*, *vousiht*, *fuht*, etc. (Pope, #1178), or still by original *s*, as in *miste* 'might' and *boust* 'bought'.

The exact phonetic nature of this spelling *h* (or *gh*, *sh*) from the old *s* is not certain, but was (at first) a sound representing "one of the many series of changes *s* may have undergone before disappearance" in the early part of the 13th century (Menger, pp.

⁴² Pope, #730; Anglo-Norman scribes often omitted or inserted incorrectly initial *h* (see Brunner, p. 43). On the initial epenthetic *h* alternating with *z*, see #1.1.1.2b above.

⁴³ Pope, #1178; for *-st* we find *st*, *ht* (*ght*, *sht*), and also *ϕ* (disappearance) in Anglo-Norman (Menger, p. 102).

106-107). Apparently, the sibilant fricative had first been weakened to a backed flat fricative [ç] or [x] and further to a glottal fricative (i. e. a breathing [h]) before it was lost.

When this preconsonantal *s* was finally effaced, the traditional spelling *s* was then maintained frequently and used as a diacritic to indicate the lengthening of the preceding vowel. This diacritical function of *s* was subsequently extended to other words unetymologically, as Peletier du Mans states: "Nous métons volontiers cete lètre(s) pour sinifier que la sillable êt longue" (see Pope, #725(i)).

A similar development occurred in English also, as when ME *gh* had been lost, for example, before *t*, the old *gh* then came to be used as a diacritic to indicate vowel length—this, of course, by reverse spelling: (1461) *Paston* ii. 29: wright (OE *writan*), c1450 *Lydg. SSocr.Ctn.* 1814: audight (L. *auditus*; MED *audġte*).

a. After front vowels.

c1250 *Of on pat is so fayr* 3: brist, c1250 *Louerd asse pu ard* 10: brist, 117: briste, 71: brit (withot *h*), cf. a1225(?c1175) *PMor.*(Lamb) 75: brichte [vrr. brihte, brizte, brite] (OA *breht*, *bryht*; WS *beorht*; MED *bright*); c1250 *Doomsday*(Trin-C) 6: disten, c1250 *Louerd asse pu ard* 119: diste (OE *dihtan*); c1250 *Judas* 34: fiste, cf. a1225(?c1200) *St. Juliana* 63/684: to fiten (without *h*)(OE *feohtan*); c1250 **St. Marg.*(2) (Trin-C) 218: heiste, c1250 *Judas*(Trin-C) 19: heiste, 20: heite (OE *hēt*); *ibid.* 6: meist mete 'might meet', 29: miste 'might' [rime: cnistes (line 30) 'knights', fiste (31) 'fight'], a1275(?1150) *Prov.Alf.*(Trin-C) 72/31: mistin, c1300(?c1225) *Horn*(Cmb) 10: miste.

b. After back vowels.

c1250 *Judas*(Trin-C) 26: ic am iboust (OE *boht*); c1250 **St.Marg.*(2) 219: brousten, c1250 *Seinte marie leuedi* 5: brovste (OE *broht*); c1300(?c1225) *Horn* 15/249: doster (OE *dohter*); c1440 *PParv.* 129: dowsty (OE *dohtig*); c1250 *Wolle ye i-heren* 4: isoust (ppl.) [rime: ibroust], c1250 *pene latemeste dai* 28: isout (ppl.) [rime: ibroust] (without *h*), ?a1300 *Jacob & J.* 420: isouzt (ppl.) (OE *sōhte*); c1250 *pene latemeste dai* 68: bipaiste (ppl.) [vr. bipahte] ~ 286: bipezte.

V. *w*

W is used for *z*, *j* ~ *g*, and *f*.

W for *y* and *j* (~*g*) is due to the fact that all these letters are related to *z*, which represents *w*, for example, next to a back vowel, as well as *y* and *j* (see #11.3 above); *w* for *f* is due to the fact that *u* or *v* was used for *w*, and since *u* and *v* interchanged with each other, one of them was subsequently employed for *f*.

1. *z* (i.e. *y*) /*y*/: a1225 *Wint.Ben.Rule* 71/12: andwit (MED *andȝit*).

2. *j* ~ *g* /*j*/: c1390 *Psalt. Maria*(1) 440: pe Iewes mod [L. *tempera iudicis*] (OF *juge*; MED *jūġe*).

3. *f*/f/,/v/ (see #I.4.4 above): (c1385) Chaucer *CT.Kn.* A.1985: a veze [vrr. *wese*,

veze] (MED fēse); a1400(c1300) *NHom.*(1) *Gosp.* p. 96: abowen, (1444) *Paston* 2.66: abowe, c1380 *Firumb.*(1) 4319: aboze (MED abōue(n)); a1325(c1300) *Glo. Chron. A.* 2198: a wissinge [c1425: a fischyng], 5351: a-vissinge 'on-fishing'.

VI. p

p is used for y, h, w, s, f, and d and t.

1. y (see #II above).

Concerning the two English letters that have no equivalents in the French alphabet, a 14th century writer remarks as follows: "Auxi come nous auons en nostre parleure en Engleterre deux lettres plus qils nount en lour a b c, cest assauoir p et z, qi sont appelez thorn et zogh" (MS British Museum Harley 4383 f. 31), which means in Middle English: "And wee in Englonde haue in oure language and speche ii lettres mo pan pei haue in hire a.b.c, and pat is p and z whiche ben clept porn and zogh" (MS Cotton Titus c.xvi (1410-1420)) (see Paues, p. 444). One of these two letters, z, is called 'yoz, zouz' or 'pouz' in the 15th century English Mandeville manuscripts (see Paues, p. 446).

Since y and p appear so alike in script, they have been endlessly confused by scribes, as in c1305 *Als i me rod* (LinI) 163/12(S): yider (= pider), *Oxf. Douce* 109 f. 37: z. and y. whiche ben clepid zou and pouz; *Camb.Univ. Ff.* 5.35 f.24b: y and z pe whiche beth I-callid powhes (see Paues, p. 445), and also with occasional transference to p of the dot which palaeographically may stand only over y, as in c1250 *Prov. Alf.*(Trin-C) f. 85: p .i. yorn (with the y overdotted for p (!) by the Norman scribe).

c1250 *pene latemeste dai* 86-87: lepen (OE lēag)... brepe, cf. c1325 *Most i ryden* 18: breze (OE WS bræw; OA brēg; MED breu n.), c1250 *Wene pin eyen* 21/1: epen 'eyes'; c1400 *John Ball's Letter to the Peasants of Essex, 1381* (St. Albans MS British Museum Royal 13.E.ix) 161/11(S): pe (=ye); c1475(c1399) *Mum & S.*(1) 3.106: cloped (MED cloien v.); c1350 *MPPsalter* 45.4: deluup [vr. deluvie] (MED dilūvīe); c1450 *Med.Bk.*(1) 318/1048: dreggpe, cf. ?c1425 **Chauliac*(2) 34a/b: dragye (OF dragie; MED draǵǵē); c1305 *Als i me rod* 23: piif, (c1465) *Stonor* 1.71: pyf: (OE gif); a1450 *Disp.Virg. & Cross*(Roy) 241: keiped (MED keied (ppl.) 'fastened'); c1325 *Mon in pe mone* 69/11: hip-te (OE hīgp; MED highthe).

Similarly, th for y ~ z: c1400 *St.Anne*(1) 1226: contreth's, c1440 *PLAlex* 9/23: contreth, a1450 *7 Sages*(3) 3318: countreth, c1450 *Alph. Tales* 69/12, 163/21: contreth, (a1456) *Shireley Death Jas.* 11: cuntreth, cf. c1300 *SLeg. Nich.* (Hrl) 439: contrai, (1398) **Trev. Barth.* 135b/a: contrey (OF contrée; MED contrē(e, with scribal substitution of th for y read as p)).

2. h.

On the orthographical origin of p for h, see #III above; the p for h usually appears before t from OE -ht.

2.1. /x/.

c1325 *Mon in þe mone*(Hrl) 69/7: wypt (OE wiht); c1300 Lay. *Brut*(Otho) 12: heþ ...hepte [Clg: heihte], c1325 *Mon in þe mone*(Hrl) 70/35: heþ (OE hē(a)h); c1250 *Owl & N.* 1391, 1395, 1552: noþt, 1470, 1620, 1740: naþt (OE nāht); c1300 Lay. *Brut* (Otho) 21/25(DW) miptie, cf. *ibid.* 21/30(DW): mistie (OE mihtig); *De clerico et puella* (British Museum Harley 2253) 122/17(DW): ript (OE rihte); a1300 I *syke* 60: bibopt [vrr. bi-boyt, boht] (OE beboht); c1250 *Owl & N.* 1295: hopful [Jes-O: houhful], cf. *ibid.* 537: hozfule (OE hohful); c1300 Lay. *Brut*(Otho) 1270: bi-hepte; c1300 Lay. *Brut*(Otho) 3477, 3205: inop [Clg: inoh], a1450 *Bevis*(Cai) 28/600: i-nouþe [Auch: inouþ] (OE genōh); a1225(?a1200) Lay. *Brut* 9106: broðten [c1300: brohte]; *ibid.* 6940: iseoðten [c1300: sohte] (OE gesōhte).

2.2. **p** represents only the letter *h*, not its sound.

a1300(?a1250) *Serm. atte wrastinge* 107: detpis, cf. 1372 *At þe time* 25: detz (OE *dēap*).

In the sequence *-ht*, final *t* is often omitted: c1300(c1250) *Floris*(Cmb) 407: forb [Auch: forht]; *ibid.* 737: worp [Auch: worht]. For a similar loss of the *t* after *z*, see c1400 (?c1390) *Gawain* 1858: myz (=myzt), c1400(?c1380) *Pearl* 286: broz (=brozt).

3. w.

Anglo-Norman scribes often confused the two letters þ and ꝥ, as did the English scribes, on account of their graphic similarity, by writing þ for the Anglo-Saxon ꝥ (=w); therefore, the Norman scribes of the following manuscripts have written down the following four peculiarly English letters as a memorandum for guidance in their transcription: (a) At the bottom of the first page on folio 85 of c1250 *Prov. Alf.*(Trin-C): iye w and iȳorn;⁴⁴ (b) on the blank page folio 114b following the beginning of the

3 ꝥ 7 þ

Poema Morale(McLean 123): •porn• wen yoz and.⁴⁵

(c1300) *Havelok*(Ld) 464: ps (=ws for us); *ibid.* 2578: forpi(=forhwi, forwi); c1250 *Owl* & N. 946: flopep [Jes-O: flowep], cf. c1450(?a1400) *Wars Alex.* 2053: flozes [Dub: flowes]; c1250 *Owl* & N. 1613: aschepele; ?a1300 *St. J. List Trees* 155: hapes (OE haga); c1450 *Bevis*(Cai) 28/600: i-noupe [Auch: inouz], cf. (c1410) York *MGame* 38: inowe (OE genōg, genōh); a1225(?OE) *Lamb. Hom.* 157: ituped, cf. c1250 *Owl* & N. 1725: itozen [vr. itowen] (<OE getēon); *ibid.* 1320: ipune, 475: iwone (OE gewuna).

4. S.

p for s is due first to the fact that for the unfamiliar fricative *h* (commonly written *z*) before *t*, Anglo-Norman scribes often employed its French equivalent *s*, and next, to

⁴⁴ The *i* of *iye* and *iyorn* apparently stands for *id est*; see Paues, p. 442; in the same manuscript, the Norman scribe has also written *y* twice where he should have written *p* (=w) (see Greg 1910, p. 284).

⁴⁵ On the other hand, Sisam, following Dr. Bradley, suggests that the initial *p* is mistaken for *v* (= *u*). However, I would rather explain the substitution by associating *p* with *z* for *w*, and subsequent employment of *z* for *y*, and then of *p* for *w* in spelling.

graphic confusion of *z* (for *y*) and *p* on account of their graphic similarity (see #VI.1 above), and finally to subsequent employment of *p* for *s*.⁴⁶ Cf. c1300 *Lay. Brut*(Otho) 21/30(DW): *mistie*, 21/25: *miptie* (OE *mihtig*).

c1150(?OE) *PDidax.* 13/13: *pona* [MED *read: sona*]; c1450 *Med. Bk.* (1) 28/42: *escarp*, cf. ?a1425 **Chauliac*(1) 64a/a: *escarez* [**Chauliac*(2): *escares*]; c1380 *Firumb.*(1) (Ashm) 423: *doppoper* [original draft: *dozepers*], 259: *doppoperen*, 650: *doppeper*, cf. *ibid.* 2036: *dozepers*, a1225(?a1200) *Lay. Brut* 1622: *duczepers* [Otho: *dosseperes*], a1450 (a1338) *Mannyng Chron. Pt.1* 1601: *dosze-peres*, a1500 *Alex.-Cassamus* 518: *doszeperys* (OF *dozeper*(s), *duz*(z)e- from **dodze*, with the affricate *dz* becoming *z* in the course of the 13th century (Pope, #194)); also *th* for *s*: a1425(c1395) *WBible*(2) 2 Kings 19.3: *eschewide* [vr. *ethchewide*] (OF *eschivir*; MED *escheuen*).

5. f.

The substitution of *p* for *f* is due to the fact that ME /x/, written *z*, was often labialized to *f* finally or before *t*, as in a1400 *Cursor*(Vsp) 579: *pof* [Trin-C: *pouze*] 'though',⁴⁷ and then subsequent confusion of *z* (for *y*) and *p*. Wyld(p.209) says that substitution of *f* for *th*[θ] and *v* for [ð] in all positions occur: "This substitution seems to be rather a personal idiosyncrasy than a dialect feature, though it does appear to be frequent in a very low type of Cockney English."

c1325 *Middelord for mon*(Hrl) 30/29: *fyth of oper ne darþ he flõe* (?OE *derfen* 'to afflict'); c1400(?c1380) *Pearl* 138: *oper* 'over'; a1425(c1385) Chaucer *TC* 4.1567: *hastif* [vr. *hastyp*] (OF; MED *hāstīf*); a1375 *WPal.* 362: *dwerþ*, cf. a1325 *Gloss. Bibbesw.* 823: *dweruf* [vrr. *dwarw*, *duarf*] (OE WS *dweorg*; MED *dwergh*).⁴⁸

6. d and t.

a. For *d*. Before nasal or liquid, there was a tendency of *p* becoming a *d* (see Brunner, p. 38).

(c1300) *Havelok*(Ld) 739: *erpe*; c1325(c1300) *Glo. Chron. A.* 7491: *debrused* [vr. *pebrusede*] (OF *debrisier*; MED *dēbrīsen*); a1500(?1400) *Chestre Launfal* 101: *pepartyp* (F *departir*); c1330 *Orfeo* 33/370: *perk* (OE *deorc*); c1250 *On leome* 55: *peit* (OE *dēap*); 1451-1500 (c1400) *Tundale* 1057: *donge* [vr. *ponge*], 1056: *dange* [vr. *pange*], a1500 (c1400) *Emare* 659: *ponge* (past of OE **dingan*); a1500(c1400) *Emare* 422: *powgtur* (OE *dohtor*); a1400 *Cursor*(Göt) 11829: *propsi* [Frf: *dropecy*] (MED *dropsi*(e)); ?c1200

⁴⁶ The *z* in French represents the letter *z* or *s*.

⁴⁷ More examples: (1399) *RParl.* 3.452a: *all yof*, a1400 *Cursor*(Göt) 4240: *al pou* [Vsp: *pof*], c1400(?c1390) *Gawain* 624: *pof*, c1440 *Bonav. Medit.*(3) 200: *all-poff*, c1450(?a1400) *Destr. Troy* 6745: *all-pof*; (1449) *Paston* 2.105: *brofte* (OE *brohte*); a1400 *Amis* (Suth) 2468: *cauzt* [vr. *caufte*] 'caught'; (1340) *Ayenb.* 217/4: *ydiff* (OE *dihtan*); a1450 *Terms Assoc.*(1) 604: *draufthe* (MED *draught*); a1325 *Gloss. Bibbesw.* 823: *dwerf* [vrr. *dwarw*, *duarf*] (MED *dwergh*). Jordan (#197 Anm. 1) notes that the first examples of labialization /x/ to /f/ occur in c1300 *Thomas Becket* (Harley 2277): *thurf* 'through', *Trev.* *dwerf*.

⁴⁸ Conversely, *f* for *p*: c1175(?OE) *Bod. Hom.* 134/27: *He nauef* (=nauep).

Orm. 2245: Jupewess (L. Jūdaeus).⁴⁹

b. For *t*.

a1500(?c1425) *Spec. Sacer.* 60/35: deynpedes (AF deintép); (a1387) *Trev. Higd.* 7.473: drouzte [vr. druype]. Similarly, *th* for *t*: (c1300) *Havelok*(Ld) 48: with, 213: woth, 252: leth, 808: neth.⁵⁰

APPENDIX: z

This letter takes the Roman form, both as a capital and as a small letter, during the 11th and 12th centuries, with two horizontal lines joined by a diagonal, but from the latter part of the 13th century on, the small letter, however, comes to assume the form indistinguishable from the letter *z* 'yogh' (Johnson and Jenkinson, p.55); hence, they have come to be confused. Moreover, some editors have replaced *z*'s by *z*'s where "that is the letter intended" (Davis, p.v in Tolkien and Gordon 1967).

The letter *z*, then, is used for *p*, /ts/, *s*, and *h*.

1. *p* (cf. #I.7 above).

(1296) in Löfvenberg *ME Local Surnames* 101: Rob. atte Huz, cf. *ibid.* 113: Steph. atte Huth (MED hīth(e)); c1300 *SLeg.*(Ld) 424/129: His fischares wenden a-fischez 'went fishing' (with original *z*, (for *th*) normalized to *z* by the editor(!), cf. a1325(c1280) *SLeg. Pass.*(Pep) 2179: Hi... wende a-fisschep (MED a-fisheth 'adv. '); c1390 *SLeg. Cross* (Ld) 168: dez (OE dēap); ?a1400 *Adv.* 18.5.16 *Gloss.* 159: hez (OE hǣp); a1400(a1325) *Cursor* 7806: haizen [Fr̄f: heypen] (OE hǣpen).

2. /ts/ (cf. #I.3.1c above).

In Old French, *z* was written for *ts* at the end of words, whence some plurals like *restemenz*. Following this, *tz* was used in English, as in *merchantz* (Mossé, p.53). In French loan-words, the flexible *z* can signify the sound *z* [ts] in final position (Morsbach, #10).

(c1300) *Havelok*(Ld) 2559: Marz (OF marz); (1314) *Chart.R.PRO* 3.275: cerchez (pl.) ~ (1461) *RParl.* 5.476a: chirchetts (pl.) (MED cherset); a1225(c1200) *Vices & V.* (1) 79/7: innocentes, (c1390) Chaucer *CT.ML* B. 815: innocentz, a1500(c1340) *Rolle Psalter*(UC 64): innocenz (pl.), c1390(a1325) *Ipotis* 71: innocens (<OF innocent; MED innocent).

3. *s* [s] (cf. #I.3.1 above).

For voiceless *s*, the French *z* is commonly used (Morsbach, #10). In the Northwest Midland dialect, the Northern dialect, and Scots, the letter *z* was equally used at the end

⁴⁹ Conversely, *d* for *p*[ð]: a1400 *Cursor* (Göt) 4539: cloding [Trin-C: cloping], a1400(a1325) *Cursor* 10600: de-gre [Göt: pe-gre].

⁵⁰ Conversely, *t* for *th*. French scribes employed *t* for *p* or *ð* since they had no interdental fricatives (see Jordan, #203 Anm.): (c1300) *Havelok*(Ld) 1: herknet; *ibid.* 18, 52, 113: wit; c1250 *Owl & N.*(Clg) 67: bigredet, 67, 131: wit, 230: hatiet.

of words with the value *s* or *z* (Mossé, #8.IV).

a1500 *Hrl. 1002 Gloss* 627: neruus: zenew, cf. a1450(1408) **Vegetius* (1) 100a: strynges i-made of *zenewes* and here / Plente of *senewes* and horshere for strenges; (1391) *Acc. Expect. Der.* in *Camd. n.s.* 52 219/17: zitronde (OF; MED citronāde); c1325(c1300) *Glo.Chron.A* 10201: iustizes, c1425 *Al es bot* 85: iusticz (OF; MED justīce); a1400 (c1300) *NHom.*(1) *Abp. & N.* 86: faz (OF; MED fāce); a1475 Russell *Bk. Nurt.* 618: douz, (1440) *PParv.* 129: dowce (OF douz, douce; MED dōuce).

The loss of /x/ before a consonant is indicated by the Anglo-Norman scribes with either the letter *s* or *z*: (1465) *Will Norwich* in *Norfolk Archaeology* 4.332: nyt (OE niht) [rime: myzt (OE miht)].

4. *h* (cf. #I.2.1 above).

(1340) *Ayenb.* 56/29: ze, cf. c1400(c1378) *PPLB*(Ld) 6.138: ze shall ete ... He shall ete (OE hē).

5. *z* represents only the letter *h*, not its sound, in the sequence *tz* (for *th*) (see #I.2.3 above).

c1400(c1378) *PPLB*(Ld) 17.237: assetz [C. 20.203: a-seth] (OF asse(t)z; MED assēth).

REFERENCES

- Berndt, Rolf. 1965. The Linguistic Situation in England from the Norman Conquest to the Loss of Normandy (1066-1204). *Philologica Pragensia* 8.145-63. Reprinted in Lass 1969, pp. 369-91.
- Bliss, A. J. 1952-53. Vowel Quantity in Middle English Borrowings from Anglo-Norman. *Archivum Linguisticum* 4.121-47, 5.22-47. Reprinted in Lass 1969, pp. 164-207.
- Brödin, G. (ed.). 1950. *Agnus Castus*, a Middle English Herbal. Essays and Studies on English Language and Literature, Upsala University.
- Brunner, Karl. 1963. *An Outline of Middle English Grammar*. Trans. Grahame Johnston. Cambridge, Mass.: Harvard University Press.
- Campbell, A. 1959. *Old English Grammar*. Oxford: Clarendon Press.
- Dickins, Bruce and R. M. Wilson (eds.). 1954. *Early Middle English Texts*. New York: W. W. Norton.
- Fisiak, Jacek. 1968. *A Short Grammar of Middle English I*. London: Oxford University Press.
- Gordon, E. V. (ed.) 1953. *Pearl*, Oxford.
- Greg, W. W. 1910. The Troubles of a Norman Scribe. *MLR* 5.282-85.
- _____. 1913. *Facsimiles of Twelve Early English Manuscripts in the Library of Trinity College, Cambridge*. Oxford: University Press.
- Johnson, Charles and Hilary Jankinson. 1915. *English Court Hand a.d. 1066 to 1500*, Part I. Oxford: Clarendon Press.

- Jordan, Richard. 1968. *Handbuch der mittenglischen Grammatik. Teil I: Lautlehre*. 2nd ed. rev. by H. Ch. Matthes. Heidelberg: Carl Winter.
- Kim, Suksan. 1971. Diacritical Functions of the Letter *ȝ* in Middle English. *Journal of English Linguistics* 5. 94-100.
- Lass, Roger (ed.). 1969. *Approaches to English Historical Linguistics (an Anthology)*. New York: Holt Rinehardt and Winston.
- Luick, Karl. 1914-40. *Historische Grammatik der englischen Sprache*. Ed. by F. Wild and H. Koziol from Luick's notes in 1964. Stuttgart: Bernhard Tauchnitz.
- Malone, Kemp. 1959. Diphthong and Glide. In: *Mélanges de linguistique et de philologie: Fernand Mossé in memoriam*. Paris. Pp. 256-66.
- McLaughlin, John C. 1963. *A Graphemic-phonemic Study of a Middle English Manuscript*. The Hague: Mouton.
- Menger, Louis Emil. 1904. *The Anglo-Norman Dialect*. New York: Columbia University Press.
- Middle English Dictionary. 1952-. Eds. Hans Kurath, Sherman Kuhn, and John Reidy. Ann Arbor, Mich.: University of Michigan Press.
- Moore, Samuel and Thomas A. Knott. 1955. *The Elements of Old English*. 10th rev. ed. by James R. Hulbert. Ann Arbor, Mich.: Wahr.
- Morsbach, Lorenz. 1896. *Mittelenglische Grammatik*. Halle: Max Niemeyer.
- Mossé, Fernand. 1952. *A Handbook of Middle English*. Trans. James Walker. Baltimore: The Johns Hopkins University Press.
- Moulton, William. 1954. The Stops and Spirants of Early Germanic. *Language* 30.1-42.
- Paues, Anna C. 1911. The Name of the Letter *ȝ*. *MLR* 6.441-54.
- Pope, M. K. 1952. *From Latin to Modern French with Especial Consideration of Anglo-Norman*. 2nd ed. Manchester: Manchester University Press.
- Roseborough, Margaret M. 1938. *An Outline of Middle English Grammar*. New York: The Macmillan Co.
- Serjeantson, Mary. 1927. The Dialects of the West Midlands in Middle English. *RES* 3.54-67, 186-203, 319-31.
- Sisam, Kenneth. 1955. *Fourteenth Century Verse and Prose*. Oxford: Clarendon Press.
- Skeat, Walter W.(ed.). 1906. *Nominale sive Verbale*. Transactions of the Philological Society, London.
- _____. (ed.). 1956. *The Lay of Havelok the Dane*. 2nd ed. rev. by K. Sisam. Oxford: University Press.
- Stockwell, Robert P. 1958. The Phonology of Old English: a Structural Sketch. *Studies in Linguistics* 13.13-24.
- Studer, Paul. 1920. *The Study of Anglo-Norman*. Inaugural lecture delivered before the University of Oxford on 6 February, 1920. Oxford: Clarendon Press.

- Sweet, Henry (ed.), 1871. *King Alfred's West Saxon Version of Gregory's Pastoral Care*. EETS OS 45 and 50. Oxford University Press. Reprinted in 1968.
- Thompson, E. M. 1893. *Handbook of Greek and Latin Palaeography*. New York.
- Tolkien, J. R. R. and E. V. Gordon (eds.). 1967. *Sir Gawain and the Green Knight*. 2nd ed. rev. by Norman Davis. Oxford: Clarendon Press.
- Trnka, B. 1959. A Phonemic Aspect of the Great Vowel Shift. *Mélanges de linguistique et de philologie: Fernand Mossé in memoriam*. Paris. Pp.440-43.
- Vising, Johan. 1923. *Anglo-Norman Language and Literature*. London: Oxford University Press.
- Wyld, H. C. 1927. *A Short History of English*. 3rd ed. London: John Murray.