THE CURIOUS USE OF THE DIGRAPH <oy> IN THE MIDDLE CORNISH TEXT *BEWNANS MERYASEK*

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A B S T R A C T

Unlike the other Middle Cornish texts, Bewnans Meryasek *makes extensive use of the digraph <oy> to depict the vowel /ɔ/ when stressed and long. This paper tries to discover why.*

1)   INTRODUCTION

In Middle Cornish, the digraphs <oy> and <oi> were used to represent three different phonemes, as shown in Table 1.

Table 1	Cases of <oy, oi> in Middle Cornish texts[2]									
Phoneme	**Text[3] →**	PA	PC	RD	OM	BMa	BMb	BK	TH	SA	CW
/ɔɪ/	<oy>	33	33	53	53	59	6	46	137	16	98
	<oi>							1		1	4
/o/	<oy>	37	3	2	8	69	7	75	11		3
	<oi>		1		3	1	1		32	32	
/ɔ/	<oy>	6			1	194	1	3	3		
	<oi>								18	1	
Other[4]	<oy>				4						

In Middle Cornish, the digraphs <oy> and <oi> were used to represent three different phonemes, as shown in Table 1.

- The diphthong /ɔɪ/ is found in native words (e.g. *moy* 'more') and in loan-words, both in open final syllables (e.g. *joy*) and in closed final syllables (e.g. *poynt*).
- The close mid rounded back vowel /o/ came from Old Cornish /oi/, often spelled <ui>; this arose from the fusion of two diphthongs corresponding to Modern Welsh *wy* and *oe.* By the time of the Middle Cornish texts, the /o/ phoneme, when stressed and long, was realized as ['oː], though it was still spelled <oy>; this is shown by the loan-word *forsoyth*, which before the Great Vowel Shift contained ['oː] in English, and in Cornish was rhymed with such words as *vloyth* 'year of age'.
- The open mid rounded back vowel /ɔ/ was sometimes spelled <oy>, but in all texts **apart from BMa** this was a minority spelling; <o> was the usual spelling for /ɔ/.

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[2]   In this and other tables, green shading is used for <oy, oi> = /o/ and <o> = /ɔ/, red for <oy, oi> = /ɔ/ and <o> = /o/, yellow for <oy,oi> = /ɔɪ/, which is of peripheral importance to this paper.
[3]   PA = *Pascon agan Arluth*, PC = *Passio Christ*i, RD = *Resurrectio Domini*, OM = *Origo Mundi*, BMb = the first 10 pages of *Bewnans Meryasek,* BMa = the remainder of *Bewnans Meryasek* written down by Rad[ulphus] Ton in 1504, BK = *Bewnans Ke*, TH = Tregear Homilies, SA = *Sacrament of the Altar,* CW = *Creacon of the World.*
[4]   These are forced eye-rhymes in BMa.

That there were two rounded back mid-vowels in Middle Cornish is evident from minimal pairs such as *troys* 'foot' *v. tros* 'noise' and *boys* 'food' *v. bos* 'to be'. In his book *Towards Authentic Cornish*, Nicholas Williams devotes a whole chapter to dispute this. He writes (Williams 2006: 59), correctly but verbosely:

> In the texts <boys> is written to represent both *bos* 'food' < *boys* and *bos* 'to be' – which never had a diphthong. On the other hand <bos> is also used to represent both *bos* 'to be' (which never had a diphthong) and *bos* 'food' which was originally *boys*.

Because the word for 'food' and the word for 'to be' are both written *bos* and *boys*, he deduces incorrectly that they contained the same vowel.

There was no *a priori* requirement for Middle Cornish scribes to distinguish the two rounded back vowels in writing. In PC, RD and OM they tended to be both written <o>, which led to Nance doing the same in Unified Cornish, without realizing that there were two different phonemes.[5] However, sometimes spelling the two rounded back vowels the same way does not necessarily mean that they were pronounced the same, *pace* Williams.

The problem is that the data are noisy, and Williams has a difficulty with noisy data. The level of noise is slight, however. Table 2 shows that as regards ***boes*** and ***bos***[6] in BMb and in BK, there is no noise at all: in these texts, ***boes*** is spelled exclusively with <oy> and ***bos*** with <o>. This alone is enough to demonstrate that we are dealing with two phonemes here.

Table 2	Spellings of ***boes*** and ***bos***		
		BMb	BK	BMa
boes	<oy>	1	5	12
'food'	<o>	0	0	2
bos	<oy>	0	0	**75**
'to be'	<o>	3	**85**	4

George (2013) used evidence from both spellings and rhymes to dismiss Williams' ideas, but the exceptional distribution of <oy> and <o> in BMa deserves further study. Here the predominant spelling for both ***boes*** and ***bos*** is <boys>; <bos> is also found, but is very much a minority spelling. As supporting evidence for his views, Williams gives sixty cases of <oy> being used to spell ***bos***. No fewer than fifty of these (83%) are from text BMa, which should ring alarm bells: BMa appears anomalous, and this paper examines how and why.

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[5]   In Galician there are two rounded back vowels, both usually spelled <o>, compared with just one in Spanish (also <o>). Although the incidence of the two vowels is partially predictable, they are not allophones, but separate phonemes, as is shown by minimal pairs in which the distinction may be made by placing a grave diacritic on the more open vowel, e.g. *botar* [boˈtaɾ] 'to throw' v. *bòtar* [bɔˈtaɾ] 'to jump'.

[6]   Cornish words in ***bold italic*** are in the orthography called ***Kernewek Kemmyn*** (George 2020).

2)   PHONOLOGY BEHIND THE RHYMES IN *BEWNANS MERYASEK*

It is important to separate the phonology which underlay rhymes from the orthography which was used to write them. The author of BM (perhaps Rad Ton) would have known what constituted perfect rhymes, and attempted to use them. The rhymes are thus indicators of the underlying phonology. We examine the rhymes which contain stressed long /-oC/ and /-ɔC/ where C is a consonant. Table 3 lists rhyming pairs where C = /s/ or /z/ in both BMa and BMb.

Table 3	Rhyming pairs with ['oːs], ['oːz], ['ɔːs], ['ɔːz] in BM												
Text	**Rhyming pairs**									**Spelling**		**Notes**	
	1st rhyming word				**2nd rhyming word**				**Pts**	**1st word**	**2nd word**		
	Line	**KK**	**English**	**Phon.**	**Line**	**KK**	**English**	**Phon.**					
BMb	0115	*oes*	age	/-oz/	0116	*boes*	food	/-oz/	0	*oys*	*boys*		
	0130	*mos*	to go	/-ɔz/	0131	*goes*	blood	/-oz/	2	*mois*	*woys*	E	W
BMa	0281	*moes*	table	/-os/	0284	*loes*	grey	/-oz/	1	*voys*	*loys*		
	1195	*goes*	blood	/-oz/	1196	*loes*	grey	/-oz/	0	*goys*	*loys*		
	1397	*dos*	to come	/-ɔz/	1398	*mos*	to go	/-ɔz/	0	*doys*	*moys*		
	1452	*gloes*	pang	/-os/	1453	*poes*	heavy	/-os/	0	*gloys*	*poys*		
	1599	*goes*	blood	/-oz/	1603	*bos*	to be	/-ɔz/	2	*goys*	*boys*	E	W
	1615a	*goes*	blood	/-oz/	1618	*koes*	wood	/-oz/	0	*goys*	*coys*		
	1642	*goes*	blood	/-oz/	1643	*bos*	to be	/-ɔz/	2	*goys*	*boys*	E	W
	1726	*nos*	night	/-ɔs/	1728	*klos*	shut	/-ɔs/	0	*noys*	*cloys*		
	1787	*nos*	night	/-ɔs/	1789	*klos*	shut	/-ɔs/	0	*nos*	*clos*		
	1795	*mos*	to go	/-ɔz/	1797	*bos*	to be	/-ɔz/	0	*moys*	*boys*		
	1866	*koes*	wood	/-oz/	1867	*oes*	age	/-oz/	0	*coys*	*oys*		
	2168	*bos*	to be	/-ɔz/	2171	*loes*	grey	/-oz/	2	*bos*	*loys*		W
	2250	*plos*	dirty	/-ɔs/	2252	*ros*	gave	/-ɔs/	0	*plos*	*ros*		
				/-ɔs/	2254	*nos*	night	/-ɔs/	0	*plos*	*nos*		
	2252	*ros*	gave	/-ɔs/				/-ɔs/	0	*ros*	*nos*		
	2306	*plos*	dirty	/-ɔs/	2307	*nos*	night	/-ɔs/	0	*plos*	*nos*		
	2329	*dos*	to come	/-ɔz/	2330	*mos*	to go	/-ɔz/	0	*toys*	*moys*		
	2451	*plos*	dirty	/-ɔs/	2452	*nos*	night	/-ɔs/	0	*plos*	*nos*		
	2462	*nos*	night	/-ɔs/	2466	*dos*	to come	/-ɔz/	0	*nos*	*tos*		
	2863	*mos*	to go	/-ɔz/	2864	*bos*	to be	/-ɔz/	0	*moys*	*boys*		
	3056	*nos*	night	/-ɔs/	3058	*plos*	dirty	/-ɔs/	0	*nos*	*plos*		
	3493	*plos*	dirty	/-ɔs/	3496	*nos*	night	/-ɔs/	0	*plos*	*nos*		
	3575	*troes*	foot	/-oz/	3578	*boes*	food	/-oz/	0	*troys*	*boys*		
	3725	*nos*	night	/-ɔs/	3728	*ros*	gave	/-ɔs/	0	*nos*	*ros*		
	3767	*nos*	night	/-ɔs/	3769	*tros*	noise	/-ɔs/	0	*nos*	*tros*		
	3926	*mos*	to go	/-ɔz/	3929	*boes*	food	/-oz/	2	*moys*	*boys*	E	W
	3983	*troes*	foot	/-oz/	3984	*boes*	food	/-oz/	0	*droys*	*boys*		
	4091	*dos*	to come	/-ɔz/	4092	*mos*	to go	/-ɔz/	0	*toys*	*moys*		
				/-ɔz/	4094	*poes*	heavy	/-os/	3	*toys*	*poys*	E	W
	4092	*mos*	to go	/-ɔz/				/-os/	3	*moys*	*poys*	E	W
	4415	*bos*	to be	/-ɔz/	4418	*loes*	grey	/-oz/	2	*voys*	*loys*	E	W
	4476	*dos*	to come	/-ɔz/	4477	*loes*	grey	/-oz/	2	*toys*	*loys*	E	W

In Table 3, the spelling of each rhyming word is given in ***Kernewek Kemmyn*** (KK) so that one can see straightway that those with *oe* have /o/ and those with *o* have /ɔ/. KK does not distinguish between /-s/ and /-z/[7], so the rhyming phonemes are included under the heading **Phon.** In order to quantify how good the rhymes are, penalty points are awarded to each rhyming pair, in the column headed **Pts**:

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[7]   An updated version of KK will do so.

- no points if the rhyming sequences are congruent (identical);   } shaded
- one point if the rhyming consonants differ;   } green
- two points if the rhyming vowels differ   shaded red

Of the 34 rhyming pairs in Table 3, 25 score zero.[8]

To form the rhymes in Table 3, the poet had two pools of possible rhyming words:
- ***boes***, ***goes***, ***koes***, ***loes***, ***moes***, ***oes***, ***poes***, ***troes***   (8 words);
- ***bos***, ***dos***, ***klos***, ***mos***, ***nos***, ***plos***, ***ros***, ***tros***;   (8 words)

He would first scan the words in one pool, and hopefully find two suitable ones which produced a strict rhyme. It might happen, though, that having chosen the first rhyming word, none of the remaining seven was suitable. In that case the poet would turn to the second pool, and if he found therein a word which fitted the narrative, he could select it as the second rhyming word. In this case, the rhyme would be imperfect. This scenario explains why there are rhymes of different quality, and why, in a sufficiently large sample, there are more perfect than imperfect rhymes.

Williams (2006: 67) also gives a list of rhymes in BM, but as regards those in Table 3, he includes only the nine which score penalty points, labelled W. He makes the mistaken comment (2006: 69):

> By the time of BM *mos* / *moys* 'to go', *dos* / *doys* 'to come' and *bos* / *boys* 'to be' have the same vowel as *goys* 'blood', *loys* 'grey' and *boys* 'food'. Because the two sets of words rhyme perfectly, the writer not only rhymes them with each other, but spells them identically as well.

Table 4 summarizes the differences between Williams' ideas and my own.

Table 4		Different interpretations of the data in Table 2a						
K.Kemmyn		**Williams**				**George**	**Observed**	
1st word	2nd word	vowel sounds	Type	expected		vowel sounds		
				%	No.		No.	%
-oes	***-oes***	['oː] ≡ ['oː]	"perfect"	25	8	['oː] = ['oː]	8	24
-oes	***-os***			50	**17**	['oː] ~ ['ɔː]	**9**	26
-os	***-os***			25	8	['ɔː] = ['ɔː]	17	50

If both sets of words really rhymed perfectly, then the two pools would have been combined into one. There being eight words in each contributory pool, one would expect, in a sample of sufficent size, roughly half of the rhymes to be ***-oes*** – ***-os***. Thus Williams' hypothesis would predict 17 of the 34 rhyming pairs in Table 2 to be ***-oes*** – ***-os***. The actual number found in BM is far fewer, at 9 cases just over half the predicted number. This suggests strongly that Williams' ideas are wrong.

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[8]   Only 3 of the 34 pairs rhyme voiced and unvoiced consonants, so it appears that it was actually more important to the author of BM to avoid such rhymes than to avoid rhymes between /-oC/ and /-ɔC/. Nowhere does he rhyme ***mos*** and ***nos***, for example.

In order to see whether BM is anomalous as regards rhyming pairs, we carry out a similar analysis for all of the rhyming texts in Middle Cornish (Table 5):

Table 5		Rhyming pairs with ['oːs], ['oːz], ['ɔːs], ['ɔːz] in Middle Cornish texts													
Rhymes	**Pts.**	**Number of rhyming pairs**							**Number of penalty points**						
		PA	PC	RD	OM	BM	BK	CW	PA	PC	RD	OM	BM	BK	CW
/-oz/ ≡ /-oz/	0	6	2	3	4	7	14	3	0	0	0	0	0	0	0
/-os/ ≡ /-os/	0			1		1					0		0		
/-ɔz/ ≡ /-ɔz/	0			1	1	5	9	1			0	0	0	0	0
/-ɔs/ ≡ /-ɔs/	0	4	5	6	3	11	4	2	0	0	0	0	0	0	0
/-oz/ = /-os/	1	5				1			5						
/-ɔz/ = /-ɔs/	1		1				1	7		1				1	7
/-ɔz/ ~ /-oz/	2					7							14		
/-ɔs/ ~ /-os/	2	No pairs of this type found													
/-ɔz/ ~ /-os/	3			1		2					3		6		
/-ɔs/ ~ /-oz/	3		1					1		3					3
Total		15	9	12	8	34	28	14	5	4	3	0	20	1	10
Penalty points per 100 pairs →									33	44	25	0	59	4	71
		0	*11*	*8*	*0*	*26*	*0*	*7*	← Percentage of pairs shaded red						

The average number of penalty points per 100 pairs is 34, and the mean percentage of pairs containing different rhyming vowels (those shaded red) is 10%. Williams' hypothesis would give about 125 and 50% respectively. It does not fit the observed data at all. Even the highest observed values (71 points for CW[9] and 26% for BM) are far below what it predicts. The data for BM, although above the average, are not markedly different from that for the other texts. **As regards the two stressed long mid-back vowels /o/ and /ɔ/, BM was phonologically similar to other material in Middle Cornish**.

3)   <oy> IN THE ORTHOGRAPHY OF *BEWNANS MERYASEK*

The spelling of rhymes was generally more important to authors of Middle Cornish verse than their phonetics. When they were faced with having to use poor rhymes, to spell them they chose one of two paradoxically opposite solutions.

Usually they deliberately modified the spelling of one (or even both) of the rhyming words in a pair so that the rhyming sequences had the same graphs. In Table 3, for example, we find the poor rhyme ['goːz] ~ ['bɔːz] at lines 1599-1603, but it is spelled *goys / boys; bos* has been changed to *boys*. There are eight such rhymes in Table 3, labelled E for **eye-rhymes**. BMa is notorious for some outrageous eye-rhymes, such as spelling **gwra** 'does' as *gruae* (BM.3201) in order to make it apparently rhyme with the loan-word *dute* 'duty'.

The other solution is to use different graphs which reflect the actual sounds. This method is favoured by the author of BK. Only once does Rad Ton use it in the rhymes in Table 3: the poor rhyme ['bɔːz] ~ ['loːz] at lines 2168-71 is spelled *bos / loys*, reflecting the phonetics.

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9   The score for CW is high because by the time of its composition *c*.1555, long stressed historical /-s/ had been voiced to [-z] (George 2024), and the classification given in the first column of Table 4 is not applicable.

We now turn to <oy> in BM generally, not just in rhyming words. As regards long stressed /o/, BM uses <oy> almost exclusively (Table 6), which is normal.

Table 6		Spelling of stressed long /o/ in BMa						
	boes	**goes**	**koes**	**loes**	**poes**	Others[10]	TOTAL	**goel**[11]
	food	blood	wood	grey	heavy			feast
<o>	2	0	0	0	0	2	**2**	5
<oy, oi>	12	27	6	5	4	11	**65**	0
%oy	*86*	*100*	*100*	*100*	*100*	*85*	***97***	*0*

It is in spelling long stressed /ɔ/ that BMa differs from the other texts. The commonest words in Table 3 with this vowel are **bos**, **dos** and **mos**. To these may be added **awos** 'because' and **os** 'thou art'. Table 7a lists how many times these words are spelled with <oy> and with <o> in BMa.

Table 7a		/o/ spelled as <oy> in more than half of the cases in BMa				
	awos	**bos**	**dos**	**mos**	**os**	TOTAL
	because	to be	to come	to go	thou art	
<o>	8	4	1	4	8	**25**
<oy>	13	75	16	40	21	**165**
%oy	*62*	*95*	*94*	*91*	*72*	***87***

<oy> is commoner than <o> for all five words. The word **os** is interesting because its Welsh cognate is *wyt*, which might lead one to expect ['oːz] as its pronunciation, but its rhymes (15 of them in the texts) are all with words containing /-ɔz/ or /-ɔs/, so it corresponds rather to Breton *out*.[12]

That **this extensive use of <oy> is peculiar to BMa** is shown by Table 7b. In the other Middle Cornish texts, <oy> either has very few examples or is entirely absent.

Table 7b		Profile of /ɔ/ for words in Table 7a									
		PC	RD	OM	PA	BMa	BMb	BK	TH	SA	CW
Graphs normally	<o>	**180**	**158**	**122**	**62**	25	7	**174**	**271**	**37**	**99**
associated with /ɔ/	Others (1)					1				5	14
Graphs normally	<oi, oy>				4	**165**			14	1	3
associated with /o/	Others (2)								1	1	16
Apparent errors	<a, e>	1							1		

 (1) <o-e>, <oe>, <oe-e>, <oa>
 (2) <oo>, <v>

The digraph <oy> is by no means universal in BMa for stressed long /ɔ/, however. For the common words in Table 8, <o> is much more frequent.

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[10] *diwoes* 'bleeds', *gloes* 'pang', *goel* 'sail', *koel* 'trusts', *moes* 'table', *oel* 'weeps', *troes* 'foot'.
[11] The spelling *gol* may be due to the reduction of length in phrases like **goel Mighal** 'Michaelmas'.
[12] Williams (2006: 61) notes the rhyme *lader athoys* (BK02.46) / *abarth om coys* (BK02.48). The second line he correctly translates as 'within my wood', but the first he renders as 'thou art a robber'. That the word **os** 'thou art' is found 33 times in BK spelled *os* (and once as *o*) should have warned him to the fact that *oys* in the first line is not **os** 'thou art' but **oes** 'age': the line is **lader a'th oes** 'a long-standing thief'.

Table 8	/o/ spelled as <oy> in fewer than half of the cases in BMa						
	bodh	*drog*	*flogh*	*mor*	*nos*	*plos*	TOTAL
	will	bad	child	sea	night	dirty	
<o>	24	23	24	5	19	10	**105**
<oy>	0	0	0	1	4	0	**5**
%oy	*0*	*0*	*0*	*17*	*17*	*0*	***5***

The fact that <oy> is commonly used in BMa for long stressed /ɔ/ only in certain words is very difficult to explain. In Dunbar & George (1997: 31) I suggested that Rad Ton used <oy> as a marker of length. This is reasonable for the words in Table 7a, but not those in Table 8, which appear to be equally long. Perhaps the simplest explanation is that Rad Ton just personally preferred <oy> for *awos*, *bos*, *dos*, *mos* and *os* and <o> for *bodh*, *drog*, *flogh*, *mor*, *nos* and *plos*.

4)   CONCLUSIONS

- As in the other verse texts, the rhymes in *Bewnans Meryasek* show that there were two rounded back vowels in Middle Cornish, /o/ and /ɔ/.

- As in PA and BK, long stressed /o/ in BMa was commonly spelled <oy>.

- BMa is exceptional among Middle Cornish texts in that <oy>, rather than <o> is used extensively to spell certain words which contain long stressed /ɔ/. Other words with long stressed /ɔ/ use the normal spelling <o>. This pattern is thought to reflect the individualistic spelling habits of Rad Ton.

5)   REFERENCES

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