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Roger Lass and Margaret Laing*
**Q is for WHAT, WHEN, WHERE?:
 The ‘q’ spellings for OE *hw*-**

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Abstract: There is a wide array of spellings attested in Middle English for initial OE *hw*- in words such as *WHEN*, *WHERE*, *WHAT*, *WHO*, *WHICH*. Those beginning with ‘q’, found mostly in the North (including Scotland) and Northeast Midlands, have long been the subject of scholarly debate. The consensus is that they represented an articulation stronger than [hw], usually assumed to be [xw]. Just a handful of scholars have suggested that the articulation could have been [kw], but there is so far little detailed argument for this position. We propose that *at least a subset* of reflexes of OE *hw*- words came *at least variably* to be pronounced with initial [kw]. We suggest that this strengthened pronunciation existed alongside [xw], and lenited [hw] and [w], as well as simple [h] with the [w] deleted. We link (as some other scholars have) the history of these spellings with that of northern lenition of original initial [kw] to [xw]/[hw]/[w]. We approach the problem from a strongly variationist perspective, presenting (in accompanying appendices) detailed information on the ‘q’ spellings accessible from LAEME and eLALME. We review all the data, from the earliest attested forms through to modern dialect surveys, including place-name evidence, and we assess previous arguments on the topic.

Keywords: OE *hw*-, ‘q’-spellings, Middle English, fortition, lenition

... if a merger is assumed to be variable rather than categorical, the puzzle of how “unmerging” takes place dissolves. What is happening is not unmerging at all, but a sizable shift in frequency and distribution of unmerged and merged variants (Milroy 2004: 50 – on Minkova 2004).

For the second type of spelling variation one might take the alternative conventions for rendering OE /hw/. These are listed... as being <wh>, <w>, and more rarely <qu>, <qw>; a fifth alternative... is <qwh>. Unlike <sh> and <sch>, these spellings, and especially those

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with <q->, very properly invite the hazarding of at least wide phonic solutions; I believe however that it may well be a mistake to work on the assumption that <q-> had the same 'phonic value' in all areas (McIntosh 1969: 213).

1 Origins and early use of 'q'

'q' in its familiar shape first appears in the ancient Roman alphabet for writing Latin. Its *figura*¹ was loosely based on Phoenician and Greek models. In all these traditions its *potestas* included at least a voiceless velar or uvular stop. In Latin 'q' in combination with 'v/u' was always used to represent [kw] as in *quod* WHAT and *equus* HORSE. (For a more detailed account see OED s.v. Q.) In post-classical times, Latin had widespread influence on all Western European written vernaculars because it was the language of the Holy Roman Empire and the Western Christian Church, and thence also the common language of education. We can assume that Western European literates would have been familiar with the *littera* 'q', whether or not it occurred in their native writing systems.

1.1 'q' in Old English

In the Old English period scribes would have been trained to write both Latin and English. They would therefore have known 'q' as a member of the Latin alphabet. It was not normally used for writing Old English. For the cluster [kw] written 'qu' in Latin, the usual native writing was 'cp'.² However, there are examples in surviving Old English texts of 'qu' appearing instead of 'cp' in

¹ Our notational system refers to the antique and medieval theory of *littera*. In the conceptual framework, *littera* is the abstract or superordinate notion of the letter. *Figurae* are the shapes of *litterae*. *Potestates* are their sound values. The notational conventions here were established by Michael Benskin (1997: 1 n. 1; 2001: 194 n. 4) and used by us in a number of works from 1998 onwards: *litterae* are enclosed in single inverted commas (when referred to independently of manuscript citation); *potestates* are represented by IPA symbols in phonetic brackets. (Where relevant, *figurae* are normally enclosed in angle brackets but this paper does not deal with letter shapes.) As additional conventions, glosses and the names of lexemes are in small capitals. Dates are given as they appear in LAEME, viz: C = century, a = first half, b = second half, a1 = first quarter, a2 = second quarter, b1 = third quarter, b2 = last quarter.

² 'p' is a remaking of the angular runic wynn. In textbooks and dictionaries of Old English, 'p' is usually changed to 'w'. In our citations from such sources we will follow their practice and when referring generally to OE *hw*- words. Otherwise we will use 'p' in both Old English and Middle English as it appears in the manuscripts.

native [kw]-initial words of Gmc³ origin. Most of these come from glosses or translations of Latin texts where the Latin text itself would be visually present. Such spellings are unsurprising leakages of one orthographic praxis into another. OED (s.v. Q), mentions the early glossaries (C8) and occasional examples in the Rushworth Gospels gloss (C10b). There are also occurrences elsewhere in Old English,⁴ but a typical example is from the Mercian Rushworth gloss (Ru¹) at Matthew 25.39:

aut quando te uidimus infirmum et in carcere et uenimus ad te
 oðþe hwonne we þe segun untrymne oðþe in **quartern** & we coman to þe
 or when saw we thee sick, or in prison, and came unto thee?

The word *quartern* PRISON would normally be spelled with initial ‘cp’ but note the Latin *quando* WHEN preceding its Latin equivalent *carcere* by just six words. Earlier examples are *quedol* and *quedole*, glossing respectively *dicam* and *dicas* in the C8 Corpus Glossary. This is a rare word in Old English, present in only two other sources as *cwedel*, *cwidol* TALKATIVE, ELOQUENT (cf. OE *cweþan* TO SPEAK).⁵

1.2 ‘q’ in Middle English

Post-conquest, French words with ‘q(u)-’ start to be borrowed into English.⁶ Gradually, and in some texts more for originally Latin/French than for native

3 In what follows we use the normally accepted abbreviations, viz: (P)Gmc = (Proto-)Germanic, IE = Indo-European.

4 A trawl of the DOE Web Corpus produces altogether only 86 tokens with ‘qu’ in native [kw] words (including names). We are grateful to Linda van Bergen for help in isolating these forms. For details of some of the Old and ‘transitional’ English examples, with manuscript designations and dates from C10–C12, see Dietz (2006: 267–268).

5 The Latin lemmas in the Corpus Glossary appear defective; it is assumed that they are for *dicacem* and *dicaces* acc sg and nom/acc pl of *dicax*, *dicacis* READY TO TALK, WITTY. Another example of possible ‘priming’ from the Latin text may be found in the Lindisfarne Gospel gloss (London, British Library, Cotton Nero D.iv, f. 189vb line 24 (Luke 20.18): *efne gequoeccað bið* glossing L. *conquassabitur* IS SEVERELY SHAKEN. We owe this example to Julia Cuesta.

6 The [w] in the [kw] cluster had already begun to be lost variably in early proto-Romance (first before ‘i’ and ‘e’) (Pope 1934: Section 192). This trend continued throughout the history of Old French with the deletion latest before ‘a’. However, as late as the Norman Conquest there must still have been variable [kw], which persisted in Anglo-French, judging from the presence of ‘qu’ spellings ‘in MSS of the thirteenth and fourteenth centuries’ (Pope Section 1180). For numbers, cf. also the *Anglo-Norman Dictionary* (AND) s.v. ‘q’ where ‘qu’ + V spellings appear (as well as ‘q’ + vowel without intervening ‘u’) in several hundred headwords, including those with following ‘e’ and ‘i’. Philip Bennett (pers. comm.) agrees that French spellings at this time are

Gmc lexis, the ‘qu’ spelling began to be used in writing English as well as in Latin and French. OED (s.v. Q) says:

By the end of the 13th cent. *qu* (with *u* frequently indicated by an abbreviation) is the usual spelling (also, although extremely rare before 1300, *qv* or *qw* [or *qp*]), and *cw* [or more common *cp*] ceases to be found (although *ku* and *kw* are found in some manuscripts of the 14th and 15th centuries).⁷

1.2.1 ‘qu-’ for OE *hw-*: evidence in LAEME and eLALME

The Linguistic Atlas of Early Middle English (LAEME) Corpus of Tagged Texts (CTT) indicates that also by the late C13 ‘qu’ (with or without abbreviation of ‘u’) and rarely ‘qw’ or ‘qp’ (henceforth termed ‘qu-’ type forms/spellings) start also to be used for reflexes of OE *hw-* words: WHAT, WHEN, WHERE, WHETHER, WHICH, WHALE, WHEEL, WHEAT, etc. These forms occur almost exclusively north and east of a line starting in Norfolk and running northwest through Cheshire. They are therefore characteristic of the North-East Midlands, parts of the North-West Midlands, the North and Scotland. The area showing this spelling is quite small in LAEME (pre-1325) – just Norfolk, N Lincs and Yorks – see Figure 1. It is much more extensive in eLALME (ca 1350–1450), as we can see from Figure 2. In LAEME, all the text languages showing this development are from just before or just after 1300, that is late in the period covered by the survey (ca 1150–1325). The restricted distribution may partly be because of the smaller number of surviving texts at this period, especially in the North; but it seems probable that it also (at least partly) reflects the chronology of the development. It is important also to note that in the LAEME CTT none of the ‘qu-’ type spellings for OE *hw-* combine with ‘h’. In the later period covered by eLALME, spellings with added ‘h’, *qwh-* and *quh-* (the latter only in Scotland) begin to appear, though never in England in such numbers as those without ‘h’.⁸

variable, and may or may not reflect pronunciation especially from later C12, when an increasing desire to relate spellings to perceived Latin sources for words is another source of variation.
7 Additions in [] by RL/ML.

8 Compare eLALME, Maps, Dot Map 44 *wh-*: *qu* + V and *qw* + V with 44 *wh-*: *qwh-* and *quh-*. For more detail compare also 44 *wh-*: *qu* + V and 44 *wh-*: *qw* + V with 44 *wh-*: *qwh-* and 44 *wh-*: *quh-* and *qvh-*. The pattern displayed by Figure 2 here (= eLALME Dot Map 44 *wh-*: *q-*, all spellings) is virtually the same as that of 44 *wh-*: *qu* + V and *qw* + V, while it is clear that that of 44 *wh-*: *qwh-* and *quh-* shows only a much smaller subset of occurrences within the same areal distribution.

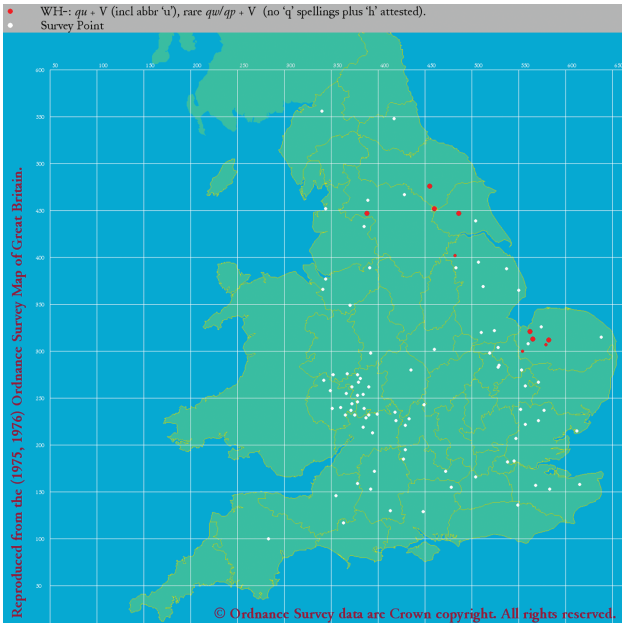


Figure 1: 'qu-' type spellings for OE *hw-* words in LAEME (red dots). C13b2-14a1.

1.3 What does 'qu-' for OE *hw-* signify?

Our response to this question was formulated in the first instance in relation to our detailed knowledge of the data in LAEME CTT and in eLALME. We present it here as a hypothesis, which we believe is supported by those two bodies of data. In subsequent sections we test this hypothesis in the light of other bodies of evidence and in relation to other hypotheses, before presenting our own detailed data and arguments in Sections 6 and 7 (and in the appendices).

1.4 Our hypothesis

In those areas shown in Figures 1 and 2, *at least a subset* of reflexes of OE *hw-* words came *at least variably*⁹ to be pronounced [kw]. Such a pronunciation (and the spellings associated with it) existed variably alongside remaining [xw],¹⁰ as

⁹ The caveat 'at least variably' will be explicated in Section 4.

¹⁰ [xw] is the earliest value of the Gmc reflexes of IE *kw, which *hw-* represents. See further Section 3.1.

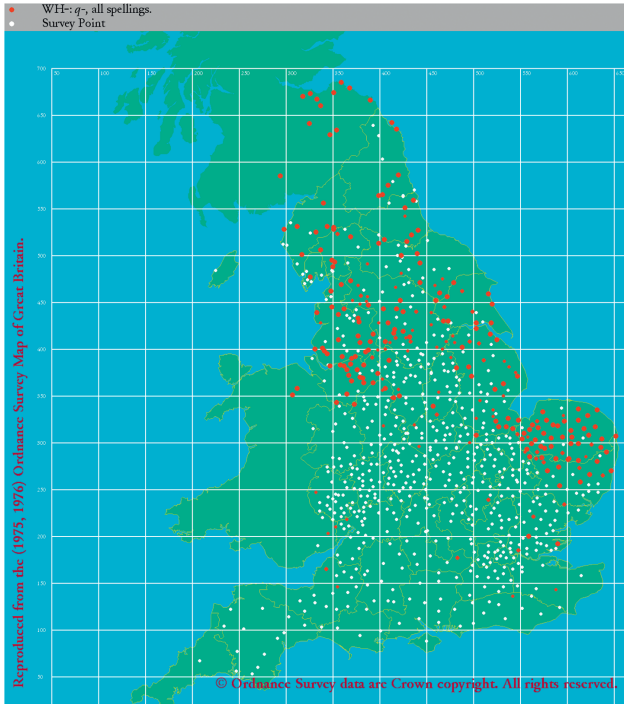


Figure 2: ‘qu-’ type spellings for OE *hw-* words in eLALME (red dots). C14b onwards (almost all post-1400).

well as lenited [hw] and [w], and simple [h] with the [w] deleted (and all the spellings associated with each of these). That is, what we find in the texts are representations of what was actually current in speech. Historical [xw] words *as a set* never merged with historical [kw] words *as a set*. Moreover, the [kw] pronunciation was not destined to prevail. The initial cluster [xw] was also variably undergoing lenition, at least to [hw] and often to [w], in the same areas, and frequently in the same idiolects, as it underwent fortition to [kw]. In those circumstances, the pronunciation as a stop and the pronunciation as a fricative or approximant were in competition.¹¹ The spellings with added ‘h’ (‘qwh-’ and in Scotland also ‘quh-’), which begin to appear a couple of generations later than the LAEME ‘qu-’ type spellings and which (in England at least) were in the minority,

¹¹ For changes competing for the same environment see Wang (1969). For descriptions of all the changes referred to in this section see CoNE, The CC, s.v. ((CXL)), ((CLHD)), ((CHD)), ((CWD)), ((ICA)), ((XWF)), ((KWL)). See also Laing and Lass (forthcoming).

presumably reflect the perception of a fricative as opposed to a stop in those variants.¹² Gradually lenition wins out against fortition, and even in areas where the cluster is preserved today, it is normally [hw]. Additionally, when the stronger [kw] variants began to undergo lenition back to [xw] (and thence to [hw] or even [w]), some original [kw] words (variably and only in some areas) fell in with them and also underwent lenition to [xw] > [hw] (> [w]) (cf. Section 3.2.5 below).¹³ Variants with initial [h] + vowel were generalised only in WHO, WHOM, WHOSE (cf. the deletion of [w] before rounded vowels in NGmc, e. g. OE *wulf* vs OIc *ulfr*).

2 The world of Q

In the course of our investigations we have read scholarly literature on the *hw*-cluster and the ‘qu-’ type spellings from the 1880s to the early 2000s, by British, American, German, Bulgarian and Scandinavian authors. In this section we attempt to determine what these other writers’ conventions mean phonetically,

12 In Scotland the picture seems to have been different. In this paper we do not attempt a full treatment of the Scots evidence, which almost certainly merits a paper of its own. We do, however, make the following preliminary observations (and see also Sections 7.3–7.4). The materials in *A Linguistic Atlas of Older Scots* (LAOS) (and cf. the very incomplete picture for Scotland presented in eLALME) show a vast preponderance of *qwh*- and *quh*- with much smaller numbers of *qw*-, even fewer *qu*- and fewer still *wh*-. (In LAOS there are also some spellings with ‘q’ followed immediately by an abbreviation mark; these contracted spellings cannot tell us much about the nature of the cluster.) An exception to the general rule is the word WHITSUN, which appears to have already begun to lose its association with the word WHITE in early Middle English south of the border. By the period of the earliest Older Scots it seems (with very few exceptions) to have been treated as a ‘w’-initial word. The entries in DOST support the evidence in LAOS with some interesting diachronic observations: e. g. s.v. *Quhite*, *adj.* (*adv.*) and *n.*²: ‘*qwit*- forms are not attested till early in the 14th c., and the first attested *qwhytte*-, *qwhit*- place-name forms are dated 1375 and 1399’. So the chronology of the spellings north of the border seems to be similar to that in England. For Older Scots, it seems likely that at least the majority ‘*qwh*-’ and ‘*quh*-’ variants represented [xw]. The ‘h’-less ‘*qw*-’ and ‘*qu*-’ type spellings might, however, suggest fortition to [kw]. Interestingly, LAOS shows a few examples of ‘*quh*-’ and ‘*qwh*-’ for original [kw] in e. g. QUIT, QUITCLAIM, QUITTANCE, QUARREL, suggesting lenition of [kw] to [xw] in these words. Alternatively, if there was alternation between [kw] and [xw] pronunciations in original OE *hw*- words, such spellings could have spilled over into original [kw] words.

13 Familiar examples of change reversal are the Old English ‘restoration of *a*’, the revival of rhoticity in non-rhotic dialects of English (e. g. New York), and nasalisation and denasalisation in French: *fin*, *finir*. A very common example of the involvement of an originally different category in such a change is unhistorical initial [h] inserted in originally vowel initial words after loss of initial [h]. This occurs in English from C8 to the present day. Hypercorrection of any kind gives ample examples of this sort of change.

and we present our own conventions and a proposed inventory for the sound types that occur in the history of OE *hw*-.

2.1 Puzzlements

We were faced from the beginning by the familiar problem of figuring out what certain symbols mean in particular traditions overall, and also in individual usages. For instance, italic *h* seems sometimes to be used for a spelling, sometimes for a sound or phoneme, and sometimes for all of these. If it is used to represent a sound value it is often undecidable whether it is supposed to be a glottal or an oral fricative, and if oral whether velar or uvular. If we know a writer is strictly using the IPA and its standard definitions, there is no problem; but perhaps more of our sources than not use other transcriptional systems, or a loose collection of symbols assumed to have traditional values.¹⁴ Even those that use the IPA (or something like it) often have different interpretations of a given symbol. For example, the usual modern interpretation (the IPA's) of [w] is a labial-velar approximant, i. e. a simultaneous double articulation, not a cluster. But some writers interpret it as a 'rounded semivowel' (e. g. Johnston 1997: 109). This makes very different predictions about possible historical trajectories from an interpretation with the velar element specified. Another writer on the history of Scots in the same volume (Jones 1997: Section 8.4.3.6) explicitly uses the IPA definition. In particular, we find quite different interpretations of what we write [h] and [w]: some traditions consider the latter consonantal and some vocalic (see the next section). This lack of agreement is one of the greatest problems in interpreting both the older literature and more modern studies.¹⁵

¹⁴ For instance, in philological work well into the mid C20 the symbol χ (normally unbracketed) is standardly used for the Gmc reflex of IE *k, as a symbol which needs no definition, presumably because any reader would be expected to know that this is the standard representation for a uvular. Disturbingly though, the only standard handbook where we have found a definition is Campbell (1959: Sections 54, 57(2)), where it is explicitly defined as 'velar'. This inevitably makes one question whether those that have not defined it intend the standard definition or something else.

¹⁵ Some descriptions come from metalanguages so different from ours that we cannot be sure of how to interpret them. For instance, Noreen (1923: Section 27.1) says that *u* in the Latin alphabet used for early West Norse, e. g. in the initial *hu*- cluster, represents "Kons. *u*", but "nicht spirans *v*, *w*". The description of *v*, *w* as 'spirants' seems to be part of an old tradition going back at least as far as Grimm (1822) (cf. Lass 2015: fn. 24), but we cannot be certain what it means. It would seem to cover what we would now call both voiced and voiceless fricatives and an approximant. His "Kons. *u*" is probably best taken as a functionally consonantal nonsyllabic vowel, more or less in the Latin tradition (see Section 2.4 below).

2.2 Strictures

The complex history of ‘qu-’ for reflexes of OE *hw-* (< Gmc **xw* < IE **kw*)¹⁶ in English displays only three phonological change types: deletion, lenition and, as we argue in this paper, fortition. So there are two main themes: cluster-simplification (deletion) and change in degree of stricture. Stricture changes are directionally reversible; clusters may remain or simplify, but the singletons resulting from cluster-simplification do not normally revert to clusters.

In this paper we use the standard IPA model, with one further distinction: that between consonants with a supralaryngeal stricture and those without. The IPA currently allows four degrees of stricture: stop, fricative, approximant (see Section 2.4 (b)) and vowel.¹⁷ Let us define lenition as movement down that series and fortition as movement up. We define lenition as increase of airflow through the vocal tract,¹⁸ whether through opening of stricture (which is our concern here), or by induction of periodic airflow (i. e. voicing), followed by opening. In the case of voiceless velars, which are going to be an essential part of our story, the lenition trajectory from [k] to zero would be:

$$k > x > h > \emptyset$$

IPA gives [x] and [h] as fricatives differing only in place of articulation; but our characterisation of [h] requires also a standard parameter for strength so that the third stage of the lenition can be weaker than the second. We take it that consonants with no supralaryngeal place of articulation have, because of their shorter occlusion, an opener degree of stricture (i. e. are weaker) than consonants with such an occlusion. This means that ‘glottal’ is both a place of

16 We are taking a slight liberty perhaps in writing the input to Gmc **xw* as IE **kw*, since it is normally written **k^w*, and interpreted as a labiovelar (a single consonant with labial coarticulation). Evidence for this is that it appears to develop differently from a bisegmental cluster, ending up as a single segment in Greek, whilst becoming (or remaining) a **kw* cluster in Sanskrit and Lithuanian. A justification for assuming a cluster, at least for Germanic, is given in Hogg (1992: Section 4.2 note 1). The line between labiovelars and labial + velar clusters is in any case a fine one: see the discussion of variation between the two in Latin in Allen (1965: 16–20). There could well have been such variation also in PIE since it is only methodological convenience that tends to see it as ‘dialect-free’.

17 See IPA 1999 and the Website of the International Phonetic Association at [www.internationalphoneticassociation.org/sites/default/files/IPA_chart_\(C\)2005.pdf](http://www.internationalphoneticassociation.org/sites/default/files/IPA_chart_(C)2005.pdf).

18 See the discussion in Lass and Laing (2013, fn. 4) and the literature cited there.

articulation and a degree of stricture. The stages in the lenition sequence above would therefore be spirantisation > debuccalisation > deletion.¹⁹

2.3 The reflexes of Gmc *xw in Old and Middle English

For the initials of OE *hw*- words we have isolated the following 57 spellings from the earliest attested Old English to ca 1500.²⁰ They have been gleaned from searches of the DOE Web Corpus, LAEME, eLALME and MED:

ch-, chu-, chp-, cu-, fw-, h-, hh-, hu-, huwh-, hVp-, hv-, hw-, hp-, ku-, q-, qh-, qhw-, qu-, qu-, quu-, qv-, qvh-, qvv-, qw-, qp-, quh-, qwh-, qw^h-, u-, uu-, v-, vh-, vu-, vVh-, vv-, w-, wch-, wh-, w^h-, whh-, whw-, wVh-, ww-, w3-, 3-, 3h-, 3hw-, 3u-, 3w-, ȝp-, þ-, þw-, þp-, p-, ph-, pu-, pv-.

Apart from the *f*- and possibly also the *þ*- forms²¹ we can characterise the remaining 53 variants using only four symbols: [k, x, h, w].

2.4 Categories and symbols

We aim to resolve the value of the ‘qu-’ spellings for OE *hw*- with this equipment; but given the variability in the literature we must define our transcription symbols. There are three phonetic/phonological²² issues: (a) the value(s) of

¹⁹ For a detailed theoretical account of this view of [h] and the four-stage lenition hierarchy, with examples from other IE subfamilies, Uralic and Dravidian see Lass (1976: Ch. 6).

²⁰ We follow the convention employed in LAEME and eLALME that in the context of Roman type, italic indicates the expansion of some kind of abbreviation sign. When citations are in italic the opposite convention applies – the abbreviation sign is in Roman.

²¹ We take *fw*- (found in *fwi* WHY 2x and *fwider* WHITHER 1x in Maidstone Museum MS A. 13) as possibly representing labial friction (cf the familiar NE Scots [f]-initials for WHEN, WHERE, WHAT etc). The form *þw*- is from London, British Library, Additional 11579. It has *þwit*, *þwyte* WHITE. It is a very short text with no other *hw*- words. Elsewhere in the text ‘þ’ represents [θ, ð] as normal. The form *þp*- is in Oxford, Bodleian Library, Tanner *169: *þpen* WHEN 2x. These too are the only spellings for this category in this writing system. The scribe uses both ‘p’ and ‘w’ for [w] and ‘þ’ for [θ, ð] in the usual way. There is no sign in either system of ‘þ/p/y/z’ substitution (Laing and Lass 2009). These spellings therefore might also represent some sort of labial friction. Trinity Homilies, Hand B has *pich* WHICH 1x; in the absence of any other such oddity in this writing system it is perhaps simply an error for *pich*.

²² In the kind of surface interpretation we adopt here, phonetic and phonological largely coincide.

what is spelled *h* in *hp*, *hw*, *hu* and *wh* digraphs; (b) the value of what is spelled *p* and later *w*; and (c) what kind of phonetic objects the digraphs themselves represent.

- (a) [h]. There is considerable disagreement about what this symbol means. Very often *h* is used and simply attributed to PGmc as the symbol for the reflexes of IE *k both then, and also for its later developments (e. g. [h], [x], [ç]). But we also find *h* as the first element of the initial clusters *hw*-, *hu*-, etc. interpreted specifically as a ‘*ch*-Laut’, i. e. [x] (see Section 3.1). Written *h* can represent many things, not only at different places and times, but even within the same language (cf. OE *hēah* HIGH where the initial is [h] and the final [x]). We use the symbol [h] only in the IPA sense, as a voiceless glottal fricative.²³ Other writers we cite may use it and [w] differently, so the reader should be aware of the mention vs use distinction: we mention what other authors say, but our use in our own argumentation is only as a voiceless fricative.
- (b) [w]. IPA [w] is defined as a voiced ‘labial-velar’ approximant, i. e. a simultaneous double stricture (with or without lip rounding) as opposed to ‘labiovelar’, which would mean a velar specifically with lip rounding as a weaker secondary articulation. The designation ‘approximant’ denotes a consonantal stricture.²⁴ Earlier designations exist for approximants. The term ‘semivowel’ was employed as early as the 1840s (OED3, s.v. *semivowel*), and is still used in modern times, along with the now obsolescent ‘frictionless continuant’, which was the older IPA designation. ‘Glide’ is also used by some linguists, but since the term approximant was invented by Peter Ladefoged (1964) it has become standard. Its definition, however, varies somewhat from writer to writer, as does the inventory of what segments can properly be given the name. The nonsyllabic vowel/

²³ Campbell (1959: Section 61) calls it “the breathing [h]”, which seems to refer to the Greek *spiritus asper*, which was surely a fricative, the first-stage lenition of IE *s: cf. L *septem* SEVEN vs Gk *ἑπτα*.

²⁴ Thus it is not the nonsyllabic vowel usually written in the older Germanic philological tradition as *μ* (e. g. Luick 1914/1940; Campbell 1959). This usage derives from the C19 Indoeuropeanists; cf. Brugmann (1886: Section 117) who uses *i*, *u* with subscript inverted breves and calls them “Vocale als Consonanten” (vowels as consonants). The tradition of graphic identity derives ultimately from Classical Latin grammatical theory, which defines prevocalic and postvocalic ‘u’ (and ‘i’) merely as functional subsets of those *litterae*. The Roman grammarians did not have special symbols (see Allen 1965: 40–42) and distinguished approximant from vowel only by position; but in fact the *littera* ‘u/v’ could represent both vocalic and consonantal strictures (Allen 41).

approximant distinction was firmly established in English historical studies by its adoption in Hogg (1992); and indeed [w] functions in Old English quite differently from a nonsyllabic vowel (Hogg 1992: Sections 2.75–2.77), and when it appears either immediately before or after a vowel symbol does not represent a mora of a diphthong.

To summarise: an approximant²⁵ is a consonant with a stricture closer than that of the closest vowel at its place of articulation, but not sufficiently close to produce audible friction.²⁶

- (c) The nature of the digraphs. The simplest interpretation of a written object is to take it first to mean what it looks as if it means. It is clear that heterorganic graphic clusters in Old English (e. g. *st*, *sn*) represent phonetically what they look like: clusters. But giving *hw*- a value seems to have created a lot of controversy, which extends to its reflexes as well. There is not much description of this in pre-modern days, but in the London standard of C18 it is described by the best of the phoneticians as a cluster, presumably [hw]. So Tucker (1773: 42):

We speak “wh” by the figure “hysteron proteron,” anglice, preposterously, a cart before the horse, as in “when, huen, whim, huim.”

The fieldworkers who transcribed the Survey of English Dialects material give it the same interpretation, but with an added detail. For *hw*- reflexes that have a voiceless element in the SED *Basic Materials* there are only two writings: [hw] and [ʰw]. We presume the second means a shorter and/or less prominent period of voicelessness preceding the [w], and in both cases the transcription is always a bisegmental cluster. For what it may be worth, the one of the two authors of this paper who has the *wine/whine* contrast (RL) has a clearly bisegmental

²⁵ Aside from prototypical [j, w] (which when their strictures are opened roughly ‘match’ [i, u]), the class would include English [ɹ], and the Scots and Dutch and occasional American retroflex rhotic [ɻ].

²⁶ This is the most generally accepted treatment, though there is some disagreement. For the best general canvassing of the major disagreements, see Trask (1996, s.v. approximant). For a radically different definition, which in effect uses the term for a nonsyllabic vowel, see Laver (1994: 148, 269), though he does note (297) that they are typically shorter than vowels. See also Ladefoged (1975), Catford (1988), Ashby and Maidment (2005) for useful and slightly variant treatments of the concept. The most radical addition to the inventory of approximants is in Ladefoged (1975: 55); he defines [h] as “simply the voiceless counterpart of the following sound”, and calls it an approximant. It will become clear that this will not work for the topic of this paper, and we will not consider it a serious proposal.

realisation, with a very short period of voiceless glottal frication followed by a voiced approximant meeting the IPA criteria.

The standard textbook story of the development of OE [xw, hw] involves a stage [ɱ] (voiceless [w]) followed in the south by revoicing to [w] and merger in Middle English with existing [w]. A typical proponent of this view is Scragg (1974: 13, 47, 58) who sees the segment that came to be written *wh-* as a “simple [or single] voiceless consonant” which “fell together [with /w/] in Southern dialects of Middle English”. This [ɱ] implies either a labiovelar or a labial-velar (i. e. a double, simultaneous articulation).²⁷ Why either of these sounds should then have revoiced is not explained. A simpler explanation (and the one that we espouse) is that the segment remained a cluster until the last stage, the [x, h] element gradually leniting to zero and thereby merging with original [w] without needing to be revoiced: [xw] > [hw] > [ʰw] > [w].²⁸ The evidence of the phoneticians above certainly suggests that this was the process in the more northerly areas where a fricative element remained in Middle English but was subsequently lost by modern times.

3 The writing *hw-*

3.1 What was Old English *hw-*?

Since the subject matter of this paper is not just ‘q’ but also the later history of all the reflexes of OE *hw-*, we must take a position on what it represented. Scholars do not agree what this digraph or its Scandinavian equivalent meant. So Hogg (1992: Section 2.60) says that OE *h-* was “the glottal fricative [h]”, i. e. an allophone of /x/, not only initially before a vowel, but also before /l, r, n, w/. The cluster by this definition was apparently [hw] from earliest times and during the whole Old English period. This appears to be the dominant opinion in the Anglophone tradition.²⁹ But Jordan (1968: Section 195) has a more nuanced

²⁷ See also Dietz (2006: chapter VI) for a very detailed account of this standard view, with copious exemplification of forms.

²⁸ Hickey (2007: 319) has both a singleton and cluster interpretation of this category in Irish English: the former at the phonetic and the latter at the phonemic level. He also says: “no variety of English which has /h/-dropping also has [ɱ], i. e. lack of /h-/ precludes the cluster /hw-/, [ɱ]”.

²⁹ There are, however, notable exceptions. As Benskin (1989: 27) observes: “Wright (1925, Section 325) was doubtless correct in stating that OE *hw-* retained [x] from Gmc., whence it has continued uninterruptedly in some northern usage until modern times; this account is given

view, part of which we will take up below. He thinks it was a *Hauchlaut*³⁰ except in Northumbrian, where it was a “spirantische χ -Laut”. This is what led, according to him, to the Middle English ‘qu-’ spellings.

The Scandinavian tradition takes a different position: for them the cognate cluster in North Germanic, usually spelled *hu*, is [xw]. For instance, Noreen (1923: Section 38) claims that in early West Norse roman script, *h* represented [h] initially before a vowel, but before consonants, as in the cluster *hu*, it stands for a “*ch-laut*”, i. e. [x]. Wessén (1968: Section 11) for Swedish assumes [x] in this cluster at least in Runsvenskan (runic Swedish) dated 800–1225, but considers the *u* to mean nonsyllabic [u].

It is quite possible – in fact necessary – to assume that both [hw] and [xw] were present in Old English at different times and in different places. Before that, there is no doubt that PGmc, with respect to this etymological category, is defined in part by Grimm’s Law, one of whose subshifts is spirantisation of voiceless stops: IE *k > PGmc *x. So there must have been at least an early stage [xw]. How long it lasted and what happened to it are the issues here. We will argue that at least as one of a set of variants, it persisted well into Middle English and that a lot happened to it, including changes going in opposite directions. It is rarely if ever possible to say that a category ‘is’ something without assuming the intra-idiolectal possibility, and the cross-dialectal certainty, of some token variability, which may or may not lead to a completed change.³¹ We labour this point because previous accounts of the significance of the ‘qu-’ spellings for OE *hw-* words do not allow for it sufficiently.

3.2 Testing the hypothesis in Section 1.4

In this section we begin to introduce the data against which our hypothesis will be tested. The data from LAEME and eLALME on which Figures 1 and 2 are based will be presented in detail in Section 6 and in Appendices 1 and 2. Here we summarise other types of relevant data.

also by Dobson (1968: Section 414). Nevertheless, Pilch (1970: 67) is unconventional in representing OE *hw-* as /xw/ not /hw/, and though he dismisses argument about the difference as a purely phonetic matter, for the later history of the language the distinction is of some importance”.

³⁰ The German term for [h], considered as an ‘aspirate’, not a true fricative.

³¹ An exception could be in a standardised variety that has succeeded in making variation illegal. We doubt if there are or have been any such languages except as fictions of the ‘ideology of the standard’.

3.2.1 ‘qu-’ type forms for OE *hw-*: evidence earlier than LAEME

There is no Old English evidence of such spellings in the DOE Web Corpus.³² We can, however, push the origins of the spelling further back than 1300 with the aid of place-name evidence, which also shows its gradual spread. While onomastic evidence must be treated with caution in relation to lexical variation, it can give useful indications of phonological developments if the etymological history of a place-name element is clear and if it retains some semantic transparency. However, we often do not know the relationship of the scribe(s) to the localities or the people supplying the names, or whether their own writing systems are local to the area. Moreover, in the case of secondary sources, such as printed editions, it is not always noticed whether single or multiple hands are involved.

There is only one relevant spelling in *Domesday Book* of 1086. This is perhaps not surprising, as neither the commissioners undertaking the survey nor the single scribe who wrote up the fair copy are likely to have been long-term indigenous locals. What is perhaps surprising is that there is *any* such evidence in *Domesday Book*. The single example is Queldale³³ (<OE *hwēol* WHEEL) for PDE Wheldale, in the West Riding of Yorkshire. This entry is on fol. 316r, while on fol. 379v the same name appears as *Weldale* (see Darby and Versey 1975: 512 column 2).³⁴

32 See note 4. The only relevant spellings that do appear are *qwo* (twice) for *who* and *quilke* (once) for *which*. All three are to be found in the same C14 copy of a Bury document (Sawyer 1968: no. 1608), Osulf and Leofrun to St. Edmund’s Abbey, London, British Library, Harley 1005. Many of the Bury copies of earlier documents at this period are apparently written by scribes originally from Norfolk (Lowe 2010). About the Harley 1005 text itself, Kathryn Lowe tells us (pers. comm.): “A majority of other forms seems to suggest a provenance for the copyist somewhere in the King’s Lynn area of Norfolk”. This places the ‘q’ spellings in this document at the same date and in the same area as the evidence in Figure 1 from the other texts localised in Norfolk in LAEME.

33 The *Domesday* place names are written in majuscule so that ‘u’ appears always as ‘v’. To avoid confusion, we follow the practice of the majority of other sources in normalising majuscule ‘v’ to lower case ‘u’ in our citations.

34 Ekwall (1960) cites another *Domesday Book* example, *Quatercote* (on fol. 242r) for PDE *Whatecote* (< OE *hwæt* WHEAT) in Warwickshire. This must be treated as a very suspect reading. Both Darby and Versey (1975: 443 column 2) and *Domesday Book Online* give the name as ... *atercote*, and examination of an image of the entry in *Open Domesday* reveals that the whole name is somewhat rubbed and the first two letters considerably blotted or otherwise obscured. While the second letter might well be a majuscule ‘v’ the first cannot be construed as a likely ‘Q’, even of the normal kind in *Domesday* in which the body of the letter sits above the midline. Otherwise for this name Ekwall lists *Whatecote*, attested in 1240, and Kristensson (1987: 186) has only *Watkote* (1327) and *Whatecote* (1332) in the later period covered by his survey (see Section 3.1.3).

Also of interest is the entry in Norfolk: *Gueruelei* (fol. 113r) beside *Huerueles* (fol. 179r), for PDE Quarles (< OE *hwerfel* CIRCLE). The digraph ‘gu’ is certainly not a native English writing. It would seem to reflect the development of initial Gmc [w] to [gw] in many Continental French dialects (Pope 1934: Section 636). This [gw] in its turn very quickly became [g]. The French dialects that were more heavily influenced by Germanic (including those that fed into Anglo-French) retained [w]. This variation gives rise to such well-known doublets in PDE as *gage*, *guarantee* vs *wage*, *warranty*, the latter two coming from some form of Anglo-French, the former from some form of Central French. What such a spelling suggests in response to an English place-name belonging to the OE *hw-* set and written down in 1086 is not clear. No Old French dialect had anything like [hw] or [xw]. If it does not simply represent [gw], the *Gu-* in *Gueruelei* could have been written either in response to a pronunciation [xw] (which would not be unexpected and which could also be reflected in the alternative spelling with *Hu-*), or in response to some form of [kw]. Given the name’s subsequent development, the latter is perhaps more likely.³⁵

3.2.2 ‘qu-’ type forms for OE *hw-*: further onomastic evidence

For C12 and C13 sources, Ekwall (1960) provides a good conspectus of the geographical patterning of ‘qu-’ type spellings for OE *hw-* (or ON *hu-*) in place-names and also (very importantly) the proportion of such spellings compared to other variants.³⁶ At this period they seem to be sporadic and in the minority in the areas where they are found, viz: Cumberland, Westmorland, Yorkshire (North Riding and West Riding), Lancashire, Norfolk and Shropshire, with single examples cited from Suffolk (*Querstede* in 1283 for PDE *Wherstead* < OE *hwe(a)rf* SHORE, EMBANKMENT) and (surprisingly) the Isle of Wight (*Quitewell* in 1212 for PDE *Witwell* < OE *hwit* WHITE). There are very few attestations from C12, the earliest

³⁵ Cf. Cambridge, Corpus Christi College 444, *Genesis and Exodus*, which has ‘g’ for [k] in *guglond* beside *kuglond* KINGLAND, REALM and Oxford, Bodleian Library, Laud Misc 108, Hand C, *Havelok*, which has *Guot* beside *Quot(h)* etc. QUOTH. Both these texts are also placed in NW Norfolk albeit much later (C14a1). Philip Bennett (pers. comm.) suggests that “If the scribe was a speaker of any form of *langue d’oïl* he could well have heard [gw] when [xw] / [kw] was pronounced”.

³⁶ A full study of the significance of these forms would ideally have to take note of the provenance of the scribes responsible for the source texts that are accessed and listed by Ekwall, if indeed this is knowable. More detail for Lancs may be found in Ekwall (1922). See also Watts (2004) based on the publications so far completed of the English Place-Name Society.

being *Quitentona* in 1138 for PDE Whittington, Shropshire (< the OE personal name *Hwīta*). Evidence for early stage diffusion is clear in that some place name elements seem more susceptible to the adoption of ‘qu-’ type spellings than others. The element *hwīt* appears as *Qui(t(e))*- also in *Quiston* 1190 Lancashire, *Quitebec* 1240–56 Cumberland, *Quiteby* 1218 Yorkshire North Riding, *Quitewell* 1205 Norfolk, *Quitewell* 1219 Norfolk, Yorkshire North Riding, and *Quitewelle* 1246 Westmorland. Another element that seems to favour early adoption of ‘qu-’ type spellings is ME and PDE *whin* (supposed to be < OE **hwin* or ON **huin*).³⁷

3.2.3 ‘qu-’ type forms for OE *hw-*: Kristensson’s evidence from the Lay Subsidy Rolls³⁸

For materials contemporary with and a bit later than LAEME, Kristensson’s series of publications, using both place-names and personal names in the Lay Subsidy Rolls (covering the period 1290–1350), provides very clear confirmation of the picture in Figure 1. Given the paucity of sources for LAEME in the North, it also gives some greater detail for the northern counties. Not surprisingly, Kristensson (2002: 259–260) shows no ‘qu-’ type spellings at all for the southern counties.³⁹ Instead, *wh-* appears throughout with *w-* as a less frequent variant, though *hw-* appears in Kent (only) as the majority spelling beside the two others.

For the west midland counties,⁴⁰ Kristensson (1987: 185–188) presents a very similar picture with *wh-* and minority *w-* attested everywhere and *qu-* only appearing in three tokens altogether. It is found once in Cheshire in *Quitteleye* (1291) for PDE Higher Whitley (< OE *hwīt*) and twice in North Shropshire (near the Cheshire border) in *Quixhal* (1327, 1332) for PDE Whixall (< OE *Hwit(t)uc*). These are both within the area showing ‘qu-’ type spellings in the slightly later period in eLALME (see Figure 2), though Whixall is at its southern edge.

³⁷ For a similar list of examples, smaller than Ekwall’s (and covering only Lancs and Yorks, NR) but conveniently drawn together, see Orton (1933: Section 304). See also Dietz (1989: 165–169) who cites further examples garnered from the rich resources of the English Place-Name Society volumes for Cheshire, Derbyshire, Lincolnshire and Cambridgeshire to illustrate the boundary of the area in which ‘qu-’ type spellings are found.

³⁸ Lay Subsidy Rolls are tax returns for individual counties. There are two types of returns, the first collected locally village by village, the second the chief taxer’s collection of these by county or other area division (cf. McIntosh 1969: 216). There are thus two layers of ‘local’ usage represented.

³⁹ Devon, Somerset, Dorset, Wiltshire, Berkshire, Hampshire, Surrey, Middlesex, Sussex, Kent.

⁴⁰ Gloucestershire, Oxfordshire, Herefordshire, Worcestershire, Warwickshire, Shropshire, Cheshire, Staffordshire, Derbyshire, Leicestershire, Nottinghamshire.

The northern counties⁴¹ (Kristensson 1967: 211–214) also show majority *wh*- and minority *w*- attested everywhere, but here there is more evidence of sporadic spellings in *qu*- and *qw*-, though these are almost always in the minority compared to rival spellings in the same county. There are attestations of ‘qu-’ type forms in Northumberland (3 tokens), Cumberland (5 tokens), Durham (10 tokens – 3 of which have *qwh*-), Westmorland (5 tokens), Lancashire (1 token), Yorkshire North Riding (2 tokens) and Yorkshire West Riding (2 tokens). Additionally, for the West Riding, Kristensson lists *Kirkeby sup Kwerff* (attested 1327) for PDE Kirby Wharfe, on the River Wharfe (< OE *hwearfan* TURN; cf. OI *hvarf* BEND).⁴² It is of interest that ‘qu-’ type spellings are absent from Lincolnshire and from Yorkshire East Riding, are rare in Lancashire and Yorkshire West Riding, and only appear in the very north of Yorkshire North Riding. Elsewhere they seem somewhat more frequent, but only in Westmorland are they in the majority compared to ‘w(h)-’ forms.

The east midland counties⁴³ (Kristensson 1995: 143–146) show a contrasting picture. Like the rest of the country, majority *wh*- and minority *w*- are attested in all counties (with no *qu*- types), but this time there is one exception – Norfolk. Here the vast majority of the spellings are in *qu*- and *qw*- (with one token showing *Qwh*-). There are only 13 *wh*-/*w*- tokens against 85 *qu*-/*qw*-. All the Lay Subsidy Roll material for Norfolk is from the second quarter of C14 (1327 and 1332). It is worth mentioning here that PDE Quarles (pronounced with initial [kw]) in Norfolk appears in Kristensson’s materials as *Qwarles* (twice – in 1331). As we have seen above in Section 3.2.1, it was recorded in *Domesday Book* in 1086 as *Huerueles* and *Gueruelei*. Ekwall (1960: 376) lists it as *Warfls* from a *Pipe Roll* entry in 1175; but as early as 1199 it is written as *Quarueles* in a *Curia Regis Roll*. Its etymology seems to be straightforwardly from OE **hwarflas* (sg *hwerfel*) CIRCLES (cf. Wharles in Lancashire and Whorlton in both Northumberland and Yorkshire North Riding) although no prehistoric stone circles have been found in the vicinity of Quarles itself. We will return to this in Section 7.

⁴¹ Northumberland, Durham, Cumberland, Westmorland, Yorkshire (all three ridings), Lancashire and (in Kristensson’s survey) also including Lincolnshire.

⁴² Whatever one thinks about the significance of ‘q’ (see Section 3.3 below) we assume that a spelling in ‘Kw’ is extremely unlikely to represent anything other than [kw]. Cf. also the name *Cuelpou*, cited in MED (quoting (1278) *EPNSoc.21* (Cum.) 278: s.v. *whelp* (n), which must surely also represent initial [kw].

⁴³ Rutland, Northamptonshire, Huntingdonshire, Cambridgeshire, Norfolk, Suffolk, Buckinghamshire, Bedfordshire, Hertfordshire, Essex.

3.2.4 Other Middle English evidence

The evidence in MED, s.v. **qu-** (cons. clust.) more or less tallies with that of LAEME, eLALME and Kristensson: “As a substitute for **wh-**, the spelling **qu-** (also **qw-**, **quh-**, etc.) represents the reflexes of OE **cw-** [sic – read **hw-** RL/ML], occasionally of ON **hv-**”. The editors then discuss the northern forms, mention a “second important concentration of **qu-**, etc., spellings.... in writings from East Anglia”, as well as sporadic examples in the rest of the East Midlands and further concentrations in the North West Midlands, notably in the works of the *Gawain* poet.

3.2.5 ‘w(h)-’ type spellings for historical [kw]

It has also been observed in the sources cited above that there are ‘wh-’ type spellings for place-names with OE *cw-* (or ON *ku-*) historically. What is not usually made clear is that these spellings start to emerge well over 100 years after the earliest attested ‘qu-’ form for OE *hw-* (in *Domesday Book*, see Section 3.2.1) and for the most part nearer to 200 years after. Although they appear later than the ‘qu-’ type spellings for OE *hw-*, these ‘w(h)-’ forms are however of great interest in relation to the history of both initial clusters. There is evidence for them not just in place-names and personal names but also in Middle English texts at least as early as C14a1 (see further Section 3.2.5.2 below).

3.2.5.1 ‘w(h)-’ type spellings for historical [kw]: onomastic evidence

The earliest ‘wh-’ form for historical [kw] appears to be for PDE *Whittonstall* (< OE *cwic-tūn-steall*) in Northumberland. Orton (1933: Section 267) has *Whittonstal*, dated 1255, and Ekwall (1960: 515) for the same name has *Whyttonstall*, dated 1271. Such spellings continue to be found sporadically in the northern counties from C14 onwards. Kristensson (1967: 214) gives a useful summary of spellings of this kind found in his materials for the northern counties. For Northumberland he cites *Whittonstall* again (once in 1316 beside two earlier (1296) attestations in *Quik-* for the same name). For Cumberland he cites *Whirig’* (3 times in 1332) for PDE *Wheyrigg* (cf OI *kvi-hryggr* FOLD-RIDGE), and the personal name *Whihird* (1332) (cf OI *kvíga* CALF). For Yorkshire West Riding he cites *Whixley* (c1346) for PDE *Whixley* (< OE *cwic*) beside spellings in *Quik-* and *Quix-* also from C14. Kristensson has no such spellings in his materials for Durham, Yorkshire North and East Ridings, Lancashire or Lincolnshire, but only expected ‘qu-’ forms (even for those places that later came to be spelled with ‘wh-’ and remain

so today). Furthermore, at a time when the ‘qu-’ type is fully established as the majority spelling for OE *hw-* in Norfolk names, Kristensson (1995) shows no ‘wh’ for historical [kw] in Norfolk.

3.2.5.2 ‘w(h)-’ type spellings for historical [kw]: evidence in LAEME

The LAEME Tag Dictionary under tags beginning with \$cw or with \$qu shows that compared to the numbers of ‘qu-’ type forms for OE *hw-*, ‘w(h)-’ type forms for historical [kw] are present only in tiny numbers. The earliest attestation is completely isolated in both time and space. In the SW Midlands, Hand A, language 2 of the Lambeth Homilies⁴⁴ (ca 1200, NW Worcestershire) shows the single form *hpakien* (< OE *cwacian* QUAKE) beside only *qu-* or *qu-*⁴⁵ for other words with historical [kw]. As far as we know this is the earliest recorded example of such a spelling. Rather less surprising examples involve forms of a single lexeme (reflexes of the past tense singular of OE *cweþan* SPEAK), in two texts placed in W Norfolk and dated in LAEME C14a1. For QUOTH, *Havelok*⁴⁶ has two examples of *hwat* and one of *wat* beside 19 spellings with ‘expected’ *qu-* (*quoth* 14x, *quath* 2x, *quod*, *quodh* and *quot* once each); the text also shows *Guot* and *couth* once each. *Genesis and Exodus*⁴⁷ has two examples of *pað* beside 30 forms in ‘expected’ *qu-* or *qu-*. This text also has a single example of the form *spinacie* (< OFr (*e*)*squinancie* QUINSY). These Norfolk forms occur in the heartland of ‘qu-’ type spellings for OE *hw-* at the same date and, in these cases, in the same texts.

3.2.5.3 ‘w(h)-’ type spellings for historical [kw]: evidence from later Middle English

Unfortunately, eLALME’s questionnaire has no items that can yield any examples. MED s.v. **qu-** (cons. clust.) give a good conspectus of the relevant material. It may reflect the comparative paucity of such forms, even in late Middle English, that the editors of MED considered them to be ‘reverse spellings’ predicated on the presence of ‘qu-’ type forms for OE *hw-*:

As a reverse spelling, **wh-** is used for **qu-**, both when the latter represents the reflexes of OE **cw-**, ON **kv-** and when it represents those of OF, L (& ML), MDu., MLG **qu-**, and OF, L **c-**; e.g., **whake** for **quaken** v., **whene** for **quene** n.(1) & **whishin** for **quishin** n., **whainte** for **queinte** adj. Such spellings appear in Northern texts: rather frequently in *Acc.R.Dur.*, *Alph.*

44 London, Lambeth Palace Library 487, fols. 21v–30v, 51v–65r.

45 For abbreviation conventions see note 20.

46 Oxford, Bodleian Library, Laud Misc 108, Hand C, fols. 204r–219va.

47 Cambridge, Corpus Christi College 444.

Tales, **Cath.Angl.*, *St.Cuth.*, the York wills, and other documents of Northumberland, Cumberland, Durham, and Yorkshire; less frequently in *MOTest.*, *PConsc.*, Rolle, *St. Bridget*, and *Thm.Med.Bk.*; sporadically in *Gaytr.LFCatech.* and a few other texts. A few of the mixed-Northern texts show an appreciable number of **wh-** spellings: (NEM & N) *Misyn*, *St.Anne(1)*; (EM & N) *SLeg.in Cmb Add & Min-U [...]*; (NWM & N) *Destr.Troy*, *Parl.3 Ages*, *Wars Alex.* From the Northeast Midlands, *Towneley Pl.* has several examples, and four other texts show sporadic instances. There are sporadic examples from the Southeast Midlands, the Northwest Midlands, and the central West Midlands. *St.Editha* from the Southwestern area has one example, **white** for **quiten** v.; Capgrave, *MKempe*, *Paston*, and *PParv.* are the only EAngl. texts containing more than sporadic examples. Among texts which are probably from the East Midlands but which are difficult to localize more narrowly, *Med.Bk.(1)*, *Higd.(2)*, **Lanfranc CP*, and **Trev.Higd.(Tbr)* contain several examples each, while eleven other texts contain an instance or two. The Lansdowne MS of Chaucer *CT*, which appears to be a SEM text copied in NWM, contains a number of examples: **whakeinge**, ppl. of **quaken** (Cl.), **whike** for **quik** adj. (Pars.), **whike-silver** (Prol.), **whikke** for **quiken** v. (SN), **iwhiked** p.ppl. (Pars.), etc.

It is clear from this that most of the evidence is from well after mid C14 and is mainly in the North. There are, however, sporadic examples elsewhere, including Norfolk and even further south.

3.3 What does ME ‘qu-’ for OE *hw-* signify? Views differing from ours

3.3.1 The consensus

There is almost universal agreement that Middle English ‘qu-’ type spellings for OE *hw-* must have represented a stronger articulation than [hw], normally given as [xw] (e. g. Dietz 2006: 267)⁴⁸ but by some writers (e. g. Laker 2002) as [χw]. We use the modern default [x] for a back fricative whose precise value is unknown. It is generally accepted that sporadic spellings in initial *chu-* (3 times) and *chp-* (once) that appear in the C10 Lindisfarne Gospels gloss for what elsewhere in the text is spelled *hu-*, must represent [xw] in that text’s Northumbrian language.⁴⁹

⁴⁸ Dietz actually uses phonemic slashes /xw-/ , /kw-/ etc., but we take it that he is referring to broad phonetic realisations.

⁴⁹ E.g. *chuæt* WHAT (twice) (DOE Web Corpus MtGl (Li) C8.1.1 [0602 (18.18)] and [0603 (18.19)]; *chuælc* WHICH (once) (DOE Web Corpus LkGl (Li) C8.1.3 [0457 (9.48)]; and *chwæm* whom (once) (DOE Web Corpus LiPraefEuseb (Skeat) C20.4 [0018 (17)]) (cf. Laker 2002: 184 fn. 3). Note also that the first example has the spelling *huæt* in the previous line, the second has *eghuelc* four words before, and the third has *hua* in the following line. We are grateful to Julia Cuesta for drawing our attention to this.

There is some difference of opinion among scholars as to whether earlier Gmc [xw] was carried into Old English and simply remained in the northern half of the country, or whether Gmc [xw] > OE [hw] and then by secondary development back to [xw] in Northumbrian (see Laker 2002: 185). The tradition of Scandinavian scholarship (e.g. Kristensson) assumes [xw] throughout (cf. Section 3.1 above), at least for the area in which the ‘qu-’ type forms emerge, before later lenition to [hw] and thence in some cases to [w]:

Spellings with <qu> and <qw> generally denote [xw], and there can be no doubt that [xw] lingered on in Nf [Norfolk]. In any case it is quite clear that [xw] lives on longer in Nf than in the rest of the area examined [i.e. East Midland counties. RL/ML]. There are 13 <wh> <w> forms dispersed evenly in Nf... All this demonstrates that [hw] occurred by the side of [xw] and that [xw] was probably on its way to developing into [hw]. (Kristensson 1995: 145).

Some evidence for loss of ‘h’ in this cluster even in Old English certainly suggests lenition to [hw] in or before the Old English period for some parts of the country. It seems that the lenition went to completion in zero at least occasionally. Minkova (2004: 17) lists both ‘h’-less spellings found in Old English for historical *hw-* words and instances of unetymological ‘h’ insertions. She also provides examples from late Old English verse of alliteration of original *hw-* words with original *w-* words. We have discussed OE *hw-* more fully in Section 3.1 but it seems clear that it represented different things in different places and at different stages within Old English. Within the Lindisfarne Gospel gloss itself there may well have been variability. There is evidence that in this text there was already some lenition and even loss of [x] in the other initial ‘h’ clusters, ‘hr’, ‘hn’ and ‘hl’: compare e.g. *lutorlice* for *hlutorlice* CLEARLY (glossing Latin *perspicue*) and the back spelling *hlifiendum* for *lifiendum* LIVING (glossing Latin *uiuis*), both on fol. 8 of the manuscript (British Library, Cotton Nero D.iv). The spellings *chu-*, *chp-* for OE *hw-* noted above may have been in response to observed lenition of initial [x] in other contexts – a sense that continuing [x] needed its own specific spelling – or it could possibly indicate variable restrengthening to [x] from a previously lenited [h].

The three scholars who have written most recently and in most detail about the reflexes of OE *hw-* are Laker (2002, 2009), Minkova (2003, 2004) and Dietz (2006). On Dietz (2006), see further Section 6.1 (e). Laker links the Middle English ‘qu-’ type spellings for OE *hw-* with the lenition of the original [kw] cluster. He propounds (2002) a substratum theory that the two clusters fell together in [χw] as a result of sound substitution by indigenous British Celts whose language (like Welsh) lacked both [hw] and [kw] but had something like [χw]. Minkova’s detailed accounts deal primarily with the evidence for the loss of the first element of the [hw] cluster and its merger with historical initial [w]. She

accepts Laker's Celtic theory, and this allows her to decouple the history of the relationship of the [kw] and [hw] clusters from her main concern (Minkova 2004: 21).

We disagree with Minkova and agree with Laker that the histories of the two clusters [kw] and [hw] are inextricably intertwined in Middle English. We do not, however, accept the Celtic substratum theory. As will be clear from Section 5.1 below, we have a principled objection to it, as well as other difficulties (see Section 5.2.3), and our account shows that there is absolutely no need to invoke it.

3.3.2 A different idea

The general agreement that 'qu-' for OE *hw-* represented something like [xw] has up to now had few dissenters other than ourselves. Kluge (1901: 991) was apparently the first to voice the opinion that these spellings implied [kw] and that historical [xw] in fact merged with [kw] although it is not entirely clear to what extent he is talking about sounds rather than spellings and he presents no argumentation.⁵⁰ He says:

nach Norden zu tritt als graphische Neuerung *wh* dafür vereinzelt auf: Prompt.-Parv. *whick*, *whaken* neben *quick*, *quaken*, Havel. *hwath* für *quath*, *quod*, Gaw. *whene* für *quene*; irriige Schreibungen, welche durch den nördl. Wandel von *hw* zu *qu* veranlasst sind.

[later in the North graphic *wh* is substituted for [*qu* (*qv* *qw*)] – Promptorium Parvulorum *whick*, *whacken* beside *quick*, *quaken*, Havelok *hwath* for *quath*, *quod*, Gawain *whene* for *quene*; these are erroneous writings, which are caused by the northern change of *hw* to *qu*.]

Laker (2002: 188–191) picks up Kluge's idea of 'the northern change of *hw* to *qu*' (on the assumption that Kluge does indeed mean that [xw] > [kw]). For the purposes of his own argument, Laker pretends to run with Kluge's idea for a time, presenting more evidence from alliteration than Kluge himself cites. He even produces a diagram (2002: 190) showing the proposed development of Gmc *kw-* and *χw-* through Proto-Old English, Old English (Northumbrian) to merger as *kw-* in Middle English, followed by unmerger in Modern English. But he soon

⁵⁰ McLaughlin (1963: 125–126), treating the works of the Gawain poet, makes a much clearer statement. He points out that there is alliteration of "etymological /xw/ with etymological /kw/ and /k/" and concludes that "the poet was familiar with both /w/ and /kw/ pronunciations of the reflex of OE /xw/ and used the one or the other depending upon which best served his stylistic purpose". This is similar to our own position; see Section 3.3.3. Stephen Laker tells us that Lutz (1991: 51) "also thinks that pronunciations of OE *hw* with full occlusion (i. e. /kw/) may possibly have occurred in late ME". We are grateful to Laker for these references.

rejects the idea in favour of his theory of Celtic substrate influence and the pronunciation in χw -.

For very different reasons, Benskin also makes the case for [xw], based on the *LALME* material and Kristensson's (1967) place-name evidence, and taking into account the lenition of original [kw]:

A deliberate choice of <q-> for the reflex of OE *hw*- would be predictable within the terms of Latin spelling if the sound in question were [xw], but hardly if it were lenis [hw] or [w]. Because <q-> in any function was still novel in vernacular renderings by the date of its first appearances for OE *hw*-, it is unlikely that back-spelling – orthographic inertia – is in question for the twelfth-century examples. Early orthographic identification of OE *hw*- with OE *cw*- is likely to reflect *apprehension of both as the same sound* [italics RL/ML]. In later writings, <q-> for OE *hw*- could perfectly well be a back-spelling, resting on a tradition of writing <qu-> et var. for vernacular [kw] which had between times lenited. By that stage, <q-> could correspond to [xw] or [hw] or [w] (cf. Kristensson (1967: 214). Benskin: (1989: 29 (7)).

We consider that the chronology (as indicated in Section 3.2.5) does not support the conclusion that the *qu*- type spellings for OE *hw*- could be back-spellings for lenited [kw].⁵¹

3.3.3 The evidence from alliteration

When dealing with sounds of initial segments, alliteration can be a valuable source of information and insight. Verse written in the alliterative tradition in Middle English has therefore been much cited in the discussions of the Middle English 'qu-' type forms for OE *hw*-. Minkova's invaluable studies (2003: 348–369, 2004) amass examples from late Old English and early Middle English to illustrate reduction of [hw] to [w] (see 2004: 17–19).

Minkova also deals with the C14 'qu-' type forms (2004: 20–21) as does Laker (2002: 188–189). While the examples cited from *Sir Gawain and the Green Knight* (SGGK) make it clear that the poet himself alliterated OE *hw*- words only on [w], it is also evident that the scribe had some variation in his own usage:

SGGK

Line 2220 And wyth **q**uettyng a**w**harf, er he **w**olde ly**3**t

⁵¹ Michael Benskin has recently assured us (pers. comm.), that in spite of the apparent implications of his observation as quoted above, he did not (even at the time of writing) intend to exclude the possibility that the *qu*- type spellings could alternatively have represented [kw].

The language of the poems contained in the manuscript (London, British Library, Cotton Nero A.x) has been localised (in eLALME) to south Cheshire near the Derbyshire border, which is at the edge of the area where ‘qu-’ forms are found for OE *hw-* at that period. It would be quite possible therefore for a local poet to have only [w] for OE *hw-* and an equally local scribe to have also a variant implied by ‘qu-’. Certainly Oakden (1930: 79) believed the spellings to be non-authorial: ‘The scribal *qu* spellings often obscure the alliteration with *w*’.

There is evidence too from some northern alliterative texts that historical [xw] and [kw] could alliterate with each other. Laker (2002: 188) presents examples (taken from Schumacher 1914: 147–148) from “northern” texts. He cites 14 lines from *The Destruction of Troy* with relevant examples, nine lines from *The Wars of Alexander*,⁵² and two lines from *Morte Arthure*.⁵³ He also cites two lines from *The Awntyrs of Arthure* (as noted by Oakden 1930: 113).⁵⁴ For illustration we reproduce here examples from each of the first two texts:

The Destruction of Troy (quoted from Laker 2002: 189)⁵⁵

Line 633 **Wh**erfore I beq**w**ethe me | to your **q**weme spouse
 Line 1928 **Q**werfore vs **q**wemes nocht | now his **q**waint speche
 Line 11509 **Wh**erfore, to **q**wheme, | & to **w**hite vs of skaithe

The Wars of Alexander (quoted from Minkova 2004: 20 – from a different edition)

Line 1679: **Q**uirris forth all in **q**uite | of **q**ualite as aungels
 Line 4640: For h[i]m was **q**uartirs of **q**wete vm**q**uile out of nombre

⁵² Minkova (2004: 20) also cites a set of examples from this text.

⁵³ Laker (2002) does not mention manuscripts and we have not seen Schumacher, but *The Destruction of Troy* is found in Glasgow, University Library, Hunterian 388 (V.2.8). The manuscript is now dated by MED as late as ca. 1540 and both hands are localised by eLALME in Lancashire. *The Wars of Alexander* is found in Oxford, Bodleian Library, Ashmole 44 dated in MED ca 1450. Its language has not been mapped in eLALME but is said to be “substantially of Durham, or possibly S Northumberland, but with odd features of apparently NW Midland origin”. It is important to remember that eLALME maps scribal dialects rather than authorial ones (which may or may not be similar to those of the scribes copying them but for which see Laker 2009: Map 6). The copying strategies of scribes (whether literatim or ‘translating’ or a mixture) potentially add a further layer of complication to any inferences made about alliteration.

⁵⁴ Both *Morte Arthure* and *The Awntyrs of Arthure* are from Lincoln Cathedral 91 (Thornton Manuscript) ca 1430–50, in the hand of Robert Thornton who wrote in somewhat variable language depending on that of his exemplars, but he himself was from Yorks, North Riding.

⁵⁵ Laker does not include line 4973, cited in MED s.v. **whit** (adj.): Frut on yt fourmyt, fairest of shap, Of mony kynd þat was **kuyt**... Þat shemert as shire as any shene stonys. It is hard to see how the alliteration can be on anything other than [k] in this example.

Laker's reaction to such variants is to assume that they must all alliterate on some one sound; he comes down in favour of [xw]. Minkova presents other examples from *The Wars of Alexander*, which make it clear that historical [xw] could alliterate in this poem not just with historical [kw] but also with historical [w] and with historical [h], whatever the scribal spellings for historical [xw] might be.

Alliteration between historical [xw] and [w]:

Line 1980 For now vs **w**antis in a **q**wirre as þe **q**uele turnes
 Line 5290 And sone þe **w**acchemen without **q**uen þai him þare sawe

Alliteration between historical [xw] and [h]:

Line 269 ze behald me sa **h**ogely **q**uareon is 3our mynd
 Line 679 Of þe **q**uilke he **h**opid in his **h**ert sum**q**uat to knawe

Minkova's (2004: 20) response to this array of spellings and alliterations is to assume dialectal mixture: "The poet's language, as reconstructed on the basis of the alliterative practice, reflects both familiarity with the southern dialects and the survival of the initial segment [as [xw]]". She also attributes similar three-way alliteration in *The Parlement of the Thre Ages*⁵⁶ to linguistic mixture: "influences from the East and South Midlands are recognizable in the way the etymological <hw-> cluster is treated in alliteration".

This puzzles us. Why should not all the necessary variant pronunciations have been available within the usage of a single speaker and writer?⁵⁷ If such

⁵⁶ Also in the hand of the Yorkshireman Robert Thornton, this time in London, British Library, Additional 31042.

⁵⁷ There is an interesting parallel in the use of variant spellings in rhyme position in the work of Scribe A of Cambridge, Trinity College B.14.39, fol. 33rb (C13b1, E Herefords). He writes a stanza that rhymes *brit*, *mist*, *vichit* and *nicst* (BRIGHT, MIGHT, WIGHT and NIGHT). Laing and Lass (2003: 261–262) write: "1. This particular quartet of rhymes shares a proximate etymology in OE *-iht*. 2. If Scribe A (as the structure suggests) intends only one possible phonetic rhyme, why does he use four different spellings? Does the presence of four distinct spellings permit the existence of more than one pronunciation for any or all of these words? In practice things may be simpler: we may be looking at only two possible spoken variant types, one with a short vowel and some fricative before the <t>, the other with a long vowel and no fricative. There could in principle have been more than one fricative realization. In this text, given its date, NIGHT could have had any combination of the realizations [nixt], [niçt] (depending on whether or not there was palatalization), [niht], or [ni:t] with compensatory lengthening after fricative loss. 3. Is Scribe A drawing attention (playfully or not) to such potential ambiguities? Is he aware of more than one possible pronunciation in his own and/or other idiolects? Is he implicitly permitting the reader to adopt his/her 'favourite' rhyming realization for a quartet such as this?"

variants are allowable in a single text for the purposes of alliteration, but ability in the creator of the text to use them as part of his spontaneous usage is denied, then it begs the question as to how reliable alliteration can be in the assessment of phonology. It must be clear from much of what we have already said that we take a strongly variationist view of the history of historical [xw]. To us these alliterative examples suggest that for historical [xw] there was a lot of variation and up to four pronunciations available, as well as a variety of spellings to reflect them.⁵⁸

Most previous accounts, to a greater or lesser extent, suppose that ‘qu-’ type spellings represent something invariable in the areas in which they are found in spite of the evidence for different spellings for the same category in the same areas and often in the same writing systems.

4 Theory and method

We will come in Section 6 to our own more detailed justification of the hypothesis proposed in Section 1.4 above. Given the debate outlined in Section 3.1 we need to establish the theory and method that underpin our own account.

4.1 The Neogrammarian paradox

Since the late C19, the mainstream way of doing historical reconstruction is by considering sound change to be linear and catastrophic. Sound change occurs with no internal variation in large reified containers called ‘languages’ or ‘dialects’. Thus formulations in handbooks and textbooks are typically of the shape

$x > y$ in A

where x and y are phonetic categories and A is the locus of change. So for instance

- (a) Indo-European *k > *x in Proto-Germanic
- (b) Old English [a:] > [ɔ:] in non-Northern Middle English dialects in C13

This would appear to reflect a procedural necessity: if (a) were not true, then the huge number of correspondences like Latin *cord-* and English *heart*, German

⁵⁸ Cf. our second epigraph by Angus McIntosh, who implies something very similar. We are carrying on a very illustrious tradition.

Herz, Icelandic *hjarta* could not be shown on any principled basis to have a common ancestor. If (b) were not true, *whole* and *hale* could not be shown to have a common ancestor (OE *hāl*), and it would be an accident that Scots has *hame* while southern English has *home* (OE *hām*) for the same meaning. If such correspondences are not to be arbitrary convergence, then history must rest on the ‘dialect-free protolanguage’; and that in turn must rest on the famous claim often called the ‘Neogrammarian Manifesto’. This appears in nearly every textbook that introduces comparative reconstruction (Osthoff and Brugmann 1878: xiii):

Aller Lautwandel, soweit er mechanisch vor sich geht, vollzieht sich nach ausnahmslosen Gesetzen, d.h. die Richtung der Lautbewegung ist bei allen Angehörigen einer Sprachgenossenschaft, außer dem Fall, daß Dialektspaltung eintritt, stets dieselbe, und alle Wörter, in denen der Lautbewegung unterworfenen Laut unter gleichen Verhältnissen erscheint, werden ohne Ausnahme von der Veränderung ergriffen.

Every sound change, so far as it proceeds mechanically, proceeds according to exceptionless laws. That is, the direction of the sound alteration is always the same for all the members of a speech community, except where a dialect split occurs, and all words in which the sound that undergoes the change appears under the same conditions are without exception affected by the change [our translation].⁵⁹

If this is indeed the way sound change takes place, we should not expect to find variation in the early (much less later) stages of a change. In fact there ought not to be ‘stages’ of a change at all. If we start from Osthoff and Brugmann’s position, the data we do find ought to be impossible. Consider the change mentioned above, Old English [ɑ:] > [ɔ:] in non-Northern Middle English dialects in C13. We happen to have reasonably long texts from the earliest stages of this change: let us look at what actually happens. Here we consider all the tokens of

⁵⁹ For further discussion see Lass (2015: Section 4.4.1). Osthoff and Brugmann, however, do not characterise this as a ‘manifesto’. They call it a *Glaubensbekenntnis* CONFESSION OF FAITH, CREED. This means it can be construed as a dogma, which it has largely become. A careful reading however shows that they leave a way out of a sort, with the word *soweit* ‘so far as’; this is ambiguous, as it could mean ‘insofar as this is necessarily the case’ or ‘to the extent that cases fit the description’. It is however rarely if ever taken the second way. It seems to us that they were being cleverer and less stiff-necked than is usually thought. They were establishing a release from the rigid construal of exceptionlessness by allowing for variation in change (which they surely knew from the work of the French and Swiss dialectologists). They also allow (by omitting mention of it) the changes to be non-catastrophic and to occur in real time. The crucial point is separating the concepts ‘correspondence’ and ‘change’. Though we think that Osthoff and Brugmann were much more subtle than they appear at first to be, we will retain the traditional caricature, and use the term ‘Neogrammarian change’ to describe that which is exceptionless and catastrophic.

the reflexes of OE *þā* THEN, WHEN and the reflexes of OE (*e*)*all-swā* (AL)SO in two of the texts in LAEME's CTT from opposite sides of the country. The first is the contribution of Hand A, pp. 1–75 (except for 5 lines on p. 74) of *Vices and Virtues* (SW Essex, C13a1); the second is from fols. 4r–48r of the C version of *Ancrene Riwle* (N Herefordshire, C13a2).⁶⁰ The forms are given in the order in which they occur in the manuscripts, so can be said to reflect real time order. We assume that 'a' represents unchanged OE [ɑ:], and 'o' is for ME [ɔ:]. The innovating forms are in bold.

Text 1: *Vices and Virtues*

Examples of reflexes of OE *þā* THEN, WHEN. Trailing hyphens indicate co-ordination with reflexes of OE *þe*:

ðā-ðā Ða- ða Ða- ða Ða Ða ða **ðo Ðo**- ða ða ða- Ða- ða-ðā **ðo- ðo Þo ðo**- ða þa ða
þa Ða Ða **Ðo ðo** Ða- **ðo**-

Now here are the reflexes of the same etymological category in OE ((*e*)*all*-)*swā* (AL)SO in Hand A's contribution, again in the order they occur, across the same range of manuscript pages (1–75) and of course intermingled with the *þā* tokens. This list does not include spellings of the reflexes of OE (*e*)*all-swā* in the sense AS, but these show a similar kind of patterning to those listed for (AL)SO. Leading or trailing hyphens indicate the SO element in combinations such as WHO-SO, WHAT-SO, WHEN-SO, SO-AS:

spa spa **spo Al-spo** spa spa- spa spa spa spa **spo** sa spa spa spa spa Spa spa spa
spa **spo** spa Sa spa spa spa spa Spa spa spa **Also spo** spa spa spa spa **spo** spa
Spa Spa Spa spa **spo spo** spa spa **-spo- al-spo Al-spo** spa spa spa spa Spa **spo**
spo Spa **alspo** spa spa Spa -se spa spa spa **spo** spa Alspa Al-spa **spo** alspa spa
spa spa spa spa Spa **spo** spa **spo** spa spa spa **spo** spa spa spa **spo** spa spa spa
spa spa Spa Al-spa -spa spa spa spa spa **so** spa spa spa **-spo** spa **al-so al-spo**
spo spo spa spa spa **spo spo so spo spo alspo** spa **al-spo** spa **also** al-spa **spo**
Spa spa **Al-spo Also** Spa Spa **-spo** alspa **spo spo spo** Spa **al-spo**

Apart from the fact that tokens for SO occur much more frequently than tokens for reflexes of THEN, WHEN < OE *þā*, this shows a change in progress affecting both lexemes but with a somewhat different patterning. There is still a good deal of

⁶⁰ LAEME text # 64, vvat.tag, London, British Library, Stowe 34, Hand A and text # 273, cleorat.tag, London, British Library, Cotton Cleopatra C.vi, hand A (main hand), the tagged sample being of the first two parts of *Ancrene Riwle*. For the sake of clarity, forms are not given with their tags, or in LAEME format, but in plain text.

variation in evidence between the historical form and the new one in both cases. Although we have not given page references in the listings, there is no clear correlation between when the occasional innovative form (or cluster of such forms) occurs for each lexeme.

Text 2: C text of *Ancrene Riwe*, fols. 1r-44r

Examples of reflexes of OE *þā* THEN, WHEN:

þa þa þa þa **þo** þa þa þa **þoa þoa þoa þoa þoa þoa þoa** þa **þoa þoa**

Examples of (AL)SO < OE ((e)all-)swā:

spa se se spa al-spa spa alspra alspra Aspra spa alspra spa **asspo** alspra alspra aspra
 spa alspra alspra spa spa se spa spa spa alsa spa aspra spa Alspra spa sa spa spa
 asspra spa spa spa spa spa se spa spa spa spa spa se spa spa se spa spa se
 se asspra spa spa spa spa spa se spa spa se se se alspra spa spa spa alspra
 spa alspra spa se spa spa se spa spa spa spa spa se spa se spa

This shows the same variation in the SW Midlands as the other text shows for the SE Midlands, but in a very different pattern. The OE *þā* reflexes are interesting because they show a fairly clear progression from use of an historical spelling (if not pronunciation) to one that reflects an innovative pronunciation, presumably [ɔ:]. The scribe seems to flirt with an ‘o’ spelling, then reverts to ‘a’ and then with one exception decides on ‘oa’ for the rest of his copy of the text. We assume that in ‘oa’ the ‘a’ functions as a diacritic for lowness, indicating something lower than [ɔ:] but nevertheless rounded. In this text the history of *swā* seems to be less adventurous or more conservative than that of *þā* – yet it is the same scribe writing a single text in real time. This clearly illustrates the saying attributed to the French dialectologist Jules Gilliéron, that *chaque mot a son histoire* [every word has its history]. In this case the sequences of forms for both lexemes show that there has to be a ‘first variant’ (*þo* and *asspo*) and there are following configurations where we cannot tell if the variation will proceed further. The one occurrence could be an error, and it makes the point, that all variation begins as ‘error’ in the sense of deviation from an earlier norm.

Nevertheless, Osthoff and Brugmann appear to have been correct: *given enough time*. And this is the critical point, which will make the rest of our argument comprehensible. Sound change takes place by cumulating variation in real time, and its course is different for each member of each etymological category in each idiolect. But there is most often eventual diffusion over a given set of idiolects which smooths things out so as to allow the reifications we call ‘languages’. It is only when there has been enough time that we get the

Neogrammarian Effect.⁶¹ The fact that the procedure generally does go to completion given enough time is why Osthoff and Brugmann's stipulation of exceptionlessness is so important.⁶²

So we view the unfolding of a change as a series of stages:

'Copying error'⁶³ (erroneous replication of a form) > token variation between 'mutation' and original > fixation of new form type by type > diffusion of new type through the lexicon > diffusion from idiolect to idiolect across the community.

This is how a completed Neogrammarian change would occur. But there is no stipulation that the process should stop at any point, or that any stage must occur; variation may continue for centuries and show no sign of fixating, diffusion may abort. We must remember the obverse of Neogrammarian regularity: just because in some 'language'-sized arena it might be proper to say that $x > y$, that does not mean that there is any time in which x and y cannot coexist. Nor does it mean that *variable* $x > y$ cannot reverse in the same lect to a *variable* process $y > x$.

4.2 The centrality of the idiolect

William Labov famously described historical linguistics as "the art of making the best use of bad data" (1994: 11; see also Milroy 2004: 49). We would rather suggest here that in some ways historical data can be better than synchronic data. It is bad of course in that (a) survival is scrappy and there are great lacunae just where we need data; (b) until late C19 the only data we had was written; (c) up till C16 we have little evidence for the structure of speech communities. Milroy (ibid.) takes a gentler position and says that historical data might better be described as 'incomplete' rather than 'bad'. We would like to go a little further here, and claim that in some ways it may allow us to obtain data about how language actually changes that is very difficult to obtain from communities of living speakers. For Middle English all we have is texts, which are not interactive

⁶¹ This view of 'regularity' and the term 'Neogrammarian Effect' appear first in Lass (1993: Section 6). There is further discussion in Lass (1997: 137–43), and in CoNE, Introduction, Section 3.2.

⁶² So the notion of exceptionless change still deserves to be called a "stupendous idea" (Hoenigswald 1992: 86). See further the detailed discussion in Lass (1997: Section 3.6).

⁶³ In the neo-Darwinian sense of any replication which is different from its input, i. e. not in relation to scribes copying manuscripts and making errors that they themselves would agree were mistakes.

(so we do lose data); but most texts are continuous and many are idiolectal, so each scribal text potentially gives us an utterance in the language of one speaker in real time,⁶⁴ which it is possible to compare with another's.

The two samples given in the previous section show that in the course of a change there are places where innovative forms cluster, and places where the older forms remain intact. This is a phenomenon we see time and again, and is clearly a property of the process of change. But it is very difficult to detect novelties occurring at unpredictable intervals except frozen in the type of distribution in which it is found in scribal texts.

5 Is there a language contact element in 'qu-' spellings for OE *hw*-?

5.1 The status of contact explanations

When can you invoke contact as a cause of change? The simple and epistemologically responsible answer is that it should never be a first hypothesis. In the absence of direct evidence, contact origin for any linguistic feature cannot be taken for granted, and should always be the last resort, even if the languages in question are physically and/or socially in contact, even in diglossia or bilingualism. This is not an empirical claim, but a protocol derived from a 'transcendental' argument from philosophy of science or general epistemology.

The argument is simply a derivative of Occam's Razor: *entia non sunt multiplicanda praeter necessitatem* [entities are not to be multiplied beyond necessity]. Well formed arguments always begin from the most parsimonious hypothesis, the one that excludes the largest number of possible states of the world. In other words, scientific argument (which we try to emulate) ideally starts with a null hypothesis and tries to find arguments to overturn it.⁶⁵ It is impermissible to start with a non-parsimonious argument if there is a parsimonious one available. The

64 Or more than one, if the manuscript in question is written by more than one scribe, and their usages differ from each other.

65 The null hypothesis is the default claim that two items in the world are not related. The basic praxis in the hard sciences as well as the softer ones like the historical sciences (cosmology, evolutionary biology, historical linguistics) is the attempt to disprove the null hypothesis, i. e. to show that there is some justification for claiming that the two items in question are indeed related. The general working assumption in all sciences and science-like subjects is that the null hypothesis is true.

justification for never taking contact as first resort in an argument for the origin of a linguistic feature goes like this:

- (a) all languages are constantly changing, whether or not they are in contact with others. Even isolates have histories;
- (b) therefore a contact argument requires more evidence than an argument from endogenous change, because something is being claimed beyond what could have happened anyhow;
- (c) therefore endogenous origin is always the null hypothesis in any argument for the origin of a linguistic feature.⁶⁶

This helps us avoid claims made on the basis of phenomena seeming ‘obvious’. Our null hypothesis is this: the use of ‘qu-’ type spellings for OE *hw-* in non-romance lexis is a solely endogenous development, involving no contact with any other language.⁶⁷

5.2 Claims that ‘qu-’ for *hw-* is a contact phenomenon

5.2.1 French

We do not dispute that the influx of writers of French (as well as Latin) in post-Conquest England, and the increasing adoption of large numbers of French lexical items into English helped the further emergence of ‘q’ as a *littera* for use in English writing. Once accepted, the adoption of ‘qu-’ type spellings as normal for historical [kw] words in native as well as in Latin and French words seems to have followed quite swiftly. As we saw from the evidence of the very sparse use of ‘q’ for native Old English (Section 1.1) its adoption *could* have come entirely from scribal familiarity with Latin without invoking French. But it does seem likely that its presence in French contributed to its spread. From the point of view of our argument, however, it does not much matter: this part of the story is *not* one of endogenous development.

As for there being any French influence on the extension of ‘qu-’ type spellings for OE *hw-*, French itself had no [hw] or [xw] clusters, so the only

⁶⁶ For more detail see the argument and worked examples in Lass (1997: ch.4) and CoNE, Introduction, Section 11.

⁶⁷ We are referring here to the massive use of ‘qu-’ for OE *hw-* observable in Middle English. Nobody of course disputes that the introduction of ‘q’ into English with the *potestas* [k] in Latin and later French words is due to orthographic multilingualism (first with Latin), any more than anyone doubts that the (at first exiguous) use of ‘q’ in native lexis in Scandinavian derives from Latin.

influence could have been orthographic encouragement. As is clear from Section 1.2 and note 6, in the context of Middle English there is no reason to suspect that a ‘qw’, ‘qp’ or ‘qu’ spelling would mean anything other than [k] plus [w] (see further Section 6).

5.2.2 Scandinavian

It is not surprising, given its presence in precisely the areas most strongly Scandinavianised, that scholars have asked whether the ‘qu-’ type spellings could have been a result of Anglo-Norse contact.⁶⁸ This possibility appears to be reinforced by the existence of early NGmc spellings of the type *kv-* for the cluster cognate to OE *hw-* (cf Section 3.2.2 above). It cannot have influenced Middle English, however, because the timing and demographics of the NGmc change to [kw]/[kv] do not match with the appearance of the ‘qu-’ type spellings in English. There was apparently no fortition in Viking Age Norse, the period at which any such influence would have occurred; so the Norse settlements of C8–C10 and the later C11 Danish hegemony of Knut’s dynasty could not have been influential.⁶⁹ Recent scholarship in any case throws doubt on the extent of survival of spoken Scandinavian even in the areas where place-name evidence would seem to indicate its prominence. Fellows-Jensen (2004: 147) points out that “many of the names can have been bestowed upon the settlements that now bear them long after the Viking Age by people who no longer spoke, or even

⁶⁸ Dietz (2006: 246, 263–4, 284), particularly does not discount the idea, although he is aware of the difficulties.

⁶⁹ The fact, however, that such a fortition did indeed take place in West Norse is important in that it gives a significant parallel for the hypothesis that it did so also in Middle English. The Scandinavian situation is this: PGmc *xw remains until quite late in NGmc, but in some areas the first element is strengthened to [k] and the second element, probably by assimilation, to [v]. This yields the spelling *kv-*. However, such spellings first appear in C14: their expansion is strongest ca 1350–1530 (Noreen 1923: Sections 13, 243). The first *kv-* spellings appear in West Norwegian and this spelling is not established in East Norwegian until ca 1400. It appears still later in North and West Iceland. There is no fortition in East Norse (Danish and Swedish) but rather loss of [h], except in the Danish of North Jutland which retains it (Brøndum-Nielsen (1932: Section 382.2). It appears that the fortition to [kv] in Scandinavian was a development separate from the Middle English fortition to [kw] (cf. Benskin (1989: 30). It is perfectly possible for two similar developments to be convergent. Convergence in the biological sense is where a similar mode of life produces similar effects on quite unrelated organisms and this sense is used in historical linguistics for independent changes in languages, whether related or unrelated, e. g. the development of initial stress in Gmc and Finno-Ugric. Our null hypothesis is that the English and Scandinavian fortitions were convergent.

understood, a Scandinavian language”. Barnes (2004: 133) writing about the evidence of surviving Scandinavian runic inscriptions says:

Most interesting, perhaps, is the indication that in [Isle of] Man Scandinavian had become extinct by 1200, or was at least on the way out. If this is so, it has strong implications for the fate of the language in most other parts of the British Isles. Man must have been a relatively compact linguistic community, and it was one in which Scandinavian seems to have been the dominant language in the tenth century. If it could not survive there more than a couple of hundred years, it is unlikely to have lasted beyond the second or third generation anywhere the Norse settlers were more thinly spread.

5.2.3 Celtic

Laker’s (2002) claim is that the two clusters represented by OE *hw-* and *cw-* fell together in [χw] as a result of a Celtic substratum (see Section 3.3.1 above). It is clear, however, that the Middle English evidence for the development of the two clusters does not occur at the right times or in the right places to support Laker’s notion of Celtic influence. That there is continued evidence of lenition of original [kw] to [hw] in some words in some northern dialects of Modern English (and sporadically elsewhere) is well known from the work of Ellis (1889), Wright (1898–1905, 1905), and the SED (see further Section 7). Laker (2002: 193) dates the beginning of his sound-substitution to early Old English, over half a millennium earlier than the earliest relevant attestations. There is no direct evidence at all in Old English of a change of [kw] to [xw] although one might of course give as a reason the lack of survival of texts from the relevant areas. It is clear that Laker believes the sound substitution still to have been active after 1066 because it affected French loan words, some of which he lists (2002: 195). He then uses data from Wright’s (1905: Section 241) survey of speakers of late C19 and early C20 as evidence that the phonotactic system of the post-Conquest northern counties “did not possess *kw-*”.

Apart from the huge leaps in dates between the evidence cited and the supposed operation of the sound change, Laker (like many of his predecessors) seems to have a Neogrammarian attitude towards the change, in spite of the fact that it seems not to have affected more than a minority of the relevant lexis, or all language users, in any of the areas or at any of the periods in which it is found.⁷⁰

⁷⁰ Laker (2002: 193, fn. 24) quotes without challenge a number of Neogrammarian statements: eg Ekwall (1922: 22): “OE *cw* and *hw* seem to have *fallen together* [our italics], *qu* being often written for *hw* and *wh* for *cw*”; Orton (1933: 131): “one is almost forced to the conclusion that the

In his later paper (2009: 181–182) Laker has to go to extraordinary lengths to explain the “(re)introduction of /kw/” to the phonological systems of the northern counties under “the influence of more southerly dialects” simply because his theory cannot allow for the cluster never having disappeared from the lexical set of original [kw] words *as a whole*.

The difficulties with the Celtic substratum theory are compounded when one considers the Middle English data with a dispassionate eye. The strongest and most wide-spread evidence of the ‘qu-’ type spellings for OE *hw-* in Middle English is in Norfolk, where there is very little evidence of the lenition of [kw] and which in any case is one of the least likely places for there to have been at the necessary period(s) any indigenous Celtic speakers.⁷¹

change [kw-] to [hw] (and later to [w] in some areas)... occurred as a normal process in all Northern ME Dialects. On this supposition, the much more numerous instances of [kw-] for ME [kw-] now current might be explained as recent sound substitutions with [kw] borrowed from the cognate RS. [Received Standard English] forms”.

⁷¹ For a very full account of recent views on the extent of Celtic cultural and linguistic influence in Britain, including a careful and clearly argued account of what we are reasonably able to claim about it, see Parsons (2011). Parsons is in part weighing Schrijver’s (2002) claims that in the so-called Lowland Division of post-Roman Britain “the man in the street spoke Latin and possibly nothing but Latin”. Parsons’ paper is fascinating and highly informative and very balanced in its conclusions (or lack of them). In particular, his summary makes clear that there is little evidence of ‘Lowland British’ culture surviving in the eastern area (including East Anglia). It is the region of “early Anglo-Saxon conquest”, which could have “snuffed out British too early for some of the innovations to appear”. He throws doubt (2002: 133 and refs.) on the one putative example in Norfolk of a post-Roman British sound change (that of assimilation of [nd] to [nn] in King’s Lynn) because it is “geographically isolated, and might be questioned”, the change being known also to have happened sporadically in Old English. As Parsons says (2011: 135) “There *could* have been an area of the south-east where Latin replaced British; but the lack of positive evidence for British survival may have more to do with the circumstances of the Anglo-Saxon conquest”. In other words, whatever was being spoken in early post-Roman Britain in Norfolk (whether Latin or Brittonic or both) it would have been very quickly completely subsumed by Old English. Attempts have been made to establish a Celtic speaking presence in various parts of Britain on the basis of genetic (ethnic haplotype) evidence. This reflects a simple but unfortunately common category error. Genes do not map onto particular languages, and the fact that a population may have a ‘Celtic’-looking genotype does not say anything about what language they spoke ever, much less at any particular time – especially in the distant past. All it takes is one generation to achieve a complete language shift, and ancient genetic evidence is of no probative value whatever as to the language spoken at any time by a group (for the view that it is or may be, see Laker 2008: 26–32). The same error is often made by archaeologists, who in this case attempt to map material culture onto ethnicity and thence onto language in some cases (see Härke 2011: 21).

6 The justification for our hypothesis

6.1 Initial reasoning

The hypothesis presented in Section 1.4 was based on a sequence of observations and deductions:

- (a) Given that in Old English historical initial [xw] is represented almost without exception with *hw-* we must assume that such a representation was found to be insufficient or inappropriate for (all of) its reflexes in the areas in which the ‘qu-’ type forms occur in Middle English.
- (b) Given the evidence in Sections 1, 1.1, 1.2 and 5.2.1 that in Latin and Middle English ‘qu’ stands historically and primarily for [kw], and that it does so, at least peripherally, also in Old English and Anglo-French, we must question whether its use is likely to have been extended in Middle English to have represented some other sound or sounds.
- (c) The simplest explanation would be that a *littera* hitherto associated entirely with a voiceless velar stop continued to be so associated, and that at least some reflexes of words with historical initial [xw] came to be pronounced instead, from C11 onwards, with initial [kw]. Even though [kw] had to a very large extent become [k] in Old French before the Conquest, the continued use of initial ‘q’ + vowel (alongside ‘k’) in Anglo-French, whether for original Latin ‘qu’ ([kw]) or for original Latin or Gmc ‘c’ ([k]) words, makes it clear that ‘q’ itself never ceased to represent anything other than [k] in any of the linguistic traditions underlying its use in Middle English.
- (d) If (in the relevant geographical areas) the pronunciation of those reflexes had *not* undergone fortition to [kw], there are two other possibilities: (i) the initial cluster had always been [xw] (at least variably) and it remained so; (ii) the initial cluster had become [hw] (at least variably) and underwent refortition to [xw]. If (i) were the case then there is no reason for the spelling to have changed from ‘hw-’, which did indeed remain elsewhere in early Middle English for [hw]. Its equivalent ‘wh-’ is also increasingly found,⁷² presumed to have been adopted to march with spellings such as ‘ch’ for [tʃ], ‘sh’ for [ʃ] and ‘th’ for [θ], with ‘h’ acting as a diacritic for fricativeness. If (ii) were the case, then why was a spelling associated with a velar *stop* chosen? A more natural choice would have been ‘3-’ – a

⁷² Dietz (2006: 277–278) provides instances of the adoption of the reversed digraph (presumably at first *ph* rather than *wh*) as early as 1025. He cites 42 tokens in 18 manuscripts from early C11a1–C12b2, by which time the usage had begun to increase in numbers.

representation strongly associated with non-initial [x] in Middle English. This would have had the correct sound association but been new in an initial cluster with ‘w’, and therefore suitable to draw attention to a newly strengthened pronunciation.⁷³

- (e) Although in the later Middle English materials, ‘h’ begins to be added to ‘qw-’ (and to ‘qu-’ in Scots), presumably as a diacritic for fricativeness, spellings with ‘qu-/qw-’ combined with ‘h’ are wholly absent from the LAEME materials. They remain in the minority in the eLALME data in England and tend to be found alongside ‘qu-’ type spellings in the texts in which they do appear (see Appendix 2). We assume that ‘qwh-’ and (in Scotland) ‘quh-’ do indeed imply [xw], whether as a (variably) continuing [xw] (beside [kw]) or to indicate a lenition back to [xw] from a previously strengthened [kw]. Dietz (2006: 267) suggests that the appearance of spellings with diacritic ‘h’ (implying [xw]) makes it possible for the ‘qu-’ type spellings without ‘h’ also to represent [xw]. We consider that the later appearance of such spellings means that they cannot plausibly be taken as providing that permissive or facilitating role. It seems more likely that the diacritic was added to an already established spelling for genuine [kw] (as a fortition of earlier [xw]) to indicate modification (back) to fricativeness.

6.2 The LAEME data in detail

Figure 1 shows the distributions of the ‘qu-’ type spellings in LAEME. Elsewhere reflexes of OE *hw-* appear in a number of other spellings. There are seven major types plus a miscellaneous group:

1. *qu-/qw-/qv-/qp-* implying [kw]. There are no ‘q’ spellings in combination with ‘h’ at this date. This category also includes *qu-*, where roman type ‘u’ denotes any kind of abbreviation for ‘u’ (including that indicated simply by a superscript vowel immediately following ‘q’).
2. *hw-*, *hp-*, *hu-* and *hv-* implying [hw] (or possibly [xw]).
3. *wh-* and *ph-* implying [hw] but with spelling altered to match ‘sh’, ‘ch’, ‘th’.

⁷³ In fact, outside the ‘qu-’ area, such spellings do occur. Note in LAEME CTT, *ʒwas* WHOSE in Cambridge, Corpus Christi College 8 (cccc8t.tag) (ca 1300, E Gloucs) and numerous *ʒwat* WHAT, *ʒwanne* WHEN, *ʒwuche* WHICH, etc. in Oxford, Bodleian Library, Laud Misc 108 Hand A (laud108at.tag) (ca 1300 W. Oxon) and similar *ʒw-* spellings but also those in *wʒ-* (e. g. *wʒile* WHILE and *wʒy* WHY) and *ʒhwilk* WHICH, in Hand B (Cambs) of the same manuscript. Cf. *ʒpo* (with insular ‘g’) beside *hpo* WHO in Oxford, Bodleian Library, Digby 4 (digpmt.tag) (C13a1, Kent). See also LAEME, Map no 28285413 WH-: *ʒw-*, *wʒ-* and rare *ʒhw-* and *ʒp-*. Cf for late Middle English eLALME, Dot Maps, Item 44: WH-: *wʒ-* and *ʒw-*.

4. *w-*, *p-* and rare *v-* and *u(u)-*, implying [w].
5. Forms showing placement uncertainty, e. g. *wVh-*, *hVp-*.⁷⁴
6. *h-* implying [h] (mostly, though not exclusively, in WHO, WHOM, WHOSE).
7. Forms with ‘z’ or ‘g’ implying [x(w)].
8. Miscellaneous, e. g. *fw-*, *hp-*, *pw-* (see Section 2.3 note 21).

Some text languages show that the word HOW (< OE *hū*) had begun to be perceived as a member of the WHAT, WHERE, WHEN etc set. See Appendix 1 for *hp-*, *w(h)-*, *p(h)-* and *q-* spellings in this word. This seems to be a non-Northern development.

There are only a very few spellings in *hp-* or *wh-* for original *w-* words (see Appendix 1). Whether these indicate back spellings or back pronunciations is unknowable.

The distribution of the major types can be seen in LAEME, Maps, Browse/Search Feature Maps, WH- set. The data on which these maps are based are summarised in Appendix 1. It can be seen from a comparison of type 4 above⁷⁵ with the combination of types 2 and 3 above⁷⁶ that [w] forms (type 4) are already present almost everywhere, whereas [xw]/[hw] forms (types 2 and 3) are in complementary distribution to the ‘qu-’ type spellings, apart from a small overlap in Norfolk and perhaps Lincolnshire where both types are found. Even at this early date there is evidence that the variability of realisations of historical *hw-* represents a real state of flux. Lenition to [w] is well advanced, but rarely invariable,⁷⁷ and the sheer number of reflexes of this cluster indicates a situation of variable change in which both fortition and lenition are going on in parallel.

6.3 The eLALME data in detail

Figure 2 shows the distributions of the ‘qu-’ type spellings in eLALME.⁷⁸ These have spread to many more counties than in LAEME. Though this is partly because

⁷⁴ E.g. in *wehn* WHEN, *wihl* WHILE, *wahm* WHOM, showing placement uncertainty of [h] relative to the vowel and in *hepðer* WHETHER, showing placement uncertainty of [w] relative to the vowel. The scribe clearly heard frication but was uncertain where it stood in relation to the vowel (see CoNE, Special Codes, ([PU])).

⁷⁵ In LAEME Map 28285411 WH-: ‘w-’ + V type, all *p-* + V and *w-* + V incl rare non-ligatured forms in *uu-*, *vu-* and *wv-* + V.

⁷⁶ In LAEME Maps 28285404 WH-: ‘hw-’ type, all *hp-*, *hw-*, *hu-* and *hv-* and 28285408 WH-: ‘wh-’ type, all *wh-* and *ph-*.

⁷⁷ It is interesting to note how many examples there are of *hw-* or *hp-* where the ‘h’ has been inserted afterwards by the same scribe. Insertions of both ‘h’ and ‘w’ are all noted in Appendix 1.

⁷⁸ See also eLALME, Dot Maps, WH- set (Item 44).

there are few surviving early Middle English texts in the North, Kristensson's more detailed onomastic evidence suggests that they did indeed spread during C14b and C15. We have not collected all the non-'q' data for eLALME, but Appendix 2 shows all the reflexes for OE *hw*- words found in those counties where the 'qu-' type spellings do occur.⁷⁹ There are six major types:⁸⁰

1. *qu-/qw-/qv-/qp-* implying [kw]. This category also includes *qu-*, where roman type denotes any kind of abbreviation for 'u' (including that indicated simply by a superscript vowel immediately following 'q'), and *q-*, which usually (though not always) indicates following superscript vowel (as opposed to some other abbreviation).
2. *qwh-* and rare *qvh-* and *qh(w)-* implying [xw].
3. Rare *hw-* implying [hw] (at this date probably not [xw]).
4. *wh-* and rare *vh-* and *whw-* implying [hw] but with spelling altered to match 'sh', 'ch', 'th'.
5. *w-* and rare *v-* implying [w].
6. *h-* implying [h] (mostly, though not exclusively, in WHO, WHOM, WHOSE).

There are also more examples of 'w(h)-' spellings (including 'qu-' type) for historical *h-* in HOW (see Appendix 2, below the main *hw-* lists). Unfortunately, this item was only collected systematically for the Northern area of survey: see eLALME, Dot Maps, Item 176 HOW: 'w(h)-' and 'q-' types, which shows that there are no such forms North or West of Norfolk in the area of systematic collection, though the Southern area sub-item 176-2 HOW* 'q-', 'w(h)-' shows a scattering across the South.

The presence of *wh-* for original *w-* words is much more frequent than in LAEME (see eLALME, Dot Maps, Item 45 WH- for *w-*: 'wh-' for historical *w- + V*, incl 'q' forms). Only six Linguistic Profiles (LPs)⁸¹ have 'q' spellings for original *w- + V*, all in the heartland of both fortition and high variability in OE *hw-* words. Two are in Norfolk: LP 4624 *qwas* WAS 1x, LP 4629 *qwettyne* WIT (KNOW) 1x, two in Lincolnshire: LP 551 *qwere* WERE 1x, LP 75 *qwat* WOT (KNOW) 1x; two in Suffolk LP 4768 *qw-* and *qwh-* LP 8320 *qw-* (items not recorded).

The most startling feature of the listings in Appendix 2 is again the huge number of different spellings for reflexes of this one category. It is also

⁷⁹ Excluding Scotland which is much more fully covered now by LAOS, cf. note 12 and Section 7.4.

⁸⁰ Forms with 'z' also appear in eLALME but not in those areas where 'qu-' type forms predominate, so they are not listed in Appendix 2.

⁸¹ An LP is the processed result of a scribe's questionnaire responses – i. e. an individual's orthographic usage.

noteworthy that in Lincs, Suffolk and especially Norfolk, nearly all LPs show a wide variety within a single orthography, suggesting fortition and lenition are going on in parallel within individual systems: e. g. LP 4621 in Norfolk has *h-*, *qu-*, *qu-*, *qw-*, *qwh-*, *qw^h-*, *w-*, *wh-*.

7 The modern evidence

Assuming our hypothesis is correct, one might expect at least some marginal survival in modern times of [kw] for historical [xw]. We have already referred to the place-name Quarles (< OE **hwarflas* CIRCLES) in Norfolk. Here the fortition certainly happened early and its effect remains today.

7.1 Survey of English Dialects (SED)

SED is a questionnaire-based investigation carried out between 1950 and 1961. It collected material in phonetic transcription, showing the major historical phonological and morphological developments in the local (mainly rural) dialects of elderly (mainly male) informants. There are 20 ‘wh-’ words in the SED questionnaire: WHAT, WHEAT, WHEEL, WHELP, WHERE, WHETSTONE, WHEY, WHICH ONE, WHINNY, WHIP, WHISKERS, WHITE, WHITLOW, WHITSUNDAY, WHITTLE, WHO, WHOM, WHOOPING COUGH, WHOSE, WHY. Not all questionnaire responses elicit a form of the headword itself. WHITTLE, for instance, can elicit responses of the ‘cut’ or ‘shave’ type. Some headwords do not have surviving OE *hw-* antecedents, but most do, and a very clear picture emerges of the geographical patterning of the reflexes of the initial cluster.

The survey results are published under four regional headings: South, West Midlands, East Midlands and North. For the first three regions, the results show almost exclusively [w], except in the WHO set, which has only \emptyset or [h].⁸² The only other exceptions to [w] are in WHITTLE, which has one [skw] form in Gloucestershire,⁸³ and in WHIP, which has one [M]⁸⁴ in Monmouthshire and two [hw] in Norfolk.

82 Except for one transcription in South with [w^u] in WHOSE, in which the superscript ‘w’ presumably means a very short approximant closure.

83 The phenomenon of [skw] onsets, whether for original [hw], [sw] or [kw] (as well as [sw] for [hw]), is not relevant to this account. It is epenthesis rather than lenition or fortition and is not tied exclusively to the *hw-* cluster (cf. early examples in LAEME, text #175 Oxford, Bodleian Library, Ashmole 360, fol. 145v, hand B, the forms *squete* SWEET and *I-squngen* SWINGED).

84 [M] in the IPA transcription of that day does not have its modern IPA meaning but indicates a voiceless [w].

The North shows a more complex picture. Westmorland, Lancashire and Yorkshire show almost exclusively [w]. But in Northumberland, Cumberland, Durham and Isle of Man there is variation between [w] and [hw], even sometimes for the same headword in the same locality, and there is considerable lexical variation too. There are also some examples of [kw] type. Locality 9 (Allendale) in Northumberland has [kw] in the headword *WHITLOW* (< OE *hwīt* *WHITE* plus a second element of unknown origin, probably *-FLOW*). The actual form attested is [kwiklɑw]. The second [k] suggests that the first element had at some point in its history shifted its semantic allegiance from *WHITE* to *QUICK*. The claim for fortition is not thereby invalidated, since it is required for the switch of allegiance to have occurred.⁸⁵ There are two locations for the Isle of Man. Very often no relevant lexis was elicited for these locations but when it was, Locality 2 (Ronague) has a [k] variant for three headwords: *WHEY*, *WHIP* and *WHITE*. They sometimes alternate with [hw] and sometimes with [w]. These variants are transcribed in SED [k'w] (where the ['] indicates "light aspiration"). This is the equivalent of [k^hw] in modern IPA.⁸⁶ *WHEY* (< OE *hwæg*, *hweg*) appears to have only a WGmc history with no Scandinavian cognates cited in OED. *WHIP* has no known Old English etymon, but its Middle English spellings suggest it was part of the *hw-* set from its earliest appearance in English. This modern distribution of [kw]/[k^hw], however exiguous, makes it clear that at one stage, a subset of OE *hw-* words did indeed strengthen to [kw].⁸⁷ It is also of interest that the [k] forms

85 See also OED3 s.v. *whitlow n.* and MED s.v. **whit-flōwe** (n.) where all the attestations have initial *wh-*. One example in OED3 has potential [k] closing the first syllable: *Whick-flaw* from Samuel Pegge's supplement to Francis Grose's *Provincial Glossary*. This form is cited by Pegge as from Derbyshire. Note also that this entry for *whitlow n.* is from the 1924 edition and has not yet been updated for OED3. For what it is worth, the etymological section states: "The supposition that the original form was *whick-flaw*, dialect variant of *quickflaw* (Skeat), is not supported by the evidence". The first element's etymology from *WHITE*, given the word's meaning as "A suppurative inflammatory sore or swelling in a finger or thumb" seems to us unequivocal.

86 Aspiration is either present or is not; there are no official symbols for degrees of aspiration. Importantly, the [h] does not indicate any kind of fricative. Stephen Laker has pointed out (pers. comm.) that the [k] forms in Man could be influenced by Manx which does not have [xw]/[hw] but does have [kw]. But the Man [kw] forms alternate with [hw] and [w] forms which suggests that the speakers had native English phonology.

87 Evidence of lenition of original [kw] words is also covered in SED. There are five original [kw] words in the questionnaire: *QUARRY*, *QUART*, *QUARTER*, *QUICK*, *QUILT*. These show only [kw] in South. In West Midlands and East Midlands also there is only [kw] with the single exception of *QUICK*. For *QUARRY*, *QUART* and *QUARTER*, the North also shows only [kw]. *QUILT* has [kw] marginally alternating with [tw] in the North. The only headword that shows extensive [hw] and [w] in the North, with some spread into West Midlands and East Midlands, is *QUICK* (cf. LAE maps Ph212 and Ph213 and for *QUEY* and *QUICK* see Laker 2009: Maps 1–4). (Cumberland, however, may have been an exception; Prevost (1905: 5 – as quoted in Benskin (1989: 28)) records that: "the older

occur roughly at the north-eastern and south-western edges of the area where the medieval ‘qu-’ type forms were found. There is only one source in eLALME for the Isle of Man, LP 50 placed in Peel. This text has only *wh-* and rare *w-* for reflexes of OE *hw-*, but its language is strongly NW Midland in character and forms part of the continuum that includes the ‘qu-’ type spellings.⁸⁸

7.2 Wright’s English dialect grammar (EDG) and English dialect dictionary (EDD)

Wright (1905 and 1898–1905) can potentially extend the picture somewhat further back in time than SED. The EDG and EDD were compiled by Joseph Wright from sources containing regional English from C19 and earlier; but they help only peripherally. Wright (1905: Section 241) has only three words showing [kw] pronunciations derived from ‘wh-’ words: *WHIFF*, *WHIMS* and *WHIG*. Laker (2002: 189–190) gives some useful caveats as to the authenticity of these, especially of the single record of *quiams* for *WHIMS*. He also quite rightly points out that none of these three words has a secure etymology or citation earlier than C16.

Wright (1898–1905) has more detail. The three words above are listed as *quiams* (Yorkshire), *quiff* (Yorkshire and Lincolnshire) with variant *quift* (West Yorkshire) and *quig* (Northumberland). Without clear etymologies going back to OE *hw-*, these forms cannot provide primary evidence of fortition, but it is clear that by the time they were recorded, the words were perceived as belonging to the ‘wh-’ set given their standard spellings and the fact that they have normal southern pronunciations in [w] and normal northern

dialect speakers use *w* or *wh* for *qu* in all cases”). This variable picture is what one would expect from our hypothesis that widespread [kw] for earlier [xw]/[hw] and its subsequent reversal triggered some lenition also in the original [kw] set, with *QUICK* largely changing allegiance to [xw]/[hw] in part of the fortition area.

88 Isle of Man, Manx Museum Library: The Scheading Roll. Parchment roll containing inquests of 1428 held at Peel and Castle Rushen, before Henry of Dyrom, Lieutenant of Man. The original unprocessed analysis of this text by Angus McIntosh has a note in his hand on the back of the first page: “I think this lang[uage] bears a very close resemblance to that of Manchester area, but I’d prefer to associate it firmly with at least one kind of English in Isle of Man itself. There are slight difficulties in placing it with real conviction anywhere in S Lancs, though S Lancs is obviously the *Urheimat* of the language, and I’d have thought *SE Lancs*”. We do not know the date of the migration of this kind of language to Isle of Man, but this observation would put the *Urheimat* in an area of dense ‘qu-’ usage (beside also ‘w(h)-’) from C14b2 onwards. For Peel cf. also Section 7.3 below.

pronunciations in [hw]. More telling, perhaps, is the form *queese* WHEEZE (labelled Scots) from OE *hwēsan*.⁸⁹

Wright's sources for EDG and EDD are very diverse, both in time (he quotes some of the medieval sources dealt with elsewhere in this paper) and in type (he gathers dialect words from other publications and deals as much in spellings as in pronunciations). Because the main focus is on unusual dialect terms for standard items, many potentially relevant words have no standard equivalents and are of uncertain origin. There is, however, another source for local pronunciations of 'wh-' and 'qu-' words in C19 and earlier that uses mostly attested Old English and Scandinavian vocabulary, with some French.

7.3 Ellis's *The existing phonology of English dialects* (EPED)

Ellis's (1889) survey provides a similar picture to SED, but his material is from up to a century earlier. He started doing this work in the 1870s and most of his informants were elderly (he was looking for "conservative peasant speech"). He collected material using diverse sources including borrowing from both Wright (personal communications) and Murray (1873 and personal communications). For many areas he trained local residents in the use of Palaeotype (his own transcription system). He asked them to record from local informants responses to word lists and sometimes "dialect tests" in the form of connected prose. Some transcriptions were furnished by clergymen and other non-vernacular speakers who knew the local dialect well.

Ellis's cwl (comparative word list) contains the following OE *hw-* items: WHAT, WHEAT, WHEN, WHERE, WHEY, WHICH, WHILE, WHINE, WHO, WHOM, WHY. Unlike SED, he records no [kw] in Northumberland. For the Isle of Man, however, he records (Ellis 1889: 363) from his word list, [kw] in Peel in WHAT, WHEAT, and WHICH. From a

⁸⁹ The entry appears thus: "QUEESE *v.* Sc. Also written *quease*. A dial. Form of 'wheeze.' 'Queesin like an auld bellows' (JAM. Suppl.)." The quotation is from the supplement to Jamieson's dictionary (1887) but the alternative spelling also offered suggests at least one other recorded example in Scots. Cf. also insular Scots *quidder* (Shetland, in the phrase *quick and quidder* SWIFTLY, QUICKLY) in which *quidder* appears to be from OE *hwīpa* BREEZE (see OED s.v. *quidder* *adv.* and the etymology s.v. *whither*, *v.* and † *whyzt*, *n.*) and *quarm* (Shetland and Orkney) EDGES OF THE EYELID, cf. ON (?OI) *hvarmr* EYELID. These could arguably be later borrowings from Scandinavian forms or show Norwegian influence in their pronunciations. Wright also lists under 'Q' in EDD a number of original [kw] words with northern (some only Shetland) *hw-*, *wh-* or *w-* realisations: QUAKER, QUARREL, QUARRY, QUEAN, QUEINT, QUEEM(LY), QUEY, QUICK, QUICKEN, QUIET, QUISHIN, QUIT, (RE)QUITE. Laker (2009: 183) presents a table of these (with some additions) showing where they were recorded.

dialect test also from Peel (Ellis 1889: 362) he records [kw] in *WHERE*. Ellis lists three informants from Peel; it is not clear whether more than one of them reported [kw]. [hw] is also recorded in Peel for *WHEAT* and *WHERE*.⁹⁰ He does not report [kw] in either of the other Isle of Man locations in his survey, Lazayre and Rushen.

For the southern counties of Scotland Ellis (following Murray 1873) reports [xw]/[hw] but no [kw]. Further north the well known [f] type also appears, but Scotland is not treated by Ellis in as much detail as England.

7.4 Modern Scots: *Linguistic Atlas of Scotland (LAS)*

LAS too reports only [xw]/[hw] in the areas where ‘qw(h)-’ and ‘qu(h)-’ types are found in LAOS (see note 12 above). [kw] forms are widespread in Shetland but only isolated examples are recorded elsewhere. One [kw] is recorded for *WHAUP*⁹¹ = *CURLEW* in St Margaret’s Hope South Ronaldsay, Orkney. Cromarty in Ross and Cromarty has [kw] in *WHAT*, *WHEAT* and *WHITE*. Given the geographical discontinuity and the possibility of continuing Norwegian influence, at least in the Northern Isles, we are not convinced that such forms are part of the survival of our Middle English fortition.

8 Summary

The hypothesis that there was variable fortition of [xw] to [kw], starting in C11 and gradually spreading over a wide area (see Figures 1 and 2), also accounts for the evidence that from C13 onwards the continued variation in this category led to gradual reversal of the fortition. It also makes sense of spellings from C13 onwards showing lenition to [xw]/[hw] in some original [kw] words in areas where the [xw] to [kw] fortition had occurred, and where partial and variable merger of the categories triggered extension of the subsequent lenition.

The modern evidence listed in Sections 7.1–7.3 has largely been ignored or discounted as doubtful. But such peripheral relicts are precisely what we would

⁹⁰ We have transliterated Ellis’s Palaeotype (kw) and (wh) forms into what appear to us to be their IPA equivalents. Ellis’s (1889: 82*) description of kw is as follows: “labialised (k) as an attempt to pronounce (k) and (u) simultaneously, usual *qu* in *quality*, *quantity*, *equality*, *question*”. For a detailed treatment with maps of Ellis’s data on *hw-*, but with a different interpretation of his palaeotype, see Maguire (2012: 97–101).

⁹¹ Word of uncertain origin, but whose spellings suggest it is a member of the *hw-* set.

expect in the last stages of lexical fading of a change. We do not believe that our case requires such extra evidence, but the fact that there is any modern material containing unambiguous [kw] in reflexes of OE *hw*- supports our original interpretation of the change in the period of its florescence. We cannot prove that the modern fortition is not a separate event, but convergence is less parsimonious than survival.

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