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New perspectives on vocalic alternation in Cornish

Albert BOCK and Benjamin BRUCH

INTRODUCTION

In Cornish linguistics, the term ‘vocalic alternation’ was introduced by WILLIAMS 1995 to describe a phenomenon in the vocalism of Middle Cornish whereby the stressed vowel in many polysyllabic words derived from stems containing the reflexes of Brythonic /i:/ and /i/ often appears in writing as <e>. Monosyllabic words formed from these stems write the vowel as <y>, <ey>, or <e> in Middle Cornish and as <e>, <ea>, or <ê> in Late Cornish sources.¹ While the surviving corpus of medieval Cornish literature² provides considerable source material for the study of vocalic alternation, there has been little agreement on the correct interpretation of this data. Discussion of the phenomenon has tended to centre on one fundamental question: was this alternation purely orthographic or did it actually represent a phonetic reality? Williams and George seem to be in agreement that vocalic alternation of <y> in monosyllables and <e> in polysyllables was mostly or wholly orthographic at the time when most of the classical Middle Cornish texts were composed. However, their explanations of what this written alternation represents – and what Middle Cornish phonetic reality it conceals

- 1 Also as <ei> and <ye> in *Gwreans an Bys* (*GB*), a text known from a manuscript dated 1611 that shows both Middle and Late Cornish features.
- 2 For the sake of convenience, we use the term ‘medieval Cornish’ to describe material from the Old, Middle, and early Modern Cornish period, up to and including William Jordan’s 1611 manuscript of *GB*. While it may seem unusual to describe a work from the early seventeenth century as ‘medieval,’ we feel the description is appropriate in this case, since in terms of form and content *GB* is a medieval mystery play that happens to be transmitted in an early modern manuscript.

– are diametrically opposed. WILLIAMS (1995: 36) treats vocalic alternation of the reflex of Old Cornish /i/ as an archaism in spelling and the result of a lag of up to five hundred years in the written representation of sound changes due to an excessively conservative orthography and a strong scribal tradition. George likewise explains the phenomenon as orthographic, but maintains that Middle Cornish had no specific scribal tradition of its own. According to his interpretation, the vowel in these words remained high, but “those authors who used <y> preferred to emphasize the quality of the vowels, and the others [who used <e>] wished to indicate their quantity” – in other words, that they were half-long rather than fully long (DUNBAR & GEORGE 1997: 108). For Williams, vocalic alternation represents a consistent, systematic use of the graphs <y> and <e> by scribes who were *not* trying to indicate their own pronunciation of the words in question; for George, vocalic alternation represents an *inconsistent, unsystematic* use of the same graphs, by scribes who *were* trying to indicate their own pronunciation. Neither Williams nor George, however, considers the resulting written alternation of <y> ~ <ey> and <e> as reflecting the real phonology of the varieties of Cornish used by different scribes in the fifteenth and sixteenth centuries.

The present authors have taken a different approach to the subject of vocalic alternation, grounded in the principle that the use of <y> and <e> in Cornish manuscripts basically reflects the phonology of the language *at, or at least within living memory of, the time the manuscripts were written*. While we acknowledge that Middle Cornish manuscripts share some orthographic practices that could be characterised as belonging to a specifically Cornish scribal tradition, we do not feel the evidence supports the idea that Middle Cornish writers had a single, stable, and conservative approach to spelling. In fact, we intend to demonstrate that Middle Cornish scribes were quite content to innovate and alter forms they found in their exemplars, and that these innovations and alterations are systematic and internally consistent enough to be attributed to differences in dialect or idiolect. Essentially, we argue that scribes tended to write <y> in places where they pronounced /i/ or /ɪ/ (or sometimes /eɪ/), <ey>/<ei> where they pronounced /eɪ/ (or sometimes /e/), and <e> in places where they pronounced /e/ or /ɛ/. This approach differs from Williams’ in that it interprets vocalic alternation as a phonetic reality rather than a spelling rule, and differs from George’s in that it interprets the choice of graph as being determined consistently on the basis of vowel quality (high vs. mid) rather than quantity (long vs. half-long).

In a previous article, we applied this principle to an analysis of vocalic alternation in diphthongs, and proposed that the observable alternation in the corpus

relates to differences in nucleus length among other factors (BOCK & BRUCH 2010). In the present study we will examine the nature and extent of vocalic alternation in monophthongs, and will explore various factors that may have contributed to the phenomenon, with particular emphasis on vowel length, idiolectal or dialectal variation, and *i*-affection. We will also try to shed more light on the dating and nature of the lowering of Old Cornish /i/, which in our opinion is fundamental to understanding vocalic alternation and the historical phonology of Cornish from the twelfth century to the eighteenth.

WILLIAMS' THEORY OF VOCALIC ALTERNATION

WILLIAMS discusses vocalic alternation at length in *Cornish Today* (1995, 2006CT) and *Towards Authentic Cornish* (2006TAC), and it forms a cornerstone of his analysis of Middle Cornish phonology. While he is consistent in describing the effects of this alternation – a tendency for certain roots to be written with <y> in monosyllabic forms and with <e> in polysyllabic forms – his explanation of the causes and implications of this written alternation has changed somewhat over the years, as has his dating of the relevant sound changes. In the first edition of *Cornish Today*, Williams explained vocalic alternation in etyma containing the reflex of OC /i/ as one of the consequences of what he terms the prosodic shift, a sound change whereby all vowels in Cornish were shortened by one mora due to interference from English phonology after a number of English speakers in eastern Cornwall become bilingual Cornish speakers in the period following the Norman Conquest (WILLIAMS 1995: 96).³ Before the prosodic shift, vowel length would have been allophonic and determined by the position of the stress accent and the structure of the syllable containing the vowel:⁴

- 3 WILLIAMS' contention that a large number of English speakers became Cornish-speaking as part of "a Celtic resurgence in Cornwall after the Norman Conquest" (2006CT: 99, see also 81–96) needs to be examined more closely by scholars familiar with the history of the region in the twelfth and thirteenth centuries; it certainly does not represent the standard view of the history of the Cornish language, and at least some of the arguments Williams presents in support of this claim do not withstand close scrutiny. For discussion of WILLIAMS' assertion that "if we look at our surviving Cornish literature we can see that it is based on French and Breton models and owes little to Middle English" (2006CT: 81), see section 4 below.
- 4 Essentially, the system described by JACKSON 1953: 338–344.

1. Vowels in unstressed syllables were short (one mora).
2. Stressed vowels followed by two or more consonants or by a long (fortis or geminate) consonant were usually short (one mora).
3. Other stressed vowels (i.e. vowels followed by one consonant or in hiatus) in polysyllabic words were half-long (two morae).
4. Other stressed vowels in monosyllabic words were long (three morae).
5. There is some evidence that vowels were also realised as long or half-long before a small number of consonant clusters, due perhaps in some cases to interference from English loanwords. WILLIAMS suggests that this was the case in monosyllables ending in *-st*, *-sk*, citing LC spellings like *gêst* ‘bitch’ and *pêsk* ‘fish’ from Lhuyd, where the vowel is marked as long (2006CT: 4); GEORGE adds the cluster *-sp* to this list (2009GM: 29).⁵ The 3pl. pr. ind. form of the verb ‘be’ *y mons* (stressed on the second syllable) is often written with a diphthong as *y mowns* in texts from the *Tregear Homilies* (*TH*, ca. 1555) onwards, which suggests that vowels could be realised as long in monosyllables before the cluster *-ns* as well, especially where they were the result of contraction.⁶

After the prosodic shift, according to WILLIAMS (1995: 17–18), half-long vowels were reduced to one mora and became short, such that in post-prosodic-shift Cornish long vowels could only occur in monosyllables or in a small number of compound words that had irregular stress on the final syllable. Among other phonological consequences of the prosodic shift, Williams claims that:

1. “All long (or geminate) consonants were reduced to short (or single)” consonants (WILLIAMS 2006TAC: 42; 1995: 58–59; 2006CT: 7).
2. “[Vowels in] unstressed syllables reduced in intensity and tended to become the neutral vowel schwa [ə].” (WILLIAMS 2006TAC: 171; 1995: 20; 2006CT: 7–8).
3. Early Middle Cornish had featured vocalic alternation between the reflexes of British /t/ in mono- and polysyllables caused by the accent shift which

5 This is based on the recommended pronunciation in the latest edition of George’s dictionary of Revived Cornish, but likely reflects his interpretation of a phonological rule that would have been operative during the Middle Cornish period.

6 Similarly, the 3pl. pr. subj. of *bos* ‘be’ appears occasionally as *fowns* (*TH* 8r.18, 17v.18, *GB* 1001), the 3pl. pr. ind. of *dos* ‘come’ as *towns* (*TH* 25r.25, *GB* 928), and the 3pl. pr. ind. of *gul* ‘do’ as *rownns* (*BK* 1511, 3092, *TH* 17v.19).

WILLIAMS says was vigorous in “the earliest stratum of Middle Cornish” (1995: 52). Due to shortening and untensing of vowels by the prosodic shift, early MC /i/ ~ /e/ would have been levelled to [e:] ~ [ɛ] in speech but preserved in writing as an alternation between <y, ey, i> ~ <e> (WILLIAMS 1995: 36).

4. Stressed, formerly half-long vowels in polysyllables were untensed as a result of being shortened, which led to vocalic alternation in stems containing the reflex of British /i/, paralleling the lowering of [ɪ:] to [e:]: “After the prosodic shift *tryg* [‘dwells’] would have been /tri:g/ but *tryga* (< *tryge*) [‘dwell (VN)’] /trigə/. Similarly *bys* [‘world’] would have become /be:z/ while *myn* [‘wishes, wants’] would have remained /mɪn/. The result would have been that /ɪ:/ disappeared and /i/ became the short equivalent of /i:/. Or to put it another way: after the prosodic shift the opposition long-short in /i:/ – /i/ was simultaneously one of tenseness-laxness.” (WILLIAMS 1995: 32)

Points (3) and (4) above relate directly to vocalic alternation. According to Williams’ explanation in the first edition of *Cornish Today*, therefore, the written vocalic alternation of <y> in monosyllables and <e> in polysyllables comprises two separate phenomena, one effectively caused by the prosodic shift and the other effectively cancelled by it. According to this view, Middle Cornish in the fourteenth, fifteenth, and sixteenth centuries would have had:

- <y, ey, e> [e:] in monosyllables vs. <e> [ɛ] in polysyllables for the reflex of older /i/ (WILLIAMS 1995: 38) and
- <y> [i:] in monosyllables vs. <e, y> [ɛ] ~ [ɪ] in polysyllables for the reflex of older /i/ (WILLIAMS 1995: 31–32)

In the first edition of *Cornish Today*, Williams dated the prosodic shift to a point before “the late thirteenth or early fourteenth century” (1995CT: 17); in *Towards Authentic Cornish* he sets the date even earlier, in the twelfth (2006TAC: 29). Here, Williams goes into more detail and likens vocalic alternation of /i/ to the alternation of [i̠] and [ə] found in many Welsh cognates of the roots affected in Middle Cornish, suggesting that it is a result of the accent

7 LC attestations containing <dn> (the pre-occluded reflex of [nn]) would seem to recommend /mɪN/ or /mɪnn/ as a more suitable representation of MC *myn* ‘wants’.

shift from the final to the penultimate syllable, a transition that JACKSON dates to the eleventh century (1953: 699), although WILLIAMS speculates that “it is probably much older than that” (2006CT: 3). In the third edition of *Cornish Today*, Williams’ exposition of vocalic alternation implies that it may have arisen as a parallel development in all three of the Brythonic languages. Unstressed high front vowels in penultimate syllables were reduced to schwa in Old Cornish and were eventually restored to full vowel status as /e/ when the accent then shifted to the penultima.⁸ In Breton, all traces of such a development would have been cancelled out very early by the lowering of /i/ to /e/ (WILLIAMS 2006CT: 28; see also 2006TAC: 96). This explanation suffers from a major defect, however: it fails to account for the distribution of <i>/<y> and <e> in many of the earliest Cornish texts, including the twelfth-century *Vocabularium Cornicum* (VC), the fourteenth-century *Charter Endorsement* (CE), or the plays *Passio Christi* (PC) and *Resurrexio Domini* (RD), which are attested in a manuscript from the fifteenth century. We would expect vocalic alternation as described by Williams to be most strongly apparent in the oldest extant texts, but this is not in fact the case, which casts doubt on the likelihood of point (3).

A pivotal point in Williams’ theory – and a prerequisite for point (4) – is his description of the prosodic shift as a process in which all vowels were reduced by one mora. This view necessitates the loss of heavy diphthongs, which are by necessity trimoraic, in Cornish phonology. In fact WILLIAMS states that:

“The shortening of half-long vowels meant that after the shift no Cornish diphthong had anything other than a short nucleus. The resulting nuclei were both less tense and less high than before the new prosodic system arose.” (2006CT: 35; 1995: 42)

As is discussed in BOCK & BRUCH 2010, however, Edward Lhuyd’s transcriptions show that heavy diphthongs still existed as late as 1700 and that they are found where one would expect to find them had Williams’ prosodic shift never taken place: in open stressed syllables. Moreover, diphthongs in the extant corpus exhibit vocalic alternation of <yw> and <ew> just like the monophthongs <y> and <e> do. This phenomenon cannot therefore be the result of a general shortening of vowels, unless one accepts WILLIAMS’ assertion that “by the

8 SCHRIJVER entertains a similar speculation (1995: 168): “One may wonder whether PBr. short **ɪ* in pretonic syllables was similarly affected in Co. and B, as it was in W. However, there is hardly any hope of checking this hypothesis. If **ɪ* was reduced, we would expect a reflex *e* in B and <*e*, *y*> /*i*/ in Co. (like reduced **ɪ* > B *e*, Co. <*e*, *y*> /*i*/). These are also the regular reflexes of PBr. unreduced **ɪ* > LPBr. **ɪ*.”

Late Cornish period, vowels in stressed monosyllables had again lengthened” (2006CT: 160; 101). In fact, there is no direct evidence that diphthongs had shortened at all in open monosyllables (BOCK & BRUCH 2010). It seems far more likely that diphthongs in open syllables were interpreted as V +/j/ and V +/w/ respectively, with the semivowel as the coda of the syllable and not as part of its nucleus. The result was treated differently from ‘true’ diphthongs in closed syllables, which would explain why monophthongisation of Old Cornish /oi/ > [o:] only happened in the latter. The semivowels /j/ and /w/ were apparently treated as single lenis consonants and vowels preceding them were lengthened. Speakers of Middle Cornish would have analysed *moy* ‘more’ as /moj/ and pronounced it [mo:j] or [mɔ:j]. A closed syllable like *coys* ‘wood’ would have been analysed as /kois/ or /koiz/ and pronounced [koiz] or [koiz] in early Middle Cornish, with later monophthongisation of the diphthong to [ko:z].

Given that the explanations offered by Williams under points (3) and (4) above are not beyond question, it is tempting to try and identify other factors as the cause of vocalic alternation of the reflex of older [ɪ:] and [ɪ]. We suspect a combination of vowel lowering and other factors including secondary *i*-affection. As is shown by attestations in *VC* – a twelfth-century text which may predate Williams’ prosodic shift⁹ – and comparison with Breton, the lowering of /ɪ/ to /e/ was not necessarily caused by changes to its quantity. Scribal, dialectal, and idiolectal variation all appear to have played a role.

VOCALIC ALTERNATION IN CORNISH TEXTS

Vocalic alternation as discussed by Williams is a complex phenomenon, involving the reflexes of both OC /i/ and OC /ɪ/, and with consequences for short,

9 Depending, of course, on which of Williams’ dates for the prosodic shift we follow. In the third edition of *Cornish Today*, WILLIAMS suggests that *VC* “may date from the middle of the twelfth century” even though “the usually accepted date [...] is c. 1100” (2006CT: 102). It is possible that his later date for *VC* and much earlier date for the prosodic shift in the third edition of *Cornish Today* reflect an attempt to accommodate the evidence of vowel lowering in this early text within his theory of vocalic alternation. Even if Williams is correct in this dating, however, we would need to interpret the <e>-type spellings in *VC* as reflecting a sound change that was no more than a few generations old at the time our manuscript was copied, an interpretation which does not sit well with Williams’ idea that Cornish had a conservative scribal tradition that tended to preserve archaic spellings over a period of centuries.

half-long, and long vowels in polysyllabic words. Since the principal examples of vocalic alternation cited in *Cornish Today* and *Towards Authentic Cornish* relate to the reflexes of long and half-long OC /i/ in words like *byth* ‘will be (3sg.)’ ~ *bethaf* ‘will be (1sg.)’ and *gwyth* ‘trees’ ~ *gwethen* ‘tree’, we have chosen to focus on the development of this OC phoneme in the present study. The table below presents an overview of the treatment of the reflex of long and half-long OC /i/ in monosyllables and polysyllables in Cornish texts dating from the twelfth century to the eighteenth. Since written vocalic alternation must represent a phonological rule, an orthographic rule, or some combination of the two, we have chosen to analyse the corpus in terms of scribes rather than texts. Thus data for the *Ordinalia* is divided into two parts, since one scribe is responsible for most of *Origo Mundi* (*OM*) and another for a few lines at the end of *OM* as well as *PC* and *RD*. Likewise, *Beunans Meriasek* is divided into *BM1* (lines 272–4568) and *BM2* (lines 1–271), since the main body of the text dates to 1504 while the first ten pages were recopied with some changes in spelling ca. 1550–1575. The texts have been arranged in a rough chronological order according to the date of the manuscripts, and texts which show significant evidence of vocalic alternation are marked in **bold**. Dates given for texts elsewhere in this article refer to the date of the earliest extant manuscript, unless otherwise specified.

Table 1: Vocalic alternation in the reflexes of long and half-long OC /i/ in Cornish texts

Text ¹⁰	Long OC [i:] in mono- syllables	Half-long OC [ɪ] in polysyllables	Date of earliest surviving MS. ¹¹	Possible date of composition ¹²
<i>VC</i>	<i>, <e>	<i>, <e>	ca. 1200	ca. 1100–1150
<i>CE</i>	<y>, <e>	<y> ¹³	ca. 1350–1400	ca. 1350–1400

10 See the bibliography for a list of abbreviations used.

11 WILLIAMS (2006CT: 135) gives a similar list of sources, with dates roughly comparable to those we propose here.

12 GEORGE 2009CL: 492–493 gives slightly different dates, but his chronology is more or less in line with what we propose here.

13 If one accepts *ɥɥɥ* ‘you (sg.) may live’; this form could also be the product of *i*-affection, however (see section 6 below).

<i>PC, RD</i> ¹⁴	<y>, <ey>	<y>, <e>	ca. 1425	ca. 1400
OM	<y>, <ey>	<e>	ca. 1425	ca. 1400
<i>PA</i>	<y>	<e>	ca. 1450	ca. 1400
<i>BMI</i>	<ey>, <e>	<e>	1504	by 1504
BM2 ¹⁵	<y>, <ey>	<e>	ca. 1550–1575	by 1504
<i>TH</i>	<y>, <i>	<e>	after 1555	after 1555
<i>BK</i>	<y>	<e>	ca. 1575	ca. 1470
<i>SA</i>	<ei>, <y>	<e>	after 1576	after 1576
GB	<ey_e>, <ei_e>, <y>, <ye>	<e>	1611	by 1611 ¹⁶
<i>LC</i> ¹⁷	<e>, <ê>, <ea>	<e>	ca. 1660–1776	ca. 1660–1776

As we can see from this table, vocalic alternation of <y, ey> in monosyllables ~ <e> in polysyllables is not found in all the texts, or even in all the texts from the Middle Cornish period (ca. 1200–1575). It features most strongly in *PA*, *BK*, *TH*, and *GB*, as well as *OM* and *BM2*. *VC*, *CE*, *PC*, and *RD* apparently represent an older stratum in which the lowering of /i/ to /e/ was not yet complete, while *BMI* and all the Late Cornish texts indicate quite clearly that the reflex of long and half-long /i/ had been lowered to /e/. *SA* may represent a very similar variety of Cornish to that used in *BMI*, one in which fewer heights of front and back long vowels were distinguished, at least in writing (possibly /i:/ – /e:/ and /u:/ – /o:/ as compared to /i:/ – /e:/ – /ɛ:/ and /u:/ – /o:/ – /ɔ:/ in the varieties represented by other texts). Note that the Old Cornish *VC* already shows signs of vowel lowering of /i/ to /e/ in certain contexts, and that the oldest extant Middle Cornish text, *CE*, seems on occasion to display the actual reverse of the expected distribution of <y> in monosyllables vs. <e> in polysyllables. We consider these facts to be of crucial importance for understanding the significance of written vocalic alternation in the later texts.

14 We agree with WILLIAMS' suggestion that "the language of *PC* and *RD*, as we have them [...] [is] more archaic than [that of] *OM*" (2006TAC: 66), and have consequently listed *PC* and *RD* before *OM* in this and other tables.

15 *BM2* (lines 1–271 of the play) was recopied at a later date, but actually precedes *BMI* in the manuscript.

16 Since *GB* shares at least some lines of dialogue with the earlier *OM*, it must derive at least in part from material dating from the fifteenth (or even the late fourteenth) century.

17 Late Cornish texts, including works by Edward Lhuyd and members of the Boson family.

SCRIBAL TRADITION AND VOCALIC ALTERNATION

Since Williams now dates the prosodic shift to the twelfth century and the accent shift to the eleventh (if not earlier), with vocalic alternation being a direct consequence of the latter and the lowering of [ɪ:] to [e:] being a consequence of the former, it is clear that he does not consider vocalic alternation to represent a real phonetic alternation of [ɪ:] in monosyllables and [e(·)] in polysyllables by the time our earliest Middle Cornish manuscripts were produced in the fourteenth and fifteenth centuries. The orthographic alternation of <y> and <e> in texts like *PA* can thus only be explained as the result of conservative scribes adhering to spelling rules established centuries earlier, presumably at the time between the accent shift and the prosodic shift when according to his theory vocalic alternation would still have been a phonological fact (WILLIAMS 2006CT: 31). By this interpretation, Richard Ton's text of *BM*, which shows lowered <ey> or <e> in both monosyllables and polysyllables, represents the phonetic reality of Cornish in 1504, while the manuscripts of the Cornish *Ordinalia*, *PA*, *BK*, *TH*, and even *GB* preserve spellings that are up to five centuries out of date.

Williams' claims about the phonological history of Cornish from the eleventh century through the eighteenth are coloured by his opinion that Cornish had a strong literary tradition from a very early period (perhaps from the twelfth or thirteenth century onward) with a more or less fixed orthography that scribes continued to employ long after sound changes had brought the spoken language far out of step with its written form. According to WILLIAMS, "there was a standard Middle Cornish orthography until the suppression of Glasney [College] in the sixteenth century. As a result of this tradition the way the scribes wrote often hid rather than exhibited their speech patterns" (2006TAC: ix). Among other things, this strong scribal tradition would have led Cornish writers to preserve the <y> for original half-long [ɪ:] in words like *blythen* 'year',¹⁸ which WILLIAMS describes as an "archaism", since presumably the scribes themselves spoke a language in which this vowel was pronounced [e] or [ɛ] (2006TAC: 100, 103, 108). According to WILLIAMS, "it is a truism of historical linguistics that one must always take account of scribal tradition. Very rarely do scribes write as they speak. They write rather as they have learned to write – and only

18 Pace SCHRIJVER (1995 : 242–243) according to whom the OC form would have been /bliðen/ with /i/ < /oi/ by i-affection on the basis of OB *blidan*, *bliden*, *blidon*.

rarely give themselves away by back-spellings and misspellings” (2006TAC: 11). If this were true with respect to vocalic alternation, however, we should expect to find vocalic alternation consistently represented in all the fifteenth-century texts (that is, *OM*, *PC*, *RD*, and *PA*), with only occasional exceptions. As we have seen, this is not the case, since vocalic alternation is largely absent from *PC* and *RD*. In fact, the three scribes who are responsible for *PC* and *RD*, *OM*, and *PA* respectively follow completely different spelling patterns even with quite common words containing reflexes of OC /i/, /ɪ/, and /ɛ/, as is clear from this list of attested forms:¹⁹

Table 2: Words containing reflexes of OC /i/, /ɪ/, and /ɛ/ in *PC*, *RD*, *OM*, and *PA*

Word	<i>PC, RD</i>	<i>OM</i>	<i>PA</i>
‘answer (VN)’	<i>gorthyby</i> ×7 —	<i>gorthyby</i> ×1 —	— (<i>g</i>) <i>orzeby</i> ×2
‘believe (VN)’	(<i>c</i>) <i>rygy</i> ×31 <i>crysy</i> ×2 —	— <i>crysy</i> ×2 <i>cresy</i> ×6	— — —
‘believes’	(<i>c</i>) <i>rys</i> ×44 (<i>c</i>) <i>reys</i> ×5 —	<i>grys</i> ×4 <i>greys</i> ×8 <i>gres</i> ×1	<i>grys</i> ×1, <i>gris</i> ×4 — —
‘day’	<i>dyth</i> ×10 <i>deyth</i> ×19 (<i>d</i>) <i>eth</i> ×13	<i>dyth</i> ×9 <i>deyth</i> ×3 —	<i>dyth</i> ×7 — <i>deth</i> ×1
‘from’	<i>dyworth</i> ×1	<i>dywort</i> ×1	<i>dwor-</i> ×1 ²⁰

19 Here and in other tables, initial letters in parentheses normally represent cases where a word is attested with both mutated and unmutated forms of the initial consonant. Thus “(*g*)*orzeby* ×2” in the column headed “*PA*” indicates that the word is attested twice in *PA*: once as *gorzeby* in stanza 144 and once in its lenited form as *worzeby* in stanza 92. The forms *w(h)ylas* and *w(h)elas* indicate that the initial consonant was sometimes written *w-* and sometimes *wh-*, which does not represent a mutation but may reflect an alternation between voiced and voiceless pronunciations of the initial glide.

20 This syncopated form occurs in stanza 234 of *PA* as part of a phrase or compound *dworennos*

	<i>thyworth</i> ×5 <i>theworth</i> ×2	<i>thyworth</i> ×1 <i>theworth</i> ×5	— <i>ze worth</i> ×8
‘hurry (VN)’	<i>fystyne</i> ×5 —	<i>fystyne</i> ×2 <i>fystene</i> ×2	— <i>fystene</i> ×6, <i>fystena</i> ×1
‘look (VN)’	<i>(m)yres</i> ×4 <i>(m)yras</i> ×5 —	<i>(m)yres</i> ×4 <i>vyras</i> ×1 <i>veras</i> ×1	— — <i>(m)eras</i> ×2
‘many’	<i>lyes</i> ×31 — —	— <i>lues</i> ×4 —	— <i>luas</i> ×3, <i>luhas</i> ×1 <i>leas</i> ×12
‘so much’, ‘as much as’	<i>kemmys</i> ×19 — <i>(k)ymmys</i> ×2 — —	<i>(k)emmys</i> ×2 <i>kemys</i> ×1 <i>(k)ymmys</i> ×2 <i>kymys</i> ×1 —	<i>kemmys</i> ×1 <i>kemys</i> ×1 <i>(k)ymmys</i> ×18 — <i>kymmes</i> ×1
‘necessary’, ‘must’	<i>res</i> ×1 <i>reys</i> ×44 <i>rys</i> ×1	<i>res</i> ×9 <i>reys</i> ×10 <i>rys</i> ×8	<i>res</i> ×1 <i>reys</i> ×3 <i>rys</i> ×10, <i>ris</i> ×1
‘pray (VN)’	<i>pygy</i> ×6, <i>pigy</i> ×1 <i>pyisy</i> ×1 —	— <i>(p)ysy</i> ×3 <i>besy</i> ×1	— — <i>besy</i> ×2
‘prays’	<i>(p)ys</i> ×51 <i>peys</i> ×6 —	<i>(p)ys</i> ×16 <i>(p)eyis</i> ×5 —	<i>(p)ys</i> ×4 — <i>pes</i> ×1

‘at night’ (*dyworth* ‘from’ + *en* ‘the’ + *nos* ‘night’); the LC forms of the preposition *durt*, *dhort*, *dhoart* similarly show syncopation.

‘seek (VN)’	<i>w(h)ylas</i> ×8	—	—
	—	<i>w(h)elas</i> ×2	<i>w(h)elas</i> ×6
‘world’ ²¹	<i>(b)ys</i> ×64	<i>(b)ys</i> ×36	<i>bys</i> ×18
	<i>(b)eys</i> ×60	<i>(b)eys</i> ×39, <i>(b)eis</i> ×2	—

SCRIBAL TRADITION AND LITERARY TRADITION

For Williams, the existence of a strong scribal tradition in medieval Cornwall is confirmed at least in part by the existence of a substantial corpus of literary texts:

“We cannot separate scribal tradition from literary tradition. If a culture has a strong literary tradition, it is safe to assume that it has strong spelling conventions as well, since both are part of the same continuum: the cultivation of native writing and learning. Now it is undeniable that Middle Cornish had a very vigorous literature, that was quite independent of English. The medieval plays were based on Breton models rather than English ones. Moreover as is clear from the references to places in Cornwall mentioned in them, they are completely nativized. The well-developed metrics of PA and the Middle Cornish plays also indicate a vibrant tradition of writing. There is no imitation of English in the prosody of Middle Cornish. Indeed the predominant seven-syllable line has more in common with the prosody of Wales than with the metres of Brittany. All this suggests to me that medieval Cornwall had its own thriving literary tradition. In which case it is inevitable that it had a vigorous scribal tradition as well.” (WILLIAMS 2006TAC: 21)

We disagree with Williams’ characterization of the Cornish literary tradition on two grounds. Firstly, we challenge the assertion that the medieval Cornish plays must derive from Breton rather than English sources. There is no evidence whatsoever to suggest that Cornish writers were directly imitating or adapting Breton material. As discussed in BRUCH 2005, there is little similarity between the verse forms used in the two languages, and Cornish has no trace of the internal rhymes which are a fixture of Middle Breton verse even in the earliest texts (387–394; see also BRUCH 2009: 86–87).²² It should also be noted that Middle Cornish drama is attested in manuscripts dating from the mid-fifteenth century, while Middle Breton drama is known primarily from sixteenth-century sources. Although both traditions are likely older than the

21 Including cases where this word appears as the second element of the compounds *gwyn vys* ‘fortunate, fair (my) world’ and *nor vys* ‘Earth’ which are often written as two words.

22 BRUCH 2005: 394–411 explores the possibility of a relationship between medieval Cornish and Welsh poetry, and likewise concludes that there is no clear evidence for a direct relationship between the two traditions.

date of the earliest manuscripts, there is certainly no reason to believe that Breton drama must be older than Cornish. And while *BM* does depict the life of a Breton saint, St Meriasek is also closely associated with Camborne, and it is clear that this play was written for a Camborne audience, since much of the first day's action relates to the saint's missionary efforts in Cornwall and conflict with a local king, Teudar. In fact, *pace* Williams, there is strong evidence to suggest that Middle Cornish poetry and verse drama have a close connection to the Middle English verse tradition, and no direct link to Breton or Welsh metrics. While medieval Cornish verse has a syllabic metre and often uses a 'Brythonic' rhyming rule – due, no doubt, to similarities in the prosody and intonation of medieval Cornish, Welsh, and Breton – its stanza forms are drawn directly from the Middle English literary tradition, and even their (to modern eyes unusual) layout on the manuscript page is identical to that found in works of Middle English drama from the same period.²³

More importantly, however, we take issue with WILLIAMS' view that "we cannot separate scribal tradition from literary tradition" (2006TAC: 21). This claim is based on a false assumption: that lengthy works of literature can only be produced by a literate society, or by members of an elite literate class. In fact, cultures around the world have developed and maintained extraordinarily complex and mature systems of versification without ever committing these texts to writing. Performers trained in the oral tradition of verse composition can recite works that are thousands of lines long.²⁴ Until modern times, cultures in which poets composed their literary works on paper and disseminated them through the written word were the exception rather than the rule, and this was the case even in some literate societies. According to one famous description (BERGIN 1970: 5–11), Irish poets in the seventeenth century were still learning to compose texts without putting pen to paper, despite the fact that Irish poems had begun to be written down some nine centuries earlier. Since we have no lengthy Cornish texts from before the second half of the fourteenth century, and no clear proof that such texts existed at an earlier period, there is certainly no reason for us to assume that Middle Cornish had any sort of scribal tradition before the fourteenth century, even if we believe the Cornish verse tradition is older than that.

23 For further discussion of these points, see BRUCH 2009: 72–73, 86–104, 117–121 and BRUCH 2005: 383–446.

24 For further discussion of the oral epic tradition in Eastern Europe, and parallels with classical and medieval epic literature, see LORD 1960.

Our earliest lengthy texts in Cornish are found in manuscripts dating from the later fourteenth and mid-fifteenth centuries, and use verse forms that were popular in English poetry and drama from roughly the same period. While we would agree with Williams that the Cornish *Ordinalia* (as it appears in its fifteenth-century manuscript) is a mature work, part of a well-established tradition of versification, we disagree strongly with his suggestion that this tradition is related directly to Welsh or Breton literature, or that it is considerably older than the dates of our earliest Middle Cornish manuscripts. It is in fact quite plausible that Cornish verse of the type seen in the *Ordinalia* and *PA* did not exist before the second half of the fourteenth century.²⁵ The only surviving Cornish verse text recorded in a fourteenth-century manuscript, the 36-line *Charter Endorsement*, has little or nothing in common with the versification of the later dramas: its meter is not syllabic, and it makes frequent use of rhymed couplets, both features which set it apart from all other known works of verse in Cornish composed in the fourteenth, fifteenth, and sixteenth centuries.²⁶ If in the mid-fourteenth century there were already a robust tradition of writing Cornish verse in the metres used in the *Ordinalia* plays, it is hard to explain why the writer of *CE* should appear to be so unaware of it.

SCRIBAL CONSERVATISM VS. SCRIBAL INNOVATION

Just as there is no clear evidence to back up Williams' claim that Cornish had a thriving manuscript tradition before the fourteenth century, there is also little reason to think that scribes in fifteenth- and sixteenth-century Cornwall followed a common set of spelling rules that reflected historical forms rather than their own pronunciation of Cornish. In fact, given the nature of the Middle Cornish texts we have, it is likely that scribes would have wanted to modernise the texts to reflect current pronunciation and other developments in the language. With the exception of *PA*, a poem that might have been intended to

25 Note that this is still perhaps a century before the date of the earliest manuscripts in which these texts are transmitted, which would allow ample time for a tradition to come into being and reach maturity. Even in medieval times, a literary tradition did not take very long to become established, as can be seen from the rapid spread of Arthurian literature in Western Europe during the twelfth and thirteenth centuries, or the spread of the *cywydd* in Middle Welsh during the fourteenth.

26 See BRUCH 2005: 327–349 on the metrics of the *Charter Endorsement*.

be read for private devotion, the surviving Middle Cornish literature from the fourteenth, fifteenth, and early sixteenth centuries consists almost entirely of religious drama, and was presumably meant to be performed before an audience. Similar mystery and miracle plays are found in many other contemporary Western European literatures, including Middle English. It is generally thought that such plays were staged on a regular basis as part of celebrations of feast days and other religious festivals, and that over time they were revised and edited to reflect changes in the tastes of the audience and the performers. Since these works were aimed at a largely illiterate audience, there is no reason to think that scribes tasked with copying or adapting mystery plays would have felt compelled to leave them in archaic language and spellings that could have been confusing for contemporary actors. On the contrary, it would have made sense for scribes to modernise wherever possible, to keep the language current and fresh for actors and audience alike. These texts cannot be compared to early Irish law texts or medieval saints' lives – material written for a professional, ecclesiastical, or academic readership that could be expected to be familiar with obscure vocabulary and outdated orthographic practices. The scribes who copied the Middle Cornish plays would not be concerned with establishing the texts' antiquity, and writing in an overly stilted style would no doubt have defeated the purpose of producing an entertaining spectacle for the common man and woman in the street (or in the *plen-an-guary*).

It is also clear from the manuscripts themselves that at least some Cornish scribes did not adhere slavishly to their exemplars. The first ten pages of *BM* were recopied at a later point in the sixteenth century, presumably to replace leaves that had become damaged. (It is possible that these pages were rewritten rather than merely copied, but the similarity in stanza forms between *BMI* and *BM2* argues against this.) While these ten pages do contain a number of spellings that are orthographically identical to forms in the rest of *BM* – including some that were almost certainly copied directly out of Richard Ton's original version – the anonymous *secunda manus* who recopied the text ca. 1550–1575 had no qualms about introducing his own very distinctive spellings. While Ton always uses <th> for the interdental fricatives [θ] and [ð], this later scribe often uses <3> (found elsewhere with this phonetic value only in the fourteenth-century *CE*, the fifteenth-century manuscript of *PA*, and occasionally in the seventeenth-century *GB*). As WILLIAMS himself points out, Ton consistently writes the word for 'blessing' as *banneth* (18 examples), while the scribe who copied pages 1–10 of the manuscript preserves this spelling in only three of twelve occurrences of this word in his section of the text (2006CT: 27, 2006TAC:

158–159). Otherwise, he writes *ben(n)eth* or even (on three occasions) *bedneth* with pre-occlusion, which was clearly a feature of his post-1550 Cornish, but which did not form part of Ton’s 1504 Cornish. While Ton’s original version tends to write the long reflexes of OC /i/ as <e> or <ey>, the first ten pages of *BM* have many examples of words with this vowel spelled as <y> or <i>:

Table 3: Words containing long and half-long reflexes of OC /i/ in *BM*

Word	<i>BM1</i> :	<i>BM2</i> :
‘mind’	<i>breys</i> ×2 <i>vreyes</i> ×1 —	— — <i>vrys</i> ×1
‘learn, teach (VN)’	<i>(d)esky</i> ×5 <i>dysky</i> ×2	<i>desky</i> ×1 <i>dysky</i> ×5
‘learns, teaches’	<i>deske</i> ×2 —	— <i>(d)ysk</i> ×2 ²⁷
‘midst’	<i>mesk</i> ×4, <i>meske</i> ×12 —	— <i>mysk</i> ×1, <i>myske</i> ×1
‘time, occasion’	<i>preys</i> ×8 —	— <i>pris</i> ×1
‘spirit’	<i>sperys</i> ×10, <i>speris</i> ×1 —	— <i>spyrys</i> ×2

Other common words which the two scribes spell differently include:

27 The 2sg. imperative is also attested once as *dyske* at *BM* 112.

Table 4: Other orthographic differences between BM1 and BM2

Word	BM1:	BM2:
‘father’	(t)ays ×20 (t)as ×5	— (t)as ×5
‘goodness’	(d)adder ×12 (d)ader ×2	zadder ×2 dader ×7
‘in’, etc. ²⁸	in ×570+ yn ×8, y- ×1	— yn ×35
‘readily’	eredy ×46 —	— yredy ×5
‘through’ ²⁹	dres ×7 —	dres ×1 dryys ×2

It is clear from examples like these that the *secunda manus* had no qualms whatsoever about altering Ton’s text, *even though he was copying pages intended to be bound in the same manuscript*. Some of the changes may reflect differences in the two scribes’ dialects, such that the *secunda manus* was reluctant to copy a form that differed substantially from his own pronunciation of a word, but others – like writing ‘in’ as *yn* rather than *in* or [ð] as <ʒ> rather than <th> – represent purely orthographic differences, and make it very difficult to argue that the two men learned to write Cornish according to the same traditional spelling.

In Chapter 3 of *Toward Authentic Cornish*, WILLIAMS claims that “Middle Cornish has an autonomous spelling system with a long history, related to, but independent of English” (2006TAC: 15), and proceeds to list ways in which

28 This section also includes data on other elements realised as unstressed [ɪn], including the contraction *in + an* ‘in the’, the sequence of verbal particle *y* + infixed pronoun *’n* ‘him’, the adverbial particle *in*, and the unstressed initial syllable of numerous prepositions (e.g. *in ban* ‘up’, *in dan* ‘under’), adverbs (e.g. *in della* ‘like that’, *in delma* ‘like this’), and other forms (e.g. *inweth* ‘also’).

29 We have listed the preposition ‘through’ here rather than in Table 3 on the assumption that the vowel would have been shortened in this unstressed word.

Middle Cornish spelling does not conform to the main stream of Middle English orthography (2006TAC: 15–19). Yet while these shared conventions suggest that Middle Cornish scribes were familiar with one another’s work, and did not simply apply contemporary English spelling rules to their own personal variety of spoken Cornish on an *ad hoc* basis, it is far from clear that the similarities between individual scribes’ spelling practices outweigh the differences, even when comparing manuscripts from roughly the same period – or, for that matter, the work of two different scribes within the same manuscript, as in the case of the Cornish *Ordinalia*, *BM*, or *TH* and *SA*. These differences are all the more remarkable if we consider that most if not all Middle Cornish texts from the fifteenth and sixteenth centuries (*OM*, *PC*, *RD*, *PA*, *BM*, *TH*, *SA*, and *BK*) were likely composed or copied by writers associated with one specific religious foundation: Glasney College in Penryn (WILLIAMS 2006CT: 103, 2006TAC: 17, 23, 64; FROST 2007). If most Middle Cornish literature really does originate at Glasney, we should not ask why the texts have some orthographic similarities, but rather, why we find so many systematic differences in spelling between scribes, such that we can identify a given scribe on the basis of only five characteristics:

Table 5: Distinguishing characteristics of medieval Cornish scribes

Text	initial /jɛ/ ³⁰	‘at’ ³¹	‘is’	‘God’	[θ], [ð] as <ʒ>
<i>CE</i>	—	<i>worʒ-</i>	<i>yw</i>	—	YES
<i>PC</i>	<i>ye-</i>	<i>worth</i>	<i>yv, yw</i>	<i>dev</i>	NO
<i>RD</i>	<i>ye-</i>	<i>worth, orth</i> ³²	<i>yv, yw</i> ³³	<i>dev</i>	NO

30 Stressed or unstressed, in words like *yethewon* ~ *zethewon* ~ *ezewon* ‘Jews’, *yehas* ~ *zahas* ~ *ehas* ‘health’, *yeyn* ~ *zeyn* ~ *eyn* ‘cold’. This alternation is discussed by GEORGE 1985: 277 and WILLIAMS 2006CT: 66.

31 This column lists only the most common spelling(s) of the preposition (*w*)*orth* in each text. In general, individual scribes are fairly consistent in their treatment of the initial segment, and their preference for initial *wo-* or *o-* extends to the conjugated forms of the preposition as well.

32 Forms in *wo-* (31 examples) are almost twice as common as forms in *o-* (17 examples) in *RD*.

33 There are also a few examples of the vowel being spelled as *i-* instead of *y-* in *RD*, which may be compared to the frequent use in *RD* of *i-* for *y-* in the preposition ‘in’ and other phonetically similar forms.

<i>OM</i>	<i>ʒe-, ye-</i>	<i>orth, worth</i> ³⁴	<i>yv, yw, ev</i>	<i>dev</i>	NO
<i>PA</i>	<i>e-</i>	<i>worth</i>	<i>yw, yv</i>	<i>du</i>	YES
<i>BMI</i>	<i>ʒe-, ye-</i>	<i>orth</i>	<i>yv</i>	<i>du</i>	NO
<i>BM2</i>	—	<i>worth, orth</i> ³⁵	<i>yv</i>	<i>du</i>	YES
<i>TH</i>	<i>e-</i>	<i>worth</i>	<i>ew</i>	<i>du</i>	NO
<i>SA</i>	<i>e-</i>	<i>worth, vrth</i>	<i>ew</i>	<i>dew</i>	NO
<i>BK</i>	<i>ye-</i>	<i>orth</i>	<i>ew</i>	<i>dv, thew</i> ³⁶	NO
<i>GB</i>	<i>ye-</i>	<i>orth</i>	<i>ew, yw</i>	<i>dew</i>	RARELY

The first two of these features are almost certainly related to differences in dialect or idiolect, since each involves an opposition between two forms, one with an initial glide and one without, where both forms are attested in manuscripts from the fifteenth and sixteenth centuries. The third feature may document a historical sound change, since the older manuscripts all prefer <yv> or <yw> while the later manuscripts all prefer <ew>. The fourth feature, however, could well be purely orthographic, and the fifth feature, involving the spelling of the interdental fricatives [θ] and [ð] certainly is.

Williams himself argues the spelling of the words ‘is’ and ‘God’ provide evidence for the existence of a scribal tradition in Cornwall. According to his analysis, these two words contained the same diphthong in Middle Cornish, /iʷ/, yet were spelled differently by John Tregear because Tregear “had learnt to write this common item [the word for ‘God’] as <du>, <thu> and the force of his learnt convention was very strong” (WILLIAMS 2006TAC: 20). Setting aside the question of whether these two words really did contain identical diphthongs in Middle Cornish – since they are usually not spelled identically in *PC*,

34 Forms in *o-* (32 examples) are more than twice as common as forms in *w-* (15 examples) in *OM*.

35 Since the scribe responsible for *BM2* was likely copying Richard Ton’s original (*BMI*), it may be that the two instances of *orth* in this section reflect Ton’s spelling of the word, while the two instances of *worth* reflect the idiolect of the *secunda manus*.

36 In their edition of *BK*, THOMAS & WILLIAMS suggest that the form *dv* may represent the original spelling used in the play, with the less frequent spellings in *-ew* being introduced later when the text was recopied, presumably by a scribe who preferred to spell the word for ‘God’ with *-ew* (2007: lii). It should be noted, however, that the representation of the diphthong in our manuscript of *BK* also appears to be dependent on the preceding consonant: the word in its lenited form is usually spelled *thew* (16 of 19 times, including *theu* at *BK* 2201 and *thow* at *BK* 2574), while in its unlenited form it is usually spelled *dv* (91 of 95 times, including one example of *du* at *BK* 2747).

RD, *OM*, *PA*, *BM*, or *TH* – we challenge the claim that Tregear’s consistency in spelling ‘is’ as <ew> but ‘God’ as <du> shows that he had “learnt” to spell the word for ‘God’ as <du>, either as part of a formal educational process in reading and writing Cornish,³⁷ or through studying and imitating texts produced according to the orthographic principles of a strong Middle Cornish scribal tradition. If anything, an examination of the attested forms in the corpus proves that there was no one single proscribed spelling for ‘God’ in Middle Cornish. Richard Ton, John Tregear, Thomas Stephyn, and the anonymous scribes of *OM*, *PC*, and *RD* almost certainly all had ties to Glasney College, and the scribe of *PA* may also have learned to write Cornish there. Yet *OM*, *PC*, and *RD* write *dev* while *PA* and *BM* write *du*, and John Tregear writes *du* while his near contemporary Thomas Stephyn – who worked in the neighboring parish, later came into possession of Tregear’s manuscript of *TH*, read it and made marginal notes in it, and added his own patristic catena (*SA*) to it in the 1570s or 1580s – writes *dew*. If the scribal tradition were really as strong as Williams claims, this degree of variation among pairs of texts from the same general period is very hard to explain.

Additional evidence that scribes may have altered texts to reflect their own personal speech or writing habits comes from *PC* and *RD*. These two plays were copied by the same scribe and in general show the same spellings for most words, but it is clear that they were derived from two different exemplars which had different spellings for a few important items. The name ‘Joseph’ is always *iosep* in *PC*, but *ioseph* in *RD*, for example. As we can see from Table 5 above, *PC* almost always writes the word for ‘at’ as *worth*, while *RD* uses a mixture of *worth* and *orth*, with the former being about twice as common as the latter. This difference between the two plays may derive from a difference in orthography between the scribe’s exemplars of *PC* and *RD*. Our scribe likely spoke a form of Cornish in which ‘at’ was pronounced *worth*. Perhaps his exemplar of *PC* also had *worth* in most cases, while his exemplar of *RD* often (or always) had *orth*. When copying *RD*, he substituted his own spoken form for *orth* in at least some cases, possibly altering as many as 60% of the forms (assuming that his exemplar consistently used *orth*). A similar situation can be seen with the preposition ‘in’ and other words or prefixes pronounced as unstressed [ɪn]: these forms are spelled exclusively with *yn* in *PC* and with

37 As in WILLIAMS’ suggestion that “the priory at Glasney was the school where clerics learnt to read and write Cornish” (2006CT: 103).

a mixture of *yn* and *in* in *RD*, with *yn* being about twice as common as *in*. This can be compared to the shift from *in* to *yn* seen between *BMI* and *BM2*.

Williams' claim that Middle Cornish had a strong scribal tradition coupled with a conservative orthography does not appear to be borne out by an analysis of Middle Cornish spellings for many common words. In fact, while the evidence suggests that individual scribes had strong *personal* spelling habits, these differed significantly from those of their near contemporaries, and it is logical to assume that many of these differences reflect differences in the scribes' own speech habits. Scribes seem to have been quite willing to alter forms in their exemplars that did not match their personal tastes or did not fit with their own pronunciation of a given word. Differences in their representation of vocalic alternation are therefore most likely due to idiolectal or dialectal variation rather than preservation of fossilised spellings that represent a much older phonetic status quo.

6. /ɪ/ > /e/: EARLY EVIDENCE

Having established that the spellings in Middle Cornish texts likely represent contemporary or near-contemporary pronunciations rather than archaic forms, we now turn to an examination of the evidence for the lowering of long and half-long OC /ɪ/. Williams assumes that this vowel lowered to /e/ quite early, such that as a result of the prosodic shift in the twelfth century, "Middle Cornish had only /i:/ and /e:/" (2006TAC: 84). In *Cornish Today* he adds: "Although the transition /ɪ:/ > /e:/ was probably accomplished soon after the prosodic shift, scribal practice lagged well behind" (WILLIAMS 2006CT: 11). In order to account for later texts that continue to use <y> or <i> for the reflex of OC [i:], WILLIAMS posits a split, whereby some varieties of Cornish lowered the long vowel to [e:] via [eɪ] while others raised it to [i:] in certain environments (2006TAC: 119), as before the coronal fricatives [θ], [ð], [s], [z]. While we agree with Williams' contention that the lowering of OC /ɪ/ > /e/ began quite early and involved a transitional stage [eɪ] in at least some varieties of Cornish, we differ from him in postulating that this transition affected some etyma earlier than others, as shown by the persistence of <y>-type spellings in words like *byth* throughout the medieval Cornish period. Systematic lowering of /ɪ/ > /e/, we feel, was hampered by interference from more conservative varieties of Cornish that resisted the change and from other phonological rules like secondary *i*-affection that raised /e/ to /ɪ/ in certain environments.

Evidence for vowel lowering – but not for vocalic alternation – is found even in our earliest medieval Cornish texts. The *Vocabularium Cornicum* (*VC*) is a Latin/Cornish word-list with some Welsh equivalents based on Ælfric’s Latin/Anglo-Saxon glossary. The text has been dated to ca. 1100,³⁸ although the manuscript containing it is about a century later in date (GEORGE 2009CL: 492). In *Cornish Today*, WILLIAMS suggests that *VC* “was probably written in the first half of the twelfth century” (2006CT: 82), which implies that this text post-dates the accent shift. We might therefore expect *VC* to show signs of vocalic alternation, but in fact this is not the case. In *VC*, the vowel /i/ appears to be lowered in the word *menit* ‘mountain’ (W *mynydd*), but not in *bliben* ‘year’ or *gwiden* ‘tree’. For that matter, *VC* spells *bit* ‘world’ (W *byd*), *prif* ‘worm’ (W *pryf*), and *prit* ‘time’ (W *pryd*) with <i> but *det* ‘day’ (W *dydd*) with <e>; the word for ‘finger’ or ‘digit’ appears to have varied between *bis* and *bes* (GRAVES 1962: 57–58). While the evidence from *VC* supports the view that /i/ began to be lowered to /e/ at a very early period, *VC* as a text does not show vocalic alternation, since the lowering of the vowel is as likely to occur in monosyllabic words as in polysyllabic words, and is not found consistently in words of either type.³⁹

Additional evidence for the early lowering of OC /i/ comes from our oldest Middle Cornish manuscript, the fourteenth-century *Charter Endorsement* (*CE*). While this text is extremely short – a mere three dozen lines of verse copied on the back of a legal document – it contains some remarkably self-consistent evidence about the reflexes of /i/ and /e/. In *CE*, the element *byʒ*, *vyʒ* occurs three times: once as part of the phrase *ty a vyʒ hy* ‘you (sg.) shall have her’ in line 12, once as the 3sg. future of *bos* ‘will be’ in line 13, and once as the 2sg. imperative of *bos* ‘be!’ in line 19. (The other two occurrences of *byʒ* in lines 2 and 28 represent a different element, the word ‘[n]ever’, which may have contained a different vowel.) In each case, the conjugated form of *bos* is spelled with <y>, which is not surprising, as this word appears consistently with <y>-type spellings in every Middle Cornish text except for *BMI*

38 According to BLOM (2009: 25–26), Oliver Padel favours a composition date between 1150 and 1200.

39 JACKSON interprets this “fluctuation of spelling between *i* and *e*” as a sign that “the sound must still have been half-way between Latin *i* and *e*”; he also remarks, however, that the vowel in such words is more often spelled *e* in *VC* than in the somewhat earlier *Bodmin Manissions*, which almost always have *i* or *y* (1953: 284).

(WILLIAMS 2006CT: 11).⁴⁰ By contrast, the words *ken* ‘before’ (usually *kyns* in MC texts), *pes* ‘prays’ (3sg. pr. ind. of *pysy*), and *sens* ‘hold(s)’ (3sg. pr. ind. and 2s. imperative of *synsy*) are all spelled with <e>, suggesting that the vowel in these words was [e] for our fourteenth-century scribe. It is worth noting that both *pysy* and *synsy* are cases where the root would originally have contained <e>: both etyma apparently contained stressed /e/ or /ɛ/ in Middle Cornish, and later attestations in <y> may be the result of secondary *i*-affection (see below) or analogical remodelling of the stem based on the *i*-affected form of the verbal noun. The form *sens* in *sense fast yn della* ‘hold him fast like that’ is the 2s. imperative, not normally subject to *i*-affection, which may also account for the spelling with <e>. The vocalism of the imperative form could also be the result of the suffixed object pronoun *e* ‘him’: perhaps the verb and pronoun, written here as a single word, were analysed as a disyllabic form (and thus subject to vocalic alternation by Williams’ rule), or perhaps the vowel of the pronoun influenced the scribe’s perception of the vowel in the verb. However, the 3sg. present/future forms *sens* in line 31 and *pes* in line 19 are much more telling, as *i*-affection is to be expected in this form of the verb (and indeed, the same forms occur in *Passio Christi* as *syns* ~ *syng* and *pys* ~ *peys*). *i*-affection may also account for the <y> in the first syllable of *synsy* ‘hold (VN)’ in line 13 and *vywy* ‘you (sg.) may live’ (2sg. pr. subj. of *bewe*) in line 32, since we might otherwise expect this vowel to be lowered to <e>.

CE also provides evidence about the lowering of short OC [i] in the verb *mynnes* ‘wish, want to, will’. The 1sg. pr. ind. appears as *venna* in line 28 and the 2sg. pr. ind. as *mennyz* in line 29. The etymological vowel in the root ‘wish’ is /ɪ/, and the vowel is written <y> in the Welsh cognate *mynnu*; however, it is worth noting that even in the *Ordinalia*, there are many cases in which polysyllabic forms of this verb are spelled with <e> rather than <y>, and in Late Cornish this even extends to the monosyllabic 3sg. pr. ind. form *vedn* (WILLIAMS 2006CT: 32). As WILLIAMS points out, the verb *tenne* ‘pull’ in Cornish of all periods also shows <e> rather than <y>, even though the Welsh form *tynnu* makes it clear that the Cornish form should have contained /ɪ/ (2006CT: 32–33). The demonstrative pronoun *hen* or *henna* ‘that (masc.)’ (MB *henn*, *henez*) may show a similar development, if it derives from the original neuter form (preserved in W *hyn*, *hynny*) as suggested by LEWIS & PEDERSEN (1989:

40 The word *byz* ‘[n]ever’ is almost always spelled with <y> rather than <e> in *BMI*, which suggests that it may have contained the vowel [i:] rather than [ɪ:] or [e:].

223).⁴¹ While many conjugated forms of the verb *mynnes* preserve this lowered <e> in Middle Cornish texts, the <y> could well have been reintroduced in many cases by secondary *i*-affection, and the verb later remodelled by analogy with the 3sg. pr. ind. form *myn* and other affected forms. Interestingly, the scribe of *CE* writes *kymmerry* for ‘take her’ (*kymmer* + *hy*, with the sequence of /r/ + /h/ being rendered orthographically as <rr>), in which the 2sg. imperative ‘take’ (normally *kemmer* or *kemer* in MC texts, but derived from a root that gives Welsh *cymer*) retains a short [ɪ]. This suggests that the lowering of short OC [ɪ] seen in *menn-*, *tenne*, and *hen(na)* may only have occurred before [n].

/ɪ/ > /e/: EVIDENCE FROM OTHER MIDDLE CORNISH TEXTS

In *Cornish Today*, WILLIAMS cites the word *gwithen* ‘tree (singulative)’ as one of “the two etyma in which vocalic alternation are best attested in Cornish,” the other being “the *byth*, *beth-* stem” of the verb *bos* ‘be’ (2006CT: 28). Certainly, the three texts he cites (*OM*, *TH*, and *GB*) show clear evidence of an alternation between <y>- or <ey>-type spellings in the collective (*gwyth* ~ *gveyth*) and <e> in the collective (*gwithen*). However, it is important to note that the word is attested in other OC and MC texts as well. Here is a fuller picture which incorporates this additional data (forms not found in WILLIAMS 2006CT in **bold**):

Table 6: Attested forms of the words ‘trees’ and ‘tree’ in medieval Cornish texts

Text	collective ‘trees’	singulative ‘tree’
<i>VC</i>	—	<i>guiden</i>
<i>OM</i>	<i>gveyth</i>	<i>gwithen</i> , <i>guethen</i> , (g) <i>withen</i>
<i>PA</i>	<i>gweth</i> (Stanza 16)	—
<i>BK</i>	—	<i>gwithan</i>
<i>TH</i>	<i>gwyth</i>	(g) <i>withan</i>
<i>GB</i>	<i>gwyth</i>	(g) <i>withan</i> , <i>weathan</i> , <i>wythan</i> (<i>GB</i> 1825)

41 SCHRIJVER, however, argues that *henn(a)* is an unusual development from the masculine form: PCl. **sondos* > PBr. **sundos* > **hunn* > CB *he(nn)* (1995: 164–166).

It is unfortunate that Williams' original table does not cite the form *wythan* for 'tree' in *GB*. Admittedly, this is the only one example of <y> among 23 occurrences of the singulative form in this text, but the mere existence of the form raises speculation that the lowering of the vowel in this word did not happen for all speakers and writers at the same time. WILLIAMS himself admits that the element 'tree' is often preserved in Cornish place-names as *-withen*, although this may (as he says) reflect a historical form (2006CT: 30–31). Likewise, *wythan* in *GB* may reflect an older form from the fourteenth or fifteenth century: at least some portions of *GB* are considerably older than the date of its manuscript (1611), and *GB* includes some 128 lines which also appear in the fifteenth-century manuscript of *OM*. Although this line is not one of those shared between the two plays, it cannot be ruled out that William Jordan, the scribe of our manuscript of *GB*, copied the spelling from an older exemplar. The singulative form *guiden* from *VC* (a manuscript dated ca. 1200) establishes that by the end of the twelfth century, the vowel in the singulative had not lowered (or, at very least, that the lowering of the vowel had not yet begun to be written). By the time of *OM*, however (composed ca. 1400, copied sometime in the mid-fifteenth century), it is clear that the vowel in the singulative form could be realised as some type of /e/, and accordingly spelled as <e>. The question of exactly when between ca. 1200 and ca. 1450 the lowering of /i/ to /e/ took place in the singulative cannot be answered on the basis of the data given here, and it may have happened at different rates in different varieties of Cornish, in any case.

A similar problem is presented by the collective form *gweith* 'trees' found in stanza 16 of *PA*. This spelling suggests that the vowel in the collective noun may also at times have been lowered to /e/ – and that as early as the mid-fifteenth century when our manuscript of *PA* was copied. The rhymes in this stanza are particularly revealing: *gweith* 'trees' is here rhymed with *meneth* 'mountain' (W *mynydd*, usually spelled *meneth* in the *Ordinalia*, *PA*, and *BM* but showing <i> in the final syllable of *menit* in *VC* and <y> in the penultimate syllable of the plural form *menythyow*, *mynythyow*, *menyzyow* in *PC*, *PA*, and *BK*), *feth* 'have' (the 2sg. present/future of *y'm beus* 'have', based on the 3sg. present/future of *bos*, normally *byth* in *PA*), and *mynnyth* 'you wish' (the 2sg. present/future of *mynnes* 'wish, want to, will'), all of which are etyma that would originally have ended in *-yth* ([ið] or ['i:ð]). This suggests that the poem was composed at a time and place in which all these words contained /i/, but that the scribe who copied our text of *PA* spoke a variety of Cornish in which the vowel in at least some of these words had lowered to /e/ and was

spelled <e>. Nor is it clear that the spelling *gveyth* in *OM* represents [ɪ:] rather than [e:]; WILLIAMS suggests quite plausibly that it may represent a transitional phase [eɪ] (2006TAC: 110).

Finally, it is important to note that the words for ‘trees’ and ‘tree’ are not attested in all of the main MC texts. In fact, these words are only attested in *OM*, *PA*, *BK*, *TH*, and *GB*: precisely those texts in which vocalic alternation is most prevalent. There are no examples of this root from *BM*, where we should expect to find <e> in both the collective and the singulative forms, and none from *PC* or *RD*, the texts most likely to have <y> in the singulative as well as the collective. A clearer picture comes from adding the forms for the phonetically similar (although etymologically unrelated) word ‘year’ (forms suggesting /ɪ/ marked in **bold**):

Table 7: The words ‘year’ and ‘tree’ in medieval Cornish texts

Text	‘year’	‘tree’
<i>VC</i>	<i>bliþen</i>	<i>guiden</i>
<i>PC, RD</i>	<i>(b)lythen</i>	—
<i>OM</i>	<i>blethen</i>	<i>gvetthen, guethen, (g)wethen</i>
<i>PA</i>	<i>blyþen</i>	—
<i>BM1</i>	<i>blethen</i> ×2, <i>blythen</i> ×1	—
<i>BM2</i>	<i>blythan, vlyþan</i>	—
<i>BK</i>	<i>(b)lethan</i> ×2, <i>vlythan</i> ×1	<i>gwethan</i>
<i>TH</i>	<i>blethan, bletha[n]</i>	<i>(g)wethan</i>
<i>GB</i>	<i>(b)lethan</i>	<i>(g)wethan, weathan, wythan</i>

WILLIAMS discusses the word for ‘year’ in *Towards Authentic Cornish*, where he remarks that “the earlier spelling *blythen* is best explained as an archaism which reflects the Old Cornish form *bliþen*. The Middle and Late Cornish word for ‘year’ quite clearly is *blethen, blethan*” (2006TAC: 100). However, it is apparent from the data above that the shift (in writing certainly, and in speech probably) from <y> to <e> was not complete with this word until sometime in the sixteenth century. The spelling *blethen* is found in *OM*, but not in *PC*, *RD*, or *PA*; not until *TH* (ca. 1555) do we find another text in which the word is consistently spelled with <e> in the first syllable.

WILLIAMS derives *blethen* from “a Celtic **blidanī*” > PrimC **bli’ðen* > **blə’ðen* > **ble’ðen* > **bledðan* (2006TAC: 99) and *gwethen* from “a British form **wi’dennā*” > **gwi’ðenn* > **gwə’ðenn* > **gwe’ðenn* > **gweðan*, adding that

<guiden> in *VC* “is a fossilized spelling at the stage **gwi 'ðenn*” (2006TAC: 103). It therefore seems likely he would consider a comparison between the MC forms of the two words reasonable, given the nearly identical reconstructions he gives for their pre- and post-prosodic-shift phonology. According to SCHRIJVER (1995: 242–243), on the other hand, OC *bliþen* would more likely have contained /i/ (</OI/ by *i*-affection) rather than /ɪ/, which might explain the persistence of spellings in <y> in this word.⁴² Even if Schrijver is correct about the vowel in *blythen*, however, there are at least two other etyma that could be cited here as examples of the reflex of half-long OC /ɪ/ (and thus comparanda for *gwythen*):

Table 8: The words ‘worms’ and ‘I shall be’ in medieval Cornish texts

Text	‘worms’	‘I shall be’
<i>VC</i>	—	—
<i>PC</i>	—	<i>bythaf</i> ×1
<i>RD</i>	<i>priues</i> ×1	<i>fethaf</i>
<i>OM</i>	—	(<i>b</i>) <i>ethaf</i>
<i>PA</i>	—	<i>fezaff</i>
<i>BMI</i>	—	<i>pethaf</i>
<i>BM2</i>	—	<i>bethe</i> ×4, <i>betha</i> ×1, <i>fethaff</i> ×1
<i>BK</i>	<i>prevas</i>	<i>vezaf</i>
<i>TH</i>	—	<i>petha</i>
<i>GB</i>	<i>prevas</i>	<i>vethaf</i>

The forms *priues* at *RD* 2011 and *bythaf* at *PC* 1932a suggest that the shift from <y> to <e> in these words was not complete at the time these plays were written (ca. 1400) and possibly not even at the time our oldest manuscript of the *Ordinalia* was produced in the mid-fifteenth century.

If, as WILLIAMS claims, “Middle Cornish had only /i:/ and /e:/” as a result of the prosodic shift (2006TAC: 84), we would expect to find no meaningful degree of written distinction spelling between the long reflexes of /ɪ/ and /ɛ/. However, different spelling patterns are used to represent these two vowels in most MC texts. Nor has any regular allophonic distribution been identified that

42 The authors would like to thank an anonymous peer reviewer for bringing Schrijver’s etymology to our attention.

can reliably explain the difference in representation between these vowels in most manuscripts. With the notable exception of *BMI* and *SA*, the distribution of <y>/<ey> vs. <e> seems to be largely etymological.⁴³ This would suggest that most varieties of Middle Cornish distinguished two long mid-high front vowels – most likely [e:] and [ɛ:] – and furthermore that these had not yet fallen together phonemically in all varieties of the language: that is, that they were in fact /e:/ and /ɛ:/. It might also be argued that Ton and Stephyn simply did not bother to mark lax-tense contrast in long mid-high vowels (as is also the case in most modern Breton orthographies), although it may have persisted allophonically in their dialects or idiolects; unambiguous evidence for this is lacking, however.

/ɪ/ > /e/: CONCLUSIONS

Lowering of /ɪ/ to /e/ was already a feature of some varieties of Cornish as early as the fourteenth century. A few early indications appear even in *VC* ca. 1200.

1. This lowering primarily affected long and half-long /ɪ/, and seems to have spread slowly by lexical diffusion:

- In some cases (e.g. *eve* ‘drink’, *meneth* ‘mountain’, *tenne* ‘pull’, etc.), this change happened consistently and early enough that it is reflected even in our earliest MC texts (and, in the case of *menit*, in *VC* as well).
- Cases in Middle Cornish where the reflex of long /ɪ/ is spelled <ey> may well represent [e:] or, as WILLIAMS suggests, a transitional stage [eɪ] (2006TAC: 110, 119), rather than [ɪ:].
- In other cases involving long vowels (e.g. *gwyth* ~ *gveyth* ~ *gweith* ‘trees’, *bys* ~ *bey* ~ *byes* ~ *beise* ~ *bes* ‘world’), forms with <y>-type spellings appear as late as *GB*, suggesting that [ɪ:] in these words was not lowered in all varieties of Cornish until very late (if at all), or was lowered and then raised again in the sixteenth century before coronal fricatives like [θ], [ð], [s], and [z].⁴⁴

43 Evidence supporting the preservation of this distinction can be found in DUNBAR & GEORGE (1997: 38–42), who compare examples of roots in [ɪ:z] and [ɛ:v]. It is remarkable that they do not base their tables on minimal pairs in phonetic environment, even though the word *pryf* ~ *preif* ~ *preff* ‘worm’ would seem to be ideally suited for the comparison with roots in [ɛ:v].

44 This latter suggestion is modified from a proposal made by WILLIAMS (2006TAC: 119).

- In some cases involving half-long vowels (e.g. *priues* ~ *prevas* ‘worms’, and *bythaf* ~ *bethaf* ‘I shall be’), forms with <i> and <y> are found in *PC* and *RD*; in the case of *blythen* ~ *blethen* ~ *blythan* ~ *blethan* ‘year’, <y>-type spellings are regularly found as late as *BMI* (1504) and occur sporadically in later texts (*BM2*, *BK*, *GB*) that derive in whole or in part from earlier material. This suggests that the vowel in these polysyllabic words may not have been lowered in all varieties of Cornish until the fifteenth century or even later.
- *BMI* and *SA* generally tend to write the reflex of long OC /ɪ/ as <e>, <ey>, or <ei>, which suggests that Richard Ton and Thomas Stephyn may have spoken a variety of Cornish in which the lowering of this vowel to /eɪ/ or in all likelihood even to /e/ was largely complete by ca. 1500. These are also the only Middle Cornish texts in which the long reflexes of OC /ɪ/ and /e/ are not reliably distinguished in writing, indicating the possibility of an early merger of these two vowels in the dialect(s) represented.
- The gradual and incomplete nature of this vowel change was likely due in part to interference from conflicting phonological rules in some varieties of Cornish that raised <e> to <y> through secondary *i*-affection or in other contexts.

Short [ɪ] also appears to have been lowered quite early in some words, particularly before [n]:

- This is reflected in forms of the verb ‘wish, want to, will’ like *venna*, *mennyɜ* in *CE*, *mennaf* in *PC*, *RD*, and *OM*, and *mennyth*, *mennough* in *PC*. The 1sg. form *mannaf*(f), *manna* found extensively in MC (and as the predominant or only form in *PA*, *BM*, *TH*, and *GB*) may reflect an extreme case of vowel lowering (WILLIAMS 2006CT: 32), and the resulting alternation 1sg. *mannaf*: 2sg. *mynnyth* could well have been reinforced by the parallel with 1sg. *gallaf*: 2sg. *gyllyth* in the auxiliary verb *gallos* ‘can, be able’.
- Other words that show lowering of short [ɪ] before [n] include *tenne* ‘pull’ (W *tynnu*, WILLIAMS 2006CT: 33) and possibly also *henna* ‘that (masc.)’ (if cognate with W neut. *hynny*).
- As with the lowering of long or half-long /ɪ/, the lowering of short [ɪ] was counteracted to a greater or lesser degree by phonological rules in some varieties of Cornish that raised <e> to <y> through secondary *i*-affection or in other phonological contexts.

I-AFFECTION IN MEDIEVAL CORNISH TEXTS

I-affection in Cornish is a process (comparable to *i*-affection in Middle Breton or Welsh) whereby an <o>, <a>, or <e> in the root is raised or fronted to <e> or <y> in certain contexts. This change is also seen in the diphthongs <ow>, <aw>, or <ew>, which may be raised or fronted to <ew> or <yw>. The diphthongs <oy>, <ay>, and <ey> do not appear to be subject to *i*-affection, perhaps because of the [ɪ] that forms the second element of the diphthong, or perhaps because so many roots containing these sounds are loans from English or French. *I*-affection in traditional Cornish is discussed in WILLIAMS 2006IA and GEORGE 2009CL; BROWN 2001 (9, 150–155) gives prescriptive rules for *i*-affection aimed at students of Revived Cornish which do not always generate the same forms found in the MC texts.

I-affection is primarily associated with a group of suffixes containing a floating *I*-element which docks at the closest available vowel position of the stem. This includes a number of verbal forms, including verbal nouns in *-y* and *-el* (the latter from original **-ilis*, according to WILLIAMS 2006IA: 35) and past participles in *-ys* (< **-ito*, according to WILLIAMS 2006IA: 38)⁴⁵. *I*-affection is also common in the 3sg. pr. ind. of many verbs (which have a zero suffix in Middle Cornish) (WILLIAMS 2006IA: 29) and has spread analogically to other forms where there is no synchronic or diachronic phonological motivation, such as the 3pl. pr. ind. in *-ons*.⁴⁶ As WILLIAMS' survey of the phenomenon documents, the proportion of verbal forms showing *i*-affection begins to shrink during the Middle Cornish period, a trend which accelerates in the late sixteenth and seventeenth centuries until by the Late Cornish period, *i*-affection is commonly found only with the past participle suffix *-ez* (< MC *-ys*) (2006IA: 40). It is usual, especially in grammars of Revived Cornish, to distinguish between the 'normal' *i*-affection that raises or fronts an <a> or <o> to <e> and an <aw> or <ow> to <ew> and the 'enhanced' *i*-affection that raises an <e> (often, <e> from original <a> or <o>) to <y> (see, for example, BROWN 2001: 151). As this study is principally concerned with the alternation of <e> and <y> in Cornish texts, our analysis will focus primarily on cases of this 'enhanced' *i*-affection. As vocalic alternation involves the lowering of original /i/ to /e/ and enhanced

45 Williams's reconstructions of these suffixes are not beyond dispute; we suggest the following phonemizations for OC at the time of VC: *-y* /-i/, *-ys* /-is/, *-el* /-eɪ/ [+ɪ].

46 A somewhat simplified table showing which verbal forms are affected by *i*-affection is presented in GEORGE 2009CL: 519.

i-affection involves the raising of <e> to <y>, it is not surprising that the two phenomena interfere with one another in many texts. In general, previous analyses of Cornish phonology (often conducted as part of a process of orthographic standardisation for one form or another of Revived Cornish) have tended to view one of these phenomena as a fundamental linguistic or orthographic rule and the other as more or less random variation, dependent perhaps on the whim of the scribe. In his Revived Cornish and English dictionary, for example, R. Morton Nance provides a summary of the rules for *i*-affection, adding that “such regular vowel-change [of *o* and *a* to *e* and of *e* to *y*] must not be confused with the arbitrary use in the MSS. of *e* or *y* in any part of the vb., as, e.g., *pesy* for *pysy*” (1990: 200). Nance’s “arbitrary use” here describes what Williams would later term vocalic alternation: the orthographic shift from <y> to <e> found in polysyllabic words in many of the MC texts. For Nance, *i*-affection is the regular, predictable phonological process and vocalic alternation is an “arbitrary” variation that may mask the underlying distribution of high and mid-front vowels.

Williams, by contrast, appears to view vocalic alternation as the regular process, and to treat the raising of <e> to <y> through *i*-affection as the random element. In his study of *i*-affection in Cornish, for example, WILLIAMS limits himself to cases involving the raising or fronting of original <a> and <o> to <e>, adding that “it is not possible to say with any certainty that *e* becomes *y* in MC by *i*-affection, since it is by no means clear that the short vowels represented by <e> and <y> are distinct and separate phonemes” (2006IA: 27).⁴⁷ Cases where <y> appears in the penult, such as “a few forms in <y> in the imperative and future [of *bos*] [...] in PC and RD,” he suggests, are “archaisms, where the <y> derives ultimately from the <i> of Old Cornish spellings like *<bidam> ‘I shall be’ and *<bident> ‘let them be’, etc.” (WILLIAMS 2006TAC: 108). Leaving aside the fact that these Old Cornish forms of *bos* are unattested, and the question of why a conservative scribe would be content to replace OC <i> with <y> but not with <e>, it is surprising that Williams does not connect such forms with *i*-affection. In fact, many of the examples of conjugated forms of *bos* with <y> in the penult are in contexts where *i*-affection is expected: before the 2sg. ending *-yth*, the 1pl. ending *-yn*, and the 2pl. ending *-eugh*. That

47 WILLIAMS describes these vowels as short, because under his interpretation, all vowels in polysyllabic words became short as a result of the prosodic shift (2006TAC: 29, 2006CT: 97).

these forms with <y> are found in *PC* and *RD* (and to a lesser extent *OM*⁴⁸) is not surprising: the *Ordinalia* is one of the oldest Middle Cornish manuscripts, and by WILLIAMS' own assessment uses a more conservative orthography than its near contemporary *PA* (2006TAC: 66); we should therefore expect the *Ordinalia* to show *i*-affection more reliably – and in a wider range of verbal forms – than other, later texts.

In his article on *i*-affection in Cornish and Breton, Williams discusses the loss of *i*-affection in the 3sg. preterite of verbs in *-el*, including *sevel* 'stand' and *drehevel* 'raise', a change reflected in the shift from MC *sevys*, *drehevys* (3sg. preterite suffix *-ys*) to LC *savaz*, *derauas*, where the final syllable likely reflects a generalisation of the more common MC 3sg. preterite suffix *-as*, a suffix that does not cause *i*-affection (WILLIAMS 2006IA: 32–33). While the shift from *sevys* to *savas* seems to have taken place between the MC and LC periods – that is, near the end of the sixteenth century – there are signs of another shift within the MC period that eliminated the sporadic *enhanced i*-affection of <a> to <y> in these verbs. In general, *i*-affected forms with <e> predominate throughout the MC period. But in *PC* and *RD*, a small number of forms with <y> in the penult are also found:

Table 9: Forms of *sevel* 'stand' showing enhanced *i*-affection

<i>PC</i> 1753	<i>corf hag enef y syvy</i>	3sg. imperfect
<i>RD</i> 530	<i>ow syuel me an guelas</i>	verbal noun
<i>RD</i> 533	<i>ny yllyn syuel yn ban</i>	verbal noun
<i>RD</i> 776	<i>ny allaf syuel am saf</i>	verbal noun
<i>RD</i> 993	<i>woge merwel y syvy</i>	3sg. imperfect
<i>RD</i> 1003	<i>na yl syuel</i>	verbal noun ⁴⁹
<i>RD</i> 1372	<i>an beth sur ef a syuys</i>	(3sg. preterite)

48 *OM* has *fythyth* at line 1510 and *fythyn* at line 1606; the equivalent forms with <e> are also attested elsewhere in the play, however.

49 This line is rhymed with *da yth heuel* at *RD* 1006, which may represent a feminine (disyllabic) rhyme, particularly as the same stanza contains the rhyming couplet *a na lauar yn della / ihesu an arluth guella*. (Note, however, that the rhyme of unstressed *-el* is also sufficient in Cornish versification.) If this is a disyllabic rhyme, the spelling *syuel* suggests either that (1) the scribe who copied *RD* had a different pronunciation than the person who composed the couplet, and altered the form he found in his exemplar from *seuel* to *syuel* accordingly or that (2) the scribe who copied *RD* was using <y> to represent the vowel /ɛ/; we consider the latter to be unlikely. This is likely a comparable phenomenon to the use of <y> in the conjugated forms of *gans* in *RD*, on which see below.

In addition to changes that can be attributed to *i*-affection, *PC* and *RD* also sometimes show an otherwise unmotivated shift from <e> to <y> before [n]. This can be seen in the word *lowene* ‘joy’, which is spelled 6 of 22 times in the first signature of *PC* (but not in the other signatures) as *lowyne*, and in the conjugated forms of *gans* ‘with’, which are usually spelled 1sg. *gyne(f)*, 2sg. *gynes*, 1pl. *gynen* in both *PC* and *RD* rather than the more usual 1sg. *gene(f)*, 2sg. *genes*, 1pl. *genen* (GEORGE 2009CL, 517). In MC there is no obvious synchronic phonological motivation for the raising of <e> to <y> in the 1sg., 2sg., and 1pl. forms of the preposition, although it is perhaps relevant that Welsh has 1sg. *gennyf*, 2sg. *gennyt*, 1pl. *gennym* in these cases. One might interpret the early Middle Cornish forms as remnants of enhanced *i*-affection in *Old* Cornish – where the suffixes were [-iv] etc. – which survived into Middle Cornish in the variety of the language represented in *PC* and *RD*. That this raising represents a feature of the scribe’s dialect or idiolect is strongly suggested by the number of cases in which these forms of *gans* seem to form a feminine (disyllabic) rhyme with words containing etymological /e/ spelled <e>:

- *gyne* : *lowene* ‘joy’ (*RD* 37–38, 105–106, 112–113, 206–207, 2363–2366, 2507–2510, 2520–2521)
- *gyne* : *ene* ‘soul’ (*RD* 1408–1409)
- *gynef* : *enef* ‘soul’ (*RD* 140–141, 298–299, 2307–2309, 2575–2577)
- *gynes* : *benenes* ‘women’ (*RD* 817–818); *gynes* : *vynynes* (*RD* 1667–1668), although these are both problematic, since the vowel in the second syllable of *benenes*, *vynynes* is itself a reflex of OC [ɪ].
- *gynen* : *benen* ‘woman’ (*RD* 191–192, 917–918, 1347–1350, 1396–1397, 1443–1446, 2393–2396, 2417–2420, 2424–2425, 2429–2432)

While it is possible that no disyllabic rhyme is intended – it is certainly not required in MC versification, where rhymes between unstressed final syllables are sufficient – the sheer number of possible feminine rhymes here strongly suggest that *RD* was written by a playwright whose Cornish had *gene(f)*, *genes*, and *genen*, but copied by a scribe whose Cornish featured a higher vowel in the first syllable of *gyne(f)*, *gynes*, and *gynen*.

I-AFFECTION AND VOCALIC ALTERNATION

The raising of <e> (including <e> from original <a> and <o>) to <y> through secondary *i*-affection is a common feature in Middle Cornish texts from the fourteenth and fifteenth centuries, and is regularly found in many texts from the sixteenth century. It is clear from the corpus that not every Cornish speaker had the same phonological rule for *i*-affection, and that the rules for *i*-affection changed over time. In general, the work of any individual scribe tends to be fairly consistent in its representation of the enhanced *i*-affection of <e> to <y>, while the differences between scribes – sometimes even within the same manuscript – are great. This suggests that this feature of MC orthography reflects differences in scribal conventions, dialect, or idiolect between scribes⁵⁰ rather than adherence to a single, strong, persistent orthographic tradition. In general, enhanced *i*-affection is more common (that is, occurs in more contexts) in earlier texts, with *PC* and *RD* showing the greatest amount of raising. In most cases, enhanced *i*-affection of <e> to <y> only occurs in forms where a high front vowel /i/ or /ɪ/ or the glide /j/ appears in the following syllable. Like the ‘normal’ *i*-affection of <a> and <o> to <e>, this change is particularly common and persistent in forms containing the past participle suffix *-ys* and the verbal noun ending *-y*.

In *PC* and *RD*, enhanced *i*-affection of <e> to <y> is also likely to occur before other endings associated with ‘normal’ *i*-affection of <a> and <o> to <e>, including the 2pl. pr. ind., preterite, and imperative endings *-ough*, *-seugh*, *-eugh*. This can be seen, for example, in the 2pl. preterite and imperative of *settye*: *sytseugh* (*RD* 629), *sytyough* (*PC* 976, 1126), *sytteugh* (*PC* 3067), and the 2pl. imperative of *dalhenne* ‘seize’: *dalynnough* (*PC* 1008). Enhanced *i*-affection of the 3sg. pr. ind. (which has no ending) is found in numerous texts, as in the 3sg. pr. ind. of *cafus* ‘get’, which is normally *(k)yf* in the *Ordinalia*, *(k)yff* in *PA* and *BMI*, and *(k)yef* in *GB*, but which appears primarily as *(k)ef* in *BK* and once as *kâv* in the LC text *Dzhûan Tshei an Hør* (WILLIAMS 2006IA: 29–30). Similarly, the 3sg. pr. ind. of *kelly* ~ *kylly* ‘lose’ (root *coll*-) appears in *OM* 242 as *kyl* and at *GB* 831 as *gyll* (but at *BM* 1927 and *BK* 2710 as *gel*) and the 3sg. pr. ind. of *tevy* ‘grow’ appears as *dyf* at *OM* 712 and *dyff* in stanza 259 of *PA* (but in *TH* as *deffe*, in *BK* as *tef*, and in *GB* as *teyf* at line 365 and as *teiff* at line 1855).

50 Or, perhaps, differences in dialect carried over from an earlier writer, in cases where a given scribe was very scrupulous in copying his exemplar.

In *CE*, *PC*, *RD*, and to a lesser extent *OM*, both half-long and short <e> may be subject to enhanced *i*-affection. As a result, these texts often contain verbal forms with half-long <y> in the penult. This can be seen in the forms of *seuel* ~ *syuel* ‘stand, raise’ cited above, and also in *wylyn* ‘I saw’, the 1sg. imperfect of *gweles*, which occurs at *PC* 3022 and *RD* 434.⁵¹ Similarly, the 1sg. preterite of *gweles* appears as *wylys* or *guylys* some dozen times in *PC* and *RD*, and never once as *welys*. Enhanced *i*-affection of half-long <e> is also seen in forms of the verbs *pysy* ‘pray’, *crisy* ‘believe’, and (if the vowel is half-long before the cluster *-ns*) *synsy* ‘hold’, where the etymological vowel in the root is likely /e/.⁵² The raising of half-long <e> to <y> in these texts thus effectively neutralises the lowering of half-long [ɪ] to [e:], and thus *CE*, *PC*, and *RD* are texts which do not show significant evidence of vocalic alternation.

In *PA*, *BK*, *TH*, and *GB*, by contrast, enhanced *i*-affection is common only with short <e> in polysyllables, and only in situations where a high front vowel or [j] appears in the following syllable, as observed by GEORGE (1985: 133–134; 1986: 114). These texts tend to retain <e> in polysyllabic words and <ey> or <e> in monosyllabic words where the reflex of half-long or long OC /i/ has been lowered, but have a higher frequency of <y>-type spellings in words containing the reflex of OC short [i]. The usual form of the word ‘so much, as much as’ is *kymmys* in *PA* and *TH*, for example, and this is also a fairly common spelling in *BK*. In other texts, however, this word is normally written *kemmys*. As they allow raising of stressed <e> to <y> in the penult when the vowel is short (i.e. followed by a long or fortis consonant or by a consonant cluster) but not when the vowel is half-long (i.e. followed by a single or lenis consonant), these texts are the ones which show the best evidence of vocalic alternation. In addition, *TH* also seems to raise long <e> to <y> before the coronal fricatives [θ], [ð], [s], and [z], as reflected by forms like *kyth* ~ *kith* ‘same’ in *TH* vs. *keth* in other texts. This secondary raising of [e:] or [ɛ:] to [i:] may account for the persistence of forms like *bys* ~ *byes* ‘world’, *dyth* ‘day’, and *gwyth* ‘trees’ in manuscripts from the late sixteenth and early seventeenth centuries, and also contributes to vocalic alternation in these texts by increasing the number of monosyllables in <y> to contrast with polysyllables in <e>.

SA follows the same *i*-affection rule as *PA*, *BK*, *TH*, and *GB*, as evidenced by forms like *tirmyn* ~ *tyrmyn* ‘time’ (60r.19, 64r.30), *tyrry* ‘break (VN)’ (65r.14)

51 The 1pl. pr. ind. of *gweles* ‘we (shall) see’, which also has the suffix *-yn*, is attested at *PC* 733 as *quehyn*, however.

52 On this point with respect to *cresy* and *pesy*, see WILLIAMS 2006TAC: 35.

sittis ~ *sittys* ‘set (p. part.)’ (60r.39, 60v.2, 65v.20, 21, 25), *gilwis* ‘called (p. part.)’ (64r.29), *gylwall* ‘call (VN)’ (65r.15), and *girreow* ~ *gyrreow* ~ *gyrryow* ~ *gyrryw* ~ *girrew* ‘words’ (59r.12, 15, 61r.3, 61v.31, 62r.1, 13, 14, 18, 21 etc.). However, it also shares with *BMI* a strong tendency to write the reflex of OC long or half-long /i/ as <e> or <ei>/<ey>,⁵³ suggesting that these texts represent varieties of Cornish in which this vowel lowered to /e/ completely and early. Because of this early lowering of /i/, and because it does not raise long <e> consistently before coronal fricatives, *SA* (like *BMI*) is not a text that exhibits vocalic alternation.

CONCLUSION

Written alternation between <y> or <ey> in monosyllabic forms and <e> in polysyllabic forms of words containing the reflex of OC /i/ is indisputably present in certain medieval Cornish texts, notably *OM*, *PA*, *TH*, *BK*, and *GB*. While Williams and George both acknowledge the existence of this phenomenon, both consider it to be the result of an orthographic rule rather than a representation of phonetic reality at the time these manuscripts were written. As we have shown, Williams’ explanation that vocalic alternation reflects a conservative scribal tradition that preserved archaic spellings as part of a standard orthography for Middle Cornish is unlikely, considering the degree of variation found between roughly contemporary texts and the extent to which scribes felt free to alter forms in their exemplars, as well as the lack of evidence for Cornish manuscripts or for verse composed in the typical Middle Cornish metres before the second half of the fourteenth century. George’s explanation that vocalic alternation is due to interference from English orthography as applied haphazardly to Cornish by bilingual scribes is also unlikely, since it cannot account for forms in *VC* and *CE* that clearly predate the Great English Vowel Shift, the most plausible source for confusion between <e> and <y> among English-speaking scribes. It is therefore probable that vocalic alternation in medieval Cornish texts is actually the result of several different, interacting phenomena. In some of the core texts, there probably was a phonetic alternation between [ei] in monosyllables and [eː] or [ɛ] in polysyllables in certain etyma containing the reflex of OC /i/. In *TH*, there are some salient cases of

53 The spelling <ei> is typical of *SA* while <ey> is usual in *BMI*.

alternation between [i:] and [e(·)] or [ɛ] due to secondary raising of the long vowel in certain environments, such as before the coronal fricatives [θ], [ð], [s], and [z]. In yet other cases, *i*-affection of certain verb forms may counteract vowel lowering, cancelling out vocalic alternation in words that otherwise might show it, but the specific rules governing *i*-affection apparently differed between varieties and chronological stages of the language. It is clear that all these phenomena cannot be subsumed under a single phonological rule or set of rules.

It is clear from early texts like *VC* and *CE* that the lowering of long and half-long OC /i/ to /e/ occurred more or less simultaneously and at roughly the same rate in monosyllables and polysyllables. A parallel development (or perhaps a merging process similar to the *pin/pen* merger in some varieties of American English) seems to have affected short OC /i/ before [n], as attested by MC forms like *mennaf*, *mennyʒ*, *tenne*, and (perhaps) *hen(na)*. It is likewise clear from forms like *blythen* ~ *vlythan* ‘year’ in *BM* and *BK* and *byth* ‘will be’, *gwyth* ‘trees’ in *TH* and *GB* that the lowering of OC /i/ was not complete in some varieties of Cornish until sometime in the sixteenth century, if not the seventeenth, or at least that the reflex of OC /i/ had not fully merged with that of OC /e/ in these varieties. This lowering appears to have spread gradually, possibly by lexical diffusion, as suggested by DUNBAR & GEORGE (1997: 41), and was slowed by interference from competing phenomena, including enhanced *i*-affection, phonological rules that raised <e> to <y> before [n] in *PC* and *RD* or before coronal fricatives in *TH*.

Lowering of OC [i:] to [eɪ] as an intermediate stage is reflected in the large number of <ey>-type spellings used for words like *beys* ‘world’ and *deyth* ‘day’ in the *Ordinalia*. That this sound change had occurred in the varieties of Cornish spoken by the scribes of the *Ordinalia* is confirmed by ‘reverse spellings’ like *syth* ‘seven’ (MW *seith*, B *seizh*) at *RD* 2494, *kyn* ‘back’ at *OM* 1053 and *RD* 518, or even *pyn* ‘pain’ at *OM* 2233, *PC* 2727b, and *RD* 2012, where <y> is used to represent the diphthongs [eɪ] and [aɪ]. That <y> was seen as an admissible way of spelling the diphthong at a time when the English Great Vowel Shift had not progressed this far with the diphthongisation of Middle English [i:] suggests a very recent sound change in Cornish itself, in which <y> was carried over from [i:] to its diphthongal reflex [eɪ]. That <y> would regularly be used by sixteenth-century scribes to represent [e:] out of excessive conservatism, however, seems rather improbable (as WILLIAMS himself seems to acknowledge in *Towards Authentic Cornish*) and we accept his suggestion that the long reflexes of both OC /i/ and /e/ may have been raised

to /i/ (2006TAC: 119) before coronal fricatives in some varieties of sixteenth-century Cornish. In the varieties represented by some later texts, most notably *BMI*, *SA*, and the LC corpus, the lowering of /i/ > /eɪ/ > /e/ in closed syllables appears complete, however. This development, along with the parallel monophthongisation of /oi/ to /o/ in closed syllables gave rise to one of the few genuine spelling conventions of Middle Cornish: the use of <y> or <i> after vowels to indicate length (WILLIAMS 2006TAC: 15–16).

It is striking that both Richard Ton and Thomas Stephyn, unlike the rest of the scribes, do not distinguish between tense and lax long mid-high vowels. That they did not consider this distinction relevant suggests that in their Cornish [e:] and [ɛ:] (and presumably [o:] and [ɔ:]) were allophones or had even fallen together completely in pronunciation.⁵⁴ In other medieval Cornish texts, however, we see a contrast between the representations of the long reflexes of OC /i/ and /oi/ vs. /e/ and /o/ in closed syllables, such that the spellings <y>/<ey>/<ei> and <oy>/<oi> tend to be used for the former and <e> and <o> for the latter. This would seem to indicate that the spread of bilingualism in the fourteenth and fifteenth centuries (not in the twelfth, as claimed by WILLIAMS 2006TAC:29) had remodelled the system of Middle Cornish long vowels and brought it closer to that of Middle English. While some dialects may have retained the intermediary stage [eɪ] (< earlier MC and OC [i:]) longer than others,⁵⁵ we suggest that, by the late fifteenth century, mainstream Middle Cornish probably had the following set of long vowels:

i:	y:	u:
e:	ø:	o:
ɛ:	ɔ:	
a:		

Over the course of the sixteenth century, /ø/ and then /y/ were unrounded, likely as a result of further spreading bilingualism following a similar development in English, which by 1500 had lost rounded front vowels even in the more conservative western dialects. Attestations suggest that at the beginning of the sixteenth century, /ø/ may already have been disappearing in Cornish.

54 This need not necessarily be the case, of course: it should be noted that most orthographies of Breton fail to distinguish reliably between /e:/ and /ɛ:/.

55 Some similar cases exist in Breton, e.g. the dialectal realisations [de:], [deɪ], and [deiz/s] ‘day’.

56 Attestations of the word *bras* ‘big’ do not indicate any sign of the split of /a/ > /æ/ and /ɒ/ before the date of *SA*.

In any case, however, our suggested model only features short lags between sound changes and orthographic changes: some decades at most, well within the lifetime of a given scribe, and challenges WILLIAMS' notion that MC spellings like *bys* 'world', *byth* 'will be', and *dyth* 'day' must necessarily be "archaisms" (2006CAT: 119).

We therefore propose that vocalic alternation was caused – not levelled – primarily (but not exclusively) by the lowering of /ɪ/ to /e/ via /eɪ/, and that attestations in the surviving texts testify to phonetic realities and ongoing sound changes in the Cornish spoken by individual scribes. Some differences in spelling between scribes cannot be explained by diachronic variation alone, but very probably reflect dialectal and idiolectal features, particularly as different rules for *i*-affection appear to be at work in different medieval Cornish texts. While we have argued that a number of interacting processes are responsible for vocalic alternation in Cornish, we doubt that the accent shift to the penultimate syllable or a putative prosodic shift in the twelfth century were among them. If vocalic alternation really were that old, we would expect it to be most prominent in the oldest texts, yet – as discussed above – this is not borne out by the attested forms in *VC*, *CE*, or the *Ordinalia*.

LIST OF ABBREVIATIONS

B	(Modern) Breton
<i>BK</i>	<i>Bewnans Ke</i>
<i>BM</i>	<i>Beunans Meriasek</i>
<i>BM1</i>	<i>Beunans Meriasek, prima manus</i> (older part of the manuscript; lines 272–4568)
<i>BM2</i>	<i>Beunans Meriasek, secunda manus</i> (newer part of the manuscript; lines 1–271)
<i>CE</i>	<i>Charter Endorsement</i>
<i>GB</i>	<i>Gwreans an Bys</i> , also known as <i>Creacon of the Worlde (CW)</i>
LC	Late Cornish
MB	Middle Breton
MC	Middle Cornish
MW	Middle Welsh
OC	Old Cornish
<i>OM</i>	<i>Origo Mundi</i> , the first play of the Cornish <i>Ordinalia</i>
<i>PA</i>	<i>Pascon Agan Arluth</i> , also known as <i>Mount Calvary (MC)</i>

PC	<i>Passio Christi</i> , the second play of the Cornish <i>Ordinalia</i>
RD	<i>Resurrexio Domini</i> , the third play of the Cornish <i>Ordinalia</i>
SA	<i>Sacrament an Aulter</i>
TH	<i>Tregear Homilies</i>
VC	<i>Vocabularium Cornicum</i>
W	(Modern) Welsh

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