

‘An Abominable System’? Manx orthography in its historical context

Christopher Lewin



*PhD, University of Edinburgh, Celtic and Scottish Studies
AHRC Centre for Doctoral Training in the Celtic Languages*



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Abstract

This seminar will examine the development of the two principal orthographies used in Manx Gaelic writing from the seventeenth century onwards, that of Bishop John Phillip’s manuscript translation of the Book of Common Prayer (c. 1610), and that of the eighteenth-century printed texts, most notably the Manx translation of the Bible (completed 1772).

Although it has long been derided by Celtic scholars and Manx language activists alike as ‘an abominable system, neither historic nor phonetic’ (O’Rahilly 1932), ‘an English monstrosity’ (Jackson 1955), and ‘a historical abomination’ (Fargher 1979), quantitative linguistic research demonstrates that there is considerably more regularity in Manx spelling than has been previously assumed, as well as significant innovations to represent phonological contrasts and developments not found in English or, sometimes, the other Gaelic languages. The Manx orthographies are revealed to be a valuable resource for tracing historical sound changes, unparalleled in other Gaelic dialects where conservative literary standards tend to obscure developments in the vernacular language.

The presentation will focus on a case study of the Manx orthographic representation of reflexes of the Gaelic vowels *ua(i)* */ua/ and *ao(i)* */ə:/, a particularly complex area of Manx phonology. It will be argued that a full and fair assessment of Manx orthography requires careful consideration of the historical sociolinguistic context in which it was created, and that apparent redundancies and ambiguities in its representation of the phonological system may be functional and intelligible within this context.

Manx orthographies

Manx Gaelic was the vernacular tongue of the majority of the population of the Isle of Man until the first half of the nineteenth century. For most of its history, Manx was largely an unwritten language, but for the last few decades of its vitality as a community language, there was a significant flourishing of literacy based mainly around translated religious literature.

Two main orthographies have been used for Manx. The first is that of Bishop John Phillips' translation of the Church of England's Book of Common Prayer, believed to have been completed around the year 1610. This translation was never printed for liturgical use but was edited by A. W. Moore and John Rhÿs in 1895 from the sole surviving manuscript,¹ and collated in a glossary by Robert Thomson.²

The second is that of the eighteenth and nineteenth centuries, first appearing in print in 1707 in Bishop Thomas Wilson's bilingual catechism *Coyrle Sodjeh*, and standardized to a significant extent in the printed prayer book translation of 1765 and the Bible completed in 1773, as well as in John Kelly's and Archibald Cregeen's dictionaries.

In line with convention, I will refer to eighteenth-century Manx and its orthography as 'Classical Manx', and that of Phillips' prayer book one hundred years earlier as 'Early Manx'.

Both systems are based predominantly on English models with little or no influence from the Gaelic orthography used in Ireland and Scotland. The two systems appear to be independent of one another to a significant extent, although there are certain commonalities.³

By the way, when I refer to 'Gaelic' in this presentation I mean the Gaelic languages collectively, but with regard to the examples given it means in practice Classical Early Modern Irish, which is generally the most useful point of comparison.

Views of scholars

Celtic scholars have tended to take a censorious view of the Manx orthographies, seeing them as cutting Manx off from its sister languages and hindering scholarship, as well as being ambiguous and inconsistent. The following views are typical (my emphasis):

The system of Manx spelling ... is **an abominable system, neither historic nor phonetic**, and based mainly on English.

(O'Rahilly 1932: 20)

¹ Moore and Rhÿs 1895.

² Thomson 1953; 1954–59.

³ Wheeler 2019: 3–8; Lewin 2015; Lewin 2020: 66–68.

Phillips and his successors, indeed, removed the reproach that it [Manx] was an unwritten language; but in so doing they **encumbered** it with an orthography which was hardly more fitted to represent its sounds than the orthography of Early Modern Irish would have been.

(O’Rahilly 1932: 120–1)

Manx orthography is an **English monstrosity** which **obscures** both pronunciation and etymology.

(Jackson 1955: 108)

Despite **fundamental deficiencies and diverse inconsistencies**, the result may have served the purposes for which it was devised. From a philological viewpoint, however, it had the **regrettable** effect of **imposing** on Manx a **wholly inappropriate spelling** which **obscured its historical relationship** with its congeners and **discouraged** scholarly interest in its investigation.

(Breatnach 1993: 2)

Ní rómhaith a fhreagraíonn litriú caighdeánach na Manainnise d’fhuaimneanna na teanga mar a labhraítí í. Ní leor mar sin feidhm a bhaint as téacsanna scríofa chun bunghnéithe fhóineolaíocht na Manainnise a léiriú.

(Williams 1994: 706)

The **arbitrary, unhistorical orthography** established for Manx in the early sixteenth century is likely to have an inhibiting effect on those familiar with the other branches of Gaelic

(Ó Cíobháin 2001: 393)

For various reasons, its present spelling system differs radically from traditional Goidelic spelling, but in other respects Manx displays many similarities with related languages and is to some degree intelligible to speakers of Irish and Scots Gaelic, once they have recovered from **the initial shock of its orthography**. The system itself is **riddled with exceptions and some inconsistencies**.

(Kewley Draskau 2009: xix)

Such views have also been predominant among activists and amateur scholars in the Manx revival movement.⁴ For example, the lexicographer Douglas Fargher describes the orthography as ‘a historical abomination’ which ‘destroy[s] the linguistic unity of the Gaels’.

My own view, also shared by many respected and authoritative speakers of the language, is that this system is a **historic abomination**, separating, as it does, Manx from the rest of Gaeldom, and thus **destroying the linguistic unity of the Gaels**, without replacing it with anything better in the way of a truly phonetic orthography.

(Fargher 1979: vi)

⁴ Ó hIfearnáin 2007; Lewin 2017a: 177–8; 2017b.

According to Ó hIfearnáin (2015: 116–7), negative attitudes to the orthography are still commonplace among Manx activists, especially with regard to the place of Manx in a pan-Gaelic context:

The ideological debate about the form of the orthography is certainly linked to the issue of the ‘Gaelicness of Manx’. Those in favour of acquiring some competence in Irish or Scottish Gaelic as a support of their endeavours to anchor Manx to its Gaelic roots point out that Gaelic orthography is not only an ideological question but has practical advantages for Gaelic learners as there are **regular associations between the system and pronunciation, grammar and etymology**. They say that the Gaelic system presents clearly the base forms of verbs and nouns but in particular the range of palatalised and non-palatalised consonants and their **lenited forms** which are challenging for English speakers and **masked to a great extent by Manx orthography**

(Ó hIfearnáin 2015: 116–7)

Thomson gives a more balanced assessment, weighing up both the representational deficiencies of the Manx orthographies compared with the Irish-Scottish system, but also pointing out some advantages:⁵

The English conventions mean that the radical and lenited or nasalized consonants lack the visible connection shown in Gaelic spelling, but the spelling has the advantage for the linguistic historian of showing the vocalization of fricatives and such new developments as svarabhakti vowels, and lengthening or diphthonging in monosyllables before unlenited liquids and nasals when these are not shown in the traditional orthography. The system is rather weak on the indication of palatalization, though better in this respect than the similar nonstandard orthography of Scottish Gaelic, based on Middle Scots usage. The conventions of English and Manx orthography, have, however, grown apart, and it by no means follows that Manx pronunciation is immediately apparent to the English reader. The spelling, moreover, has developed an iconic element, in that words of similar or identical pronunciation are as far as possible deliberately spelt differently.

(Thomson 1984: 307)

The advantages of the Manx orthography for linguists is also pointed out by Paul Russell:

The advantage of Manx orthography for the linguist is that it allows us access to the pronunciation of the language in a way that the standard Gaelic orthography does not, particularly with regard to the vocalization and diphthongization associated with the loss of fricatives

(Russell 1995: 229)

⁵ See also Broderick 2010: 306–7.

Characteristics of Manx orthography

We will begin with a brief look at the main characteristics of the eighteenth-century Classical Manx orthography. Most strikingly, it is based primarily on English spelling conventions.

English conventions:

<ee> /i:/	<i>shee</i> ‘peace’ G. <i>síth</i>
<i_e> /ai/	<i>drine</i> ‘thorn’ G. <i>draighean</i>
<oo> /u:/	<i>oor</i> ‘fresh’ G. <i>úr</i>
<ch> /tʃ/	<i>ching</i> ‘sick’ G. <i>tinn</i> but also /x/ <i>cheayll</i> ‘heard’ G. <i>chuala</i>
<v> /v/	<i>vannee</i> ‘blessed’ G. <i>bheannaigh</i>
<c>, <k>, <ck> /k ⁽ⁱ⁾ /	<i>cass</i> ‘foot’ G. <i>cos</i> <i>keeill</i> ‘church’ G. <i>cill</i> <i>eck</i> ‘at her’ G. <i>aici</i>

Some of these can be misleading to English speakers today because they reflect older or dialectal pronunciations no longer current in Standard English:

Early Modern English conventions:

<ea> /e:/	<i>crea</i> ‘creed’ G. <i>créadh</i>
<e_e> /e:/	<i>rere</i> ‘according to’ G. <i>de réir</i>
<oi> /əi/	<i>noi</i> ‘against’ G. <i>i n-aghaidh</i>
<gh> /x/	<i>logh</i> ‘lake’ G. <i>loch</i>

Then there are more specifically Manx conventions, although some of these too may derive from regional Middle and Early Modern English conventions.

Other Manx conventions:

<aa> /ɛ:/	<i>laa</i> /lɛ:/ ‘day’ G. <i>lá</i>
<ey> /ə/	<i>balley</i> /ˈbaliə/ ‘town’, G. <i>baile</i> (word-final position)
<y> /ə/	<i>my</i> /mə/ ‘my’, G. <i>mo</i> (other positions; monosyllables)
<_y> following broad consonant:	<i>moyll</i> /mol/ ‘praise’, G. <i>mol</i>
vowel length, following broad consonant:	<i>oyr</i> /o:r/ ‘reason’, G. <i>adhbhar</i>
<_i> following slender consonant:	<i>oirr</i> /ori/ ‘edge’, G. <i>oir</i>
vowel length, following slender consonant:	<i>ein</i> /e:ni/ ‘birds’, G. <i>éin</i>
<eo> /ə:/, /iə/	<i>eoylley</i> /ə:lɪə/ ‘dung’ G. <i>aoileach</i> (see below) <i>feoh</i> /fiə/ ‘hate’ G. <i>fuath</i> (see below)

Advantages

Now let's look at some of the representational advantages of the Classical Manx orthography. Firstly, it represents contemporary Manx speech, and not the pronunciation of an archaic supraregional standard as with most iterations of the Irish-Scottish orthography. We can see, for example, that the Gaelic word *daimh* 'oxen' was pronounced with a final fricative in Phillips' time (*déyf* */dēv/), but with a final semi-vowel or diphthong a century later (*dew* */dēu/). If the Gaelic orthography had been in use in Man, we would have no idea when this change took place.

Phillips (C17)	Classical Manx	
<i>déyf</i> /dēv/	<i>dew</i> /dēu/	'oxen' G. <i>daimh</i>

Secondly, it represents features of Gaelic pronunciation invisible in the Irish and Scottish system. The Manx orthography distinguishes schwa from other short vowels, so the plural ending *-yn* /ən/ is distinguished from the diminutive *-an* /an/ (Irish *-án*), whereas both are written *-an* in Scottish Gaelic:

<i>cassyn</i> /'kasən/ 'feet' ScG. <i>casan</i>
<i>cassan</i> /'kasan/ 'path' ScG. <i>casan</i>

Certain vowel shifts are represented, so the Manx spelling *glen* 'clean' shows raising of /a/ to /e/ in a nasal environment. This is attested in other Gaelic dialects, such as those of south-west Argyll,⁶ but there is no obvious way to show this in the Gaelic orthography:

<i>glen</i> /glen/ 'clean' G. <i>glan</i>

The Manx orthography distinguishes different reflexes of the vocalization of medial and final fricatives, such as the minimal pair *lioar* 'book' /ljo:r/ and *liauyr* 'long' /l'aur/, both *leabhar* in the Gaelic orthography:

<i>lioar</i> /ljo:r/ 'book' G. <i>leabhar</i>
<i>liauyr</i> /l'aur/ 'long' G. <i>leabhar</i>

Compare also the stem and inflected forms of *gow*, *goaill* 'take' (G. *gabh*, *gabháil*):

<i>gow</i> /gau/ 'take' G. <i>gabh</i>
<i>ghow</i> /ɣau/ 'took' G. <i>ghabh</i>
<i>goaill</i> /go:l'i/ 'taking' G. <i>gabháil</i>
<i>ghoghe</i> /ɣo:x/ 'would take' G. <i>ghabh(f)adh</i>

⁶ Jones 2010: 85, Scouller 2017: 100; *SGDS* II: 288.

The Manx orthography also represents epenthetic vowels. The distribution of these in Manx phonology is different from other Gaelic varieties. The Manx orthography clearly shows the epenthetic vowel in *gorrym* ‘blue’, and its absence in *jiarg* ‘red’. Both of these words have epenthetic vowels in Irish and Scottish Gaelic *gorm*, *dearg*, but this is not indicated in the orthography:

gorrym /'gorəm/ ‘blue’ G. *gorm*
jiarg /dʒɑrg/ ‘red’ G. *dearg*

The orthography also shows syncope of both epenthetic and historical vowels when further syllables are added, so *corrym* ‘equal’, Gaelic *comhthrom*, but *cormal* ‘compare’, and *gormaghey* ‘to colour blue’.

corrym /'korəm/ ‘equal’ G. *comhthrom*
cormal /'korma/ ‘compare’ G. **comhthromáil*
gormaghey /'gormaxə/ ‘to colour blue’ G. *gormaghadh*

Again, these contrasts cannot easily be indicated in the Irish-Scottish orthography.

Difficulties and ambiguities

Homophones differentiated by spelling

Homophones or near-homophones are often deliberately differentiated by spelling.⁷ Given that writers of Manx knew how the language was pronounced, distinguishing clearly between similar or homophonous lexical items would have been more important than accurate phonological representation. Examples of such homophones are as follows:

olley ‘wool’ (gen.) G. *olla*
ollay ‘swan’ G. *eala* both /'olə/

leigh ‘law’ ScG. *lagh*
leih ‘forgive’ G. *loghadh* both /ləi/

she ‘is, yes’ G. *is é*
shey ‘six’ G. *sé*
sheh ‘hide’ G. *seiche* all /ʃe:/

Even etymologically identical items may have different spellings to signify different senses:

⁷ Thomson 1984: 307; Thomson and Pilgrim 1988: 4.

<i>lieh</i> ‘half’ G. <i>leath, leith</i>	
<i>er-lheh</i> ‘apart, special(ly)’ G. <i>ar leith</i>	/ (er ^l) 'lɛ:/
<i>feanish</i> ‘witness, evidence’ G. <i>fiadhnaise</i>	
<i>fenish, fênish</i> ‘presence’	/'fɛ:nəʃ/
<i>marish</i> ‘with’ ScG. <i>maille ri</i>	
<i>mârish</i> ‘with him’	/'mɛ:rɪəʃ/

One sound, several spellings

There is thus a considerable amount of variation in the way a particular sound or sequence may be represented, especially in the vowels and diphthongs, as shown in the following examples:

/ɛ:/	<ea>	/kre:/	<i>crea</i> ‘creed’ G. <i>créadha, cré</i>
	<ay>	/kre:/	<i>cray</i> ‘clay’ G. <i>cré</i>
	<ey>	/ʃɛ:/	<i>shey</i> ‘six’ G. <i>sé</i>
	<eh>	/ʃɛ:/	<i>sheh</i> ‘hide’ G. <i>seiche</i>
	<ai>	/ne:m/	<i>naim</i> ‘uncle’ Eng. dialect ‘eme’
	<aiy>	/fɛ:r/	<i>faiyr</i> ‘grass’ G. <i>féar</i>
	<eai>	/'fɛ:lɪə/	<i>feailley</i> ‘festival’ G. <i>féile</i>
	<e>	/'fɛ:nəʃ/	<i>fenish</i> ‘presence’ G. <i>fiadhnaise</i>
	<e_e>	/fɛ:m/	<i>feme</i> ‘need’ G. <i>feidhm</i>
/o:/	<oa>	/no:/	<i>noa</i> ‘new’ G. <i>nuadh, nódh</i>
	<oy>	/o:r/	<i>oyr</i> ‘reason’ G. <i>adhbhar</i>
	<oi>	/to:nɪ/	<i>thoin</i> ‘bottom’ G. <i>tóin</i>
	<oe>	/o:/	<i>oe</i> ‘grandson’ G. <i>ó</i>
	<o>, <ô>	/'o:nə/	<i>oney, ôney</i> ‘innocent’ G. <i>ónna</i>
	<o_e>	/kɪo:n/	<i>kione</i> ‘head’ G. <i>ceann</i>
/ɛ:ɪ/	<aie>	/trɛ:ɪ/	<i>traie</i> ‘shore’ G. <i>tráigh</i>
	<aaie>	/fɛ:ɪ/	<i>faaie</i> ‘home field’ G. <i>faithche</i>
	<aih>	/grɛ:ɪ/	<i>graih</i> ‘love’ G. <i>grádh</i>
	<aigh>	/ɛ:ɪ/	<i>aigh</i> ‘luck’ G. <i>ádh</i>

One spelling, several sounds

On the other hand, a particular sequence of letters may represent several different sounds:

<oi(e)>	/o/	/orʲ/	<i>oirr</i> ‘edge’ G. <i>oir</i>
	/o:/	/no:di/	<i>noid</i> ‘enemy’ G. <i>námhaid</i>
	/əi/, /i:/	/rəi/, /ri:/	<i>roie</i> ‘run’ G. <i>rith</i>
	/o:i/	/bo:irʲə/	<i>boirey, boïrey</i> G. <i>buaidhreadh</i>
<ay>	/e/	/em/	<i>aym</i> ‘at me’ G. <i>agam</i>
	/e:/	/kʲe:/	<i>kay</i> ‘mist’ G. <i>ceó</i> , dative <i>ciaigh</i>
	/ɛ:/	/slɛ:nʲtʲ/	<i>slaynt</i> ‘health’ G. <i>sláinte</i>
	/a:/	/a:rn/	<i>ayrn</i> ‘part’ G. <i>earrann</i>
	/o:/, /u:/	/o:n/, /u:n/	<i>ayn</i> ‘in him, in’ G. <i>ann</i>
<eay>	/ə:/	/blə:st/	<i>bleayst</i> ‘husk, egg-shell’ G. <i>blaosc</i>
	/iə/	/kiən/	<i>keayn</i> ‘sea’ G. <i>cuan</i>
	/iə/	/friə/	<i>freayll</i> ‘keep’ G. <i>friotháladh</i>
	/e:/	/lʲe:rʲ/	<i>leayr</i> ‘clear’ G. <i>léir</i>
<ea>	/e:/	/re:/	<i>rea</i> ‘ram’ G. <i>reithe</i>
	/ɛ:/	/gɛ:rʲə/	<i>gearey</i> ‘smile, laugh’ G. <i>gáire</i>
	/iə/, /i:/	/liəx/	<i>leagh</i> ‘reward’ G. <i>luach</i>
	/o/, /e/	/folax/	<i>feallagh</i> ‘ones’ G. <i>?eallach</i>
	/e/	/edax/	<i>eaddagh</i> ‘clothes’ G. <i>éadach</i>

In many of these words there are other clues as to the required pronunciation, however; for example the double <dd> in *eaddagh* pointing to the shortened vowel.

English v. latinate / ‘continental’ vowel values

Long vowel representations usually have their Modern English value, reflecting the outcomes of the famous Middle English Great Vowel Shift, i.e. <ee> = /i:/, <oo> = /u:/, <i_e>, <ie>, <i> = /ai/. However, they may also have a value similar to that in other European languages. This gives rise, for example, to the potentially confusing pairs such as the following:

mian /miən/ ‘desire’ G. *mian*
Mian /'mai.an/ ‘Matthew’ G. *Maitheán*

kere /kʲe:rʲ/ ‘wax’ G. *céir*
kere /kʲi:r/ ‘comb’ G. *cíor*⁸

⁸ These items may have been semantically associated through *kere-volley* ‘honeycomb’ (G. *cíor mheala*). They are distinguished in Phillips as *kéir*, *káyr*, *káir* (G. *céir*), *kiyr* (G. *cíor*).

Representation of palatalization

Palatalized or slender consonants for which a similar sound is found in English generally have a specific representation in the Manx orthography corresponding closely to the English convention, i.e. <sh> /ʃ/, <ch> /tʃ/ (G. /tʰ/), <j> /dʒ/ (G. /dʲ/), <y> /j/ (G. /ʲ/) (also <ghi>).

Otherwise palatalization is most commonly indicated by the placing of <i> before or after the consonant symbol.

#C ⁱ	<i>niart</i>	/n ⁱ art/	‘strength’ G. <i>neart</i>
	<i>lhiabbee</i>	/l ⁱ abi/	‘bed’ G. <i>leaba</i> , dat. <i>leabaidh</i>
	<i>kiune</i>	/k ⁱ u:n ⁱ /	‘calm’ G. <i>ciúin</i>
	<i>my chione</i>	/mə ço:n ⁱ /	‘my head’ G. <i>mo cheann</i>
	<i>giat</i>	/g ⁱ at/	‘gate’ G. <i>geata</i>
VC ⁱ V	<i>s’taittyn, -in</i>	/s tati ⁱ ən ⁱ /	‘pleases’ G. <i>taitin</i> (<i>s’taittyn lhiam</i> ‘I like’)
	<i>troiddey</i>	/tro ⁱ d ⁱ ə/	‘chide’ G. <i>troid</i>
	<i>bainney</i>	/ba ⁱ n ⁱ ə/	‘milk’ G. <i>bainne</i>
	<i>theinniu</i>	/ten ⁱ u/	‘thaw’ ScG. <i>taineamh</i>
	<i>ooilley</i>	/ul ⁱ ə/, /ul ⁱ u/	‘all’ G. <i>uile</i>
	<i>quallian,</i> <i>quaillan</i>	/kwal ⁱ ian/	‘whelp’ G. <i>coileán</i>
	<i>cuirrey</i>	/kur ⁱ ə/	‘invite’ G. <i>cuireadh</i>
	<i>erriu</i>	/er ⁱ u/	‘on you’ G. <i>oirbh</i>
	<i>muickey</i>	/muk ⁱ ə/	‘pig’ gen. G. <i>muice</i>
	<i>s’buiggey</i>	/s bu ⁱ g ⁱ ə/	‘softer, softest’ G. <i>is buige</i>
C ⁱ #	<i>paitt</i>	/pa ⁱ t ⁱ /	‘plague’ ScG. <i>pait</i>
	<i>creid</i>	/kred ⁱ /	‘believe’ G. <i>creid</i>
	<i>thallooin</i>	/ta ⁱ ’lu:n ⁱ /	‘earth, land’ gen. G. <i>talmhain</i>
	<i>sooill</i>	/su ⁱ :l ⁱ /	‘eye’ G. <i>súil</i>
	<i>ooir</i>	/u ⁱ :r ⁱ /	‘earth’ G. <i>úir</i>
	<i>ooig</i>	/u ⁱ :g ⁱ /	‘cave’ ScG. <i>ùig</i>

The following are minimal pairs contrasting by palatalization, distinguished orthographically by <i>:

<i>att</i>	/at/	‘swell’ G. <i>at</i>
<i>aitt</i>	/ati/	‘funny’ G. <i>ait</i>
<i>meeley</i>	/mi:lə/	‘soft’ G. <i>míonla</i> , <i>míolla</i>
<i>meeilley</i>	/mi:l ⁱ ə/	‘mile’ G. <i>mile</i>

<i>dooney</i>	/du:nə/	‘close’ vn. G. <i>dúnadh</i>
<i>dooin</i>	/du:nj/	‘close’ stem G. <i>dúin</i>
<i>shooyl</i>	/ʃu:l/	‘walk’ vn. G. <i>siubhal</i>
<i>shooill</i>	/ʃu:lʲ/	‘walk’ stem G. <i>siubhail</i>
<i>cabbyl</i>	/kabəl/	‘horse’ G. <i>capall</i>
<i>cabbil</i>	/kabəlʲ/	‘horses’ G. <i>capaill</i>

Certain letter sequences are ambiguous, since they can indicate either the palatalization contrast, or vowel length and quality, or both, as in:

<i>fainey</i>	/fɛ:nʲə/	‘ring’ G. <i>fáinne</i>	
<i>fainagh</i>	/fɛ:nax/	‘chariot’ ScG. <i>feun</i>	
<i>faitagh</i>	/fatʲax/	‘shy’ G. <i>faiteach</i>	(Cregeen <i>fashagh</i>)
<i>bainney</i>	/banʲə/	‘milk’ G. <i>bainne</i>	
<i>daaney</i>	/dɛ:nə/	‘bold’ G. <i>dána</i>	
<i>baney</i>	/bɛ:nə/	‘white’ pl. G. <i>bána</i>	

In *fainey* the long vowel length is shown by the single <n> following <ai>, and the <i> can be taken as indicating slender /nʲ/ also. In *bainney* <i> shows palatalization and the double <nn> indicates a preceding short vowel. *Fainey* contrasts with *baney*, where the absence of <i> indicates a broad /n/, and the single <n> indicates a preceding long vowel.

The spelling *daaney* is clearer, with two signals of a long vowel, the digraph <aa> and the single <n>.

Faitagh, however, is not immediately clear; a knowledge of G. *faiteach*, or reference to transcriptions of native speech (*HLSM* II: 156),⁹ is necessary in order to be confident of the vowel length. Cregeen’s alternative spelling *fashagh*, showing medial voicing and fricativization of /tʲ/ > [dʲ] > [ʒ],¹⁰ would also help here, although it would be misleading taken on its own (since <sh> usually indicates underlying /ʃ/).

Similarly, *fainagh* is unclear because <ai> here represents only the long vowel, and does not indicate a following slender consonant. The vowels /e:/ and /ɛ:/ are usually clearly distinguished in the orthography (e.g. via the common spellings <ea> and <aa>), but in *fainagh* <ai> is also ambiguous between these two vowels.

In many cases there is no clear indication as to whether a consonant is broad or slender, as the following cases illustrate:

⁹ Even this evidence is not unambiguous, since we have to reckon with the tendency in Late Manx to lengthen certain short vowels. There is a short vowel in **fat’fux** from three speakers (TC, JW and HK), as well as in the abstract noun *faitys* ‘shyness’ **fat’fəs** (TC), but a long vowel from one speaker (TT): **fɛ:t’ax** (*HLSM* II: 156).

¹⁰ With <sh> being the nearest available orthographic representation for [ʒ].

<i>genney</i>	/gen ^ɨ ə/	‘scarcity’ (G. <i>gainne</i>)
<i>glenney</i>	/glənə/	‘clean’ (vn.), ‘clean’ (adj. pl.) (G. <i>glanadh</i> , <i>glana</i>)
<i>s’glenney</i>	/s glən ^ɨ ə/	‘cleaner, cleanest’ (G. <i>is glaine</i>)
<i>meinney</i>	/men ^ɨ ə/	‘meal’ (gen.) (G. <i>mine</i>)
<i>gien</i>	/g ^ɨ en/	‘cheer’ (G. <i>gean</i>)
<i>gennal</i>	/g ^ɨ enəl/	‘cheerful’ (G. <i>geanamhail</i>)

There is no indication that *s’glenney* (presumably) and *genney* (certainly) have /n^ɨ/, while *glenney* and *gennal* have /n/, whereas in *meinney* palatalization is marked by <i>. Slender /g^ɨ/ is clearly shown by <i> in *gien*, but not in its derivative *gennal*, which has no <i> and thus is not clearly distinguished from the broad /g/ in *genney* (from *goan*, *goaun* ‘scarce’, G. *gann*).

Redundant symbols

The Classical Manx orthography is replete with letters which are redundant or largely so. For example, the English convention of final ‘magic’ <e> is used as a marker of vowel length in Manx, e.g. *bane* /be:n/ ‘white’ (G. *bán*), but it is also very widespread in words where length of the preceding vowel is shown by other means, as in *baase*. Note that there is no danger of this being taken to mean final /ə/, which is always <ey> or very occasionally <ay>, <ah>; see especially *coyrle* and *Baarle* in the list below, which have loss of final schwa:

<i>baare</i>	/be:r/	‘top’ G. <i>barr</i>
<i>sheese</i>	/ʃi:s/	‘down’ G. <i>síos</i>
<i>coyrle</i>	/kõ:rl/	‘advice’ G. <i>comhairle</i>
<i>Baarle</i>	/be:rl/	‘English language’ G. <i>Béarla</i>
<i>jymmoose</i>	/dʒi'mu:s/	‘wrath’ G. <i>díomdha</i> + <i>as</i>

Late spellings

The biblical orthography became a standard which was followed, to a greater or lesser extent, by most subsequent writers. However, later spellings for words not found in the eighteenth-century texts (often for secular or modern concepts, and everyday life) may diverge from the Classical Manx conventions, sometimes showing later phonological developments.

This is notable in Cregeen’s dictionary, printed in 1837, where there are forms showing the medial lenition of /s/ to [ð] and /d/ to [ʒ]. These are never indicated in the Biblical orthography. These changes were apparently allophonic, with the lenited and unlenited forms varying freely in Late Manx speech:

Bible / Kelly:	Cregeen:		
gassree	gadyree, -ey	/gasərə/	‘heat’ (of bitches) ScG. <i>gasradh</i>
shisseryn	shuddyr	/ʃisər/	‘scissors’ G. <i>siosúr</i>
	Breeshey	/bri:də/	‘Bridget’ ScG. <i>Brighde</i>
faitagh	fashagh	/fatʰax/	‘shy’ G. <i>faiteach</i>

Misinterpretations by scholars

The kinds of ambiguities found in Manx spelling have led some scholars perhaps to overestimate the overall degree of arbitrariness in the orthography. However, in fact there are often obvious and relatively exceptionless patterns. For example, the orthography generally distinguishes long and short diphthongs and triphthongs arising from the vocalization of original fricatives, as in the following:

/i/ + /ɥ/	<iu>	<i>iu</i> ‘drink’ G. <i>ibh(e)</i>
/i:/ + /ɥ/	<eeu, ieu>	<i>screeu</i> ‘write’ G. <i>scriobh</i>
/iə/ + /ɥ/	<eeau>	<i>cleeau</i> ‘chest’ G. <i>cliabh</i>

In Late Manx all these are mostly found as monophthongal [u:]. Jackson (1955: 72–3) projects the twentieth-century realization of all three of these as /u:/ back to an earlier period and suggests an early shortening of long /i:/ in *iobh*, *iabh* causing the short */iv/ and long */i:v/, */iəv/ to fall together prior to vocalization of the fricative.

Jackson (1955) claims:	/iv/	>					
	/i:v/	>	/iv/	>	/iu/	>	/u:/
	/iəv/	>					
orthography indicates:	/iv/	>			/iu/	>	
	/i:v/	>			/i:u/	>	/u:/
	/iəv/	>			/iəu/	>	

The orthography on the other hand clearly suggests otherwise, since if Jackson were right, there would be no reason for the vowel sounds in these words to be spelled differently in the eighteenth century — we might expect them all to be written with <iu> *iu*, * *scriu*, * *cliu*, for example. Moreover, there is no motivation for the early shortening posited by Jackson. Further examples could be given of scholars glossing over clear evidence of systematic patterns in the Manx orthography in order to posit phonologically improbable forms and derivations.

Manx representation of Gaelic *ao* and *ua*

The rest of this presentation will be devoted to a case study which illustrates in more detail how Manx orthography can provide evidence for the historical pronunciation of the language.

The Manx developments of the Gaelic diphthong *ua(i)* (/ua/) and the long monophthong spelled *ao(i)* */ə:/ (deriving ultimately from the Old Irish diphthongs /ai/, /oi/, /ui/) are a complex and difficult topic.

The development of *ao* in particular is complicated in Gaelic historical phonology as a whole. We don't have time to discuss it in detail, but here is a map showing the main dialectal differences, and you can read my article on the topic in *Papers in Historical Phonology* if you are interested (Lewin 2018).

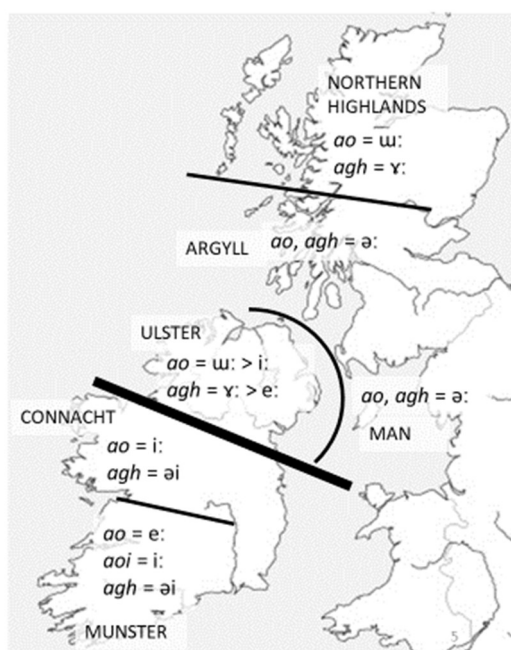


Figure A. Reflexes of the vowel */ə:/ ao in Gaelic dialects (Lewin 2018)

The main phonological changes in Manx are outlined in the diagram in **Figure B**. I give some example words in **Figure C**.

Gaelic *ua(i)* in most words has a fronted and unrounded realization /iə/ in Manx (e.g. *keayn*, *Jelhein*), but it is retained as back /uə/ in other words (spelled mostly <ooa> and <ua> in the Classical Manx system) (e.g. *tuarystal*), and certain words have both variants (e.g. *feayr*) in different dialects.

Gaelic *ao(i)* is a mid-high central vowel similar to that found in south-western Scottish dialects (e.g. *keyl*), with a tendency in Late Manx towards merger with long /e:/ before slender consonants (e.g. *eash*).

The Classical Manx orthography tends to represent both *ao(i)* and the fronted reflex of *ua(i)* by a number of letter combinations, especially <eay>, <ea>, <ey>, <eo>. Some of these letter combinations can also represent front vowels /e:/ (G. *é*), /ɛ:/ (G. *á*). This appears to suggest that (fronted) *ua* and *ao* were pronounced in a similar, but not necessarily identical way, both to each other and to the front vowels. Phillips’ orthography tends to distinguish them more clearly, as we shall see.

Before slender consonants the *ao* and *ua* vowels do, however, in most words merge as /ə:/, with a further development to /e:/ in some speakers.

Figure B. Main developments of G. *ua(i)*, *ao(i)*, *agh* in Manx

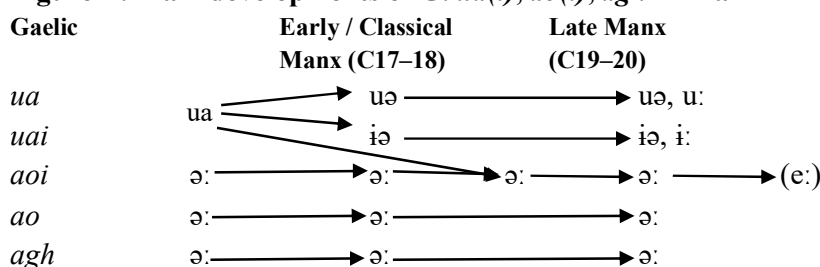


Figure C. Manx developments of Gaelic *ua(i)*, *ao(i)*, *agh*, example words:

		Classical Manx	Gaelic cognate	Manx pronunciation
<i>ua</i>	fronted	keayn ‘sea’	cuan	kʲən
<i>uai</i>	fronted	Jelhein ‘Monday’	Dia Luain	dʒeˈlɛ:nʲ > dʒeˈle:nʲ
<i>ua(i)</i>	back	tuarystal ‘appearance’	tuarascbháil	ˈtuəɾəstəl̪
<i>ua(i)</i>	variable	feayr ‘cold’	fuar	fʲuəɾ / fʲiəɾ
<i>ao</i>	central	keyl ‘slender’	caol	kə:l
<i>aoi</i>	central	eash ‘age’	aois	ə:f̪ > e:f̪
<i>agh</i>	merge with <i>ao</i>	leodaghey ‘diminish’	laghdaghadh	ˈlɛ:daxə

My interpretation of the linguistic developments differs somewhat from some of the previous accounts in the literature,¹¹ and is based partly on sources such as fieldwork descriptions by John Rhŷs (1894) and later scholars, as well as quantitative digital analysis of audio recordings. We do not have time to discuss this in detail now, but you are more than welcome to scrutinize the analysis in Chapter 3 of my PhD.¹² For now, let’s assume my account is correct, and see how the orthographic evidence matches up.

Phillips: Early Manx

In the seventeenth-century Phillips Prayer Book manuscript there are dozens of letter combinations representing the four categories Gaelic *ao*, *aoi*, *ua* and *uai*, i.e. the two vowel

¹¹ See especially Jackson 1955: 47–53; Broderick 1986: 57–60, 138–40.
¹² Lewin 2020.

sounds in question before broad and slender consonants. As most of you will know, in the Gaelic orthography, the additional <i> denotes a following slender consonant. The representations in Phillips range from one to three or even four characters, with substantial overlap between representations of the four categories. Some examples are given in **Figure D**.

Figure D. Examples of representation of *ao(i)* and *ua(i)* in Phillips MS:

	Gaelic	Phillips	Classical Manx	
<i>ua</i>	buan	búan (x4), bŷân, býan (x2), byan	beayn	‘eternal’
	chuala	g(h)ýyl (x 7), ghyyl (x2), ghýl	cheayll	‘heard’
	cuan	kien, kêyn, kýan	keayn	
	fuath	fûŷ, fua (x3), fŷa, fuá, fúa (x5), fúua	feoh	‘hate’
<i>uai</i>	uain	iëyn (x2), yĕn, yǣn	eayin	‘lambs’
	uaine	ûŷnæ, iæny	gheayney	‘green’
	gluaiseacht	glýságht, glýasyght, glýasagh, glyasaght glýasaght, glyysi	gleashaght	‘move’
	Dia Luain	ji líyn, ji liyn, ji lúeyn	Jylhein	‘Monday’
<i>ao</i>	daor	dýar (x3), dýyr (x4), dýær	deyr	‘dear’
	caora	kyrre, kyrry (x2), kyry; ny geragh, ny gerragh, ny gyrragh (genitive pl.)	keyrrey	‘sheep’
	saoghal	sýyl (x9), syyl (x5)	seihll	‘world’
	saor	syrr, sýyr (x3), séyr (x3), seyr (x2)	seyr	‘free’
<i>aoi</i>	aois	yǣsh, ýæsh, æysh, eysh (x2), êŷysh, úesh, uësh	eash	‘age’
	faoiside	feysht, fyǣst (x2), fúeast, fuást, feayst, fúeyst (x2), fýeyst, fæyst, fǣyst, fúest, fuéyst, fyést, féyest, féâst, fuast, ffyeyst	feysht	‘examine’
	caoineadh	keny, kény, kæny, keeny, kŷeny, kæny	keayney	‘cry’
	scaoileadh	skeley, skely (x3), skéle, skýale, skyle, skýlé, skyley, skýyl (x2), skeli, skéyl (x2), skîêlt, skǣyilt, skeliit	skeayley	‘spread’

Despite this complexity, clear patterns are discernible.¹³ In the analysis that follows, we will be looking at the letter combinations which make up the representation of the vowel sound. For example, here are some of the spellings of *feysht* ‘examine’ (G. *faoiside*) with the character sequence representing the Gaelic *aoi* vowel in colour. Sometimes we will be looking only at the **initial** letter of the sequence, here coloured in blue, and sometimes also the **following** characters, coloured in red:

¹³ In the following discussion Phillips’ diacritics are disregarded, and <æ>, and occasional instances of <ai>, are treated as equivalent to <e>. Likewise, a few instances of <o>-initial spellings are grouped with <u>.

(1) feysht (2) fyæst (3) fuéyst

Taking the evidence of the initial character of the letter combination (**Figures E, F**), the following observations can be made:

Figure E. Spelling of G. *ao(i)*, *ua(i)* in Phillips, by initial letter of orthographic sequence

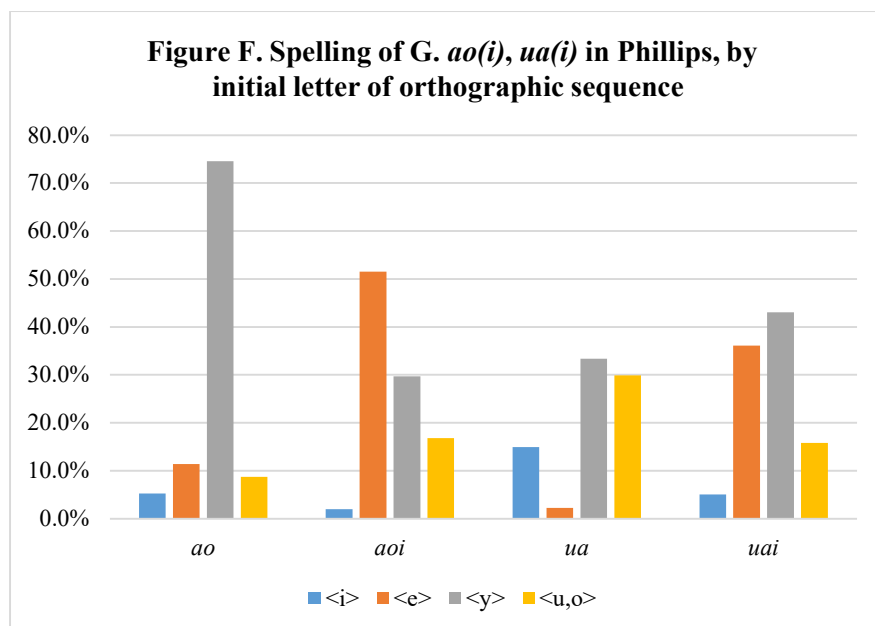
	no. of lemmas	total	<i>	<e/æ>	<y>	<u/o>
<i>ao</i>	16	114	5.3% (6)	11.4% (13)	74.6% (85)	8.8% (10)
<i>aoi</i>	21	101	2.0% (2)	51.5% (52)	29.7% (30)	16.8% (17)
<i>ua</i>	27	174	14.9% (26)	2.3% (4)	33.3% (58)	29.9% (52)
<i>uai</i>	25	158	5.1% (8)	36.1% (57)	43.0% (68)	15.8% (25)

(a) Spellings of the <y> type, while frequent (>30%) in all four categories, are especially prevalent in the case of *ao* (74.6%), for example *syyl* ‘world’, Classical Manx *seihll*, G. *saoghal*; *kyrry* ‘sheep’, CM *keyrrey*, G. *caora*. This presumably represents the mid central vowel /ə:/ reported in descriptions of Late Manx by Rhÿs and his successors.

(b) Spellings of the <u> type are most prevalent in the *ua* category, and can be associated with backer realizations of the historical /ua/ diphthong, e.g. *búan* ‘eternal’, CM *beayn*, G. *buan*.

(c) Before slender consonants, *aoi* and *uai* have a somewhat similar profile, with <e> and <y> being the dominant representations, although <e> is more prevalent in the case of *aoi*, e.g. *feysht* ‘examine’, CM *feysht*, G. *faoiside*. This suggests that at this early date *aoi* and *uai* were moving towards the merger before slender consonants seen in the later language. The <e> and <y> spellings can be interpreted as the allophone of /ə:/ which tends towards merger with /e:/.

(d) The <i> type is not frequent in any category (<6% for *ao*, *aoi* and *uai*), but is somewhat more frequent in the case of *ua* (14.9%), where it can be interpreted as representing fronted reflexes of historical /ua/, e.g. *kien* ‘sea’, CM *keayn*, G. *cuan*.



Evidence from non-initial characters in letter combinations

Further complexity is revealed if we use a finer-grained breakdown taking following letters into account, not just the initial letter of the sequence (**Figure G**).

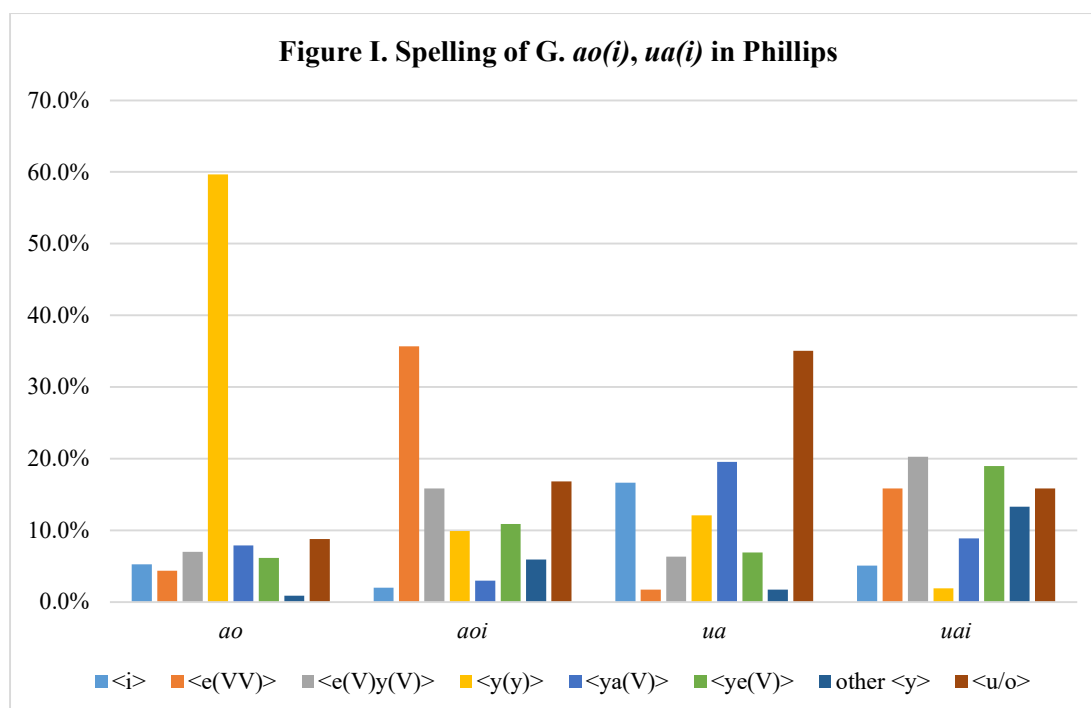
Figure G. Breakdown of orthographic categories <e> and <y>, taking into account following vowel characters (V = any vowel character)

<e(VV)>	<e> (including <æ>, <ai>) alone or followed by one or more other vowel characters (including <ee>)
<e(V)y(V)>	<e> followed by one or more vowel characters, at least one of which is <y>
<y(y)>	<y> or <yy>
<ya(V)>	<ya> only, or followed by an additional vowel character
<ye(V)>	<ye> only, or followed by an additional vowel character
other <y>	<y> in combination with vowel characters other than the above, e.g. <yi>
<e↔y>	<e(V)y(V)> and <ye(V)> combined

This breakdown is utilized in the table and chart provided as **Figures H and I**.

Figure H. Spelling of G. *ao(i)* and *ua(i)* in Phillips

	no. of lemmas	total	<i>	<e(VV)>	<e(V)y(V)>	<y(y)>	<ya(V)>	<ye(V)>	other <y>	<u/o>
<i>ao</i>	16	114	5.3% (6)	4.4% (5)	7.0% (8)	59.6% (68)	7.9% (9)	6.1% (7)	0.9% (1)	8.8% (10)
<i>ao(i)</i>	21	101	2.0% (2)	35.6% (36)	15.8% (16)	9.9% (10)	3.0% (3)	10.9% (11)	5.9% (6)	16.8% (17)
<i>ua</i>	27	174	16.7% (29)	1.7% (3)	6.3% (11)	12.1% (21)	19.5% (34)	6.9% (12)	1.7% (3)	35.1% (61)
<i>ua(i)</i>	25	158	5.1% (8)	15.8% (25)	20.3% (32)	1.9% (3)	8.9% (14)	19.0% (30)	13.3% (21)	15.8% (25)



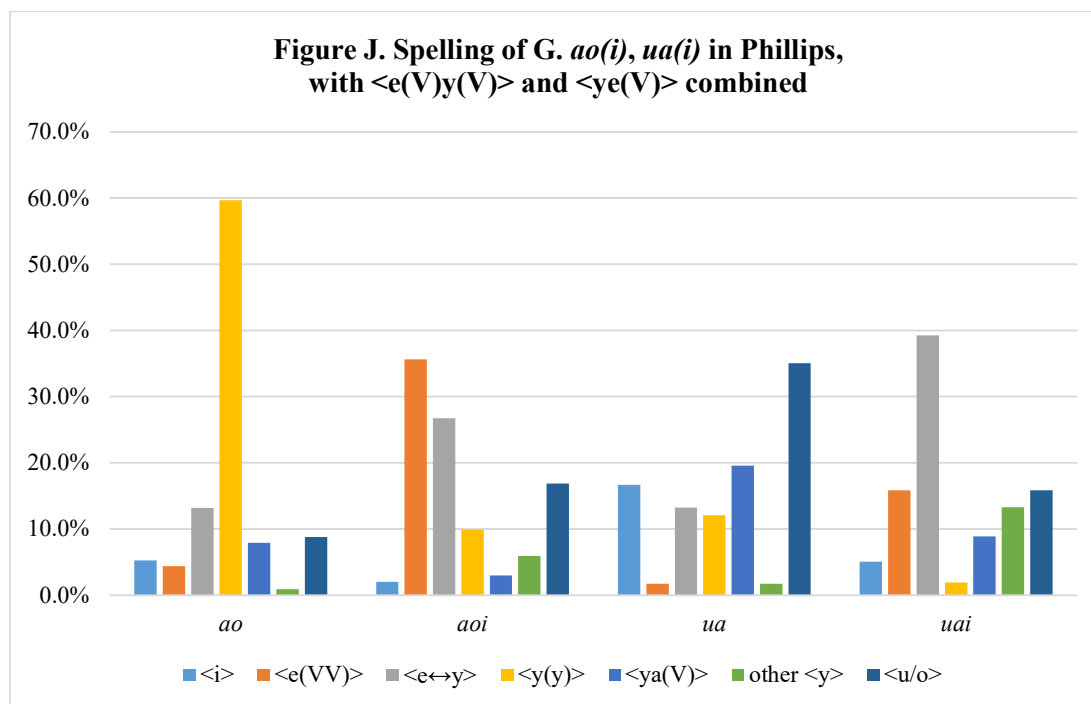
With this breakdown we see that:

(a) Letter combinations involving only the letter <y> (whether single or doubled) are overwhelmingly concentrated in the category *ao* preceding a broad consonant (59.6%, as opposed to <13% for the other categories), providing more robust evidence of monophthongal and non-merging /ə:/.

(b) The sequence <ya> is especially prominent in the category *ua* preceding a broad consonant (19.5%), and much less frequent (<9%) in the other categories. It is suggestive of fronted, central reflexes of historical /ua/ (i.e. [uə], [iə] or similar), but without the monophthongization to [i:] which is a feature of nineteenth-century Manx (as also with /iə/ > [i:], /uə/ > [u:]).

(c) Spellings involving <e> followed by <y>, or by a sequence of vowel symbols including <y>, are more frequent in the categories with a following slender consonant *aoi* (15.8%) and *uai* (20.3%) than in the other categories (<5%). As previously mentioned, this may be evidence of fronting towards merger with /e:/.

(d) If, as seems reasonable, it is assumed that <e(V)y(V)> and <ye> represent similar reflexes, and their totals are combined (as shown with the grey bars in the chart in **Figure J**), then the association between spellings involving the letters <e> and <y> and the categories *aoi* (26.7%) and *uai* (39.2%) before slender consonants is clearer, as distinct from *ao* and *ua* before broad consonants (both 13.2%).



Ao(i) and *ua(i)* contrastive with front vowels

The evidence we have just examined indicates the expected contrasts and commonalities before the four *ao(i)* and *ua(i)* categories. But are they represented distinctly from the front vowels to which they are adjacent in the vowel space?

Indeed evidence from a sample of Thomson's glossary of the Phillips text containing items with the Gaelic vowels /i:/, /ia/, /e:/ and /u:/¹⁴ (**Figure K**) clearly show patterns of representation distinct both from one another and from *ao(i)* and *ua(i)*. See for example, how /i:/, /ia/ show 100% representation by letter combinations headed by the letter <i>, in contrast to the variation between <i>, <y> and <u> representations of *ua*.

This is further evidence that the Manx reflexes of Gaelic *ao(i)* and *ua(i)* remained distinct phonemes in the seventeenth century, notwithstanding inchoate tendencies towards merger (*ua* > /iə/, /i:/; *aoi*, *uai* > /e:/) in some of the categories.

¹⁴ Mostly representing G. *i*, *ia*, *é*, *ú*, but also new long vowels arising from fricative vocalization, as in *bea* /be:/ 'life' (G. *beatha*).

Figure K. Orthographic representations of /i:/, /iə/, /e:/, /u:/ in Phillips¹⁵

/i:/	i (54), í (23), ii (3), íí (15), iy	
/iə/	ia (2), ía (2), íæ (2), ie (2), iy, iÿ	
/e:/	ie, îê (3), ia, éy (4), ey, êi, ée (18), ee (4), éa (4), ea (14), ê, é (5), e (5), áy, æy, æíí, æi (2), áéé, áeé, æa, á (8), æ (5), á, a	
/u:/	eu, iu (5), iú (11), iú, íu (2), îú, iúy, ôô (1), ou (3), u (28), ú (19), ù, ui (19), úi (5), ûi (2), ùi, uy (18), uÿ, uÿ, úy (7), yu	
	total	
/i:/	96	<i(V)> 96 (100.0%)
/iə/	10	<iV> 10 (100.0%)
/e:/	104	<e(V)> 88 (84.6%), <iV> 14 (13.5%), <a(V)> 2 (1.9%),
/u:/	132	<u(V)> 123 (95.5%), <oV> 4 (3.0%), <eu, yu> 2 (1.5%)

ua(i) in Phillips: preceding consonant conditioning and lexical diffusion

Further examination of the orthographic evidence from Phillips with regard to G. *ua(i)* sheds light on the phonological split between back /uə/ and the fronted reflexes /iə/, /ə:/, as shown in the later language by examples such as *keayn* ‘sea’ G. *cuan* as opposed to *tuarystal* ‘description’ G. *tuarascbháil*, and variable items such as *feayr* ‘cold’ G. *fuar*.

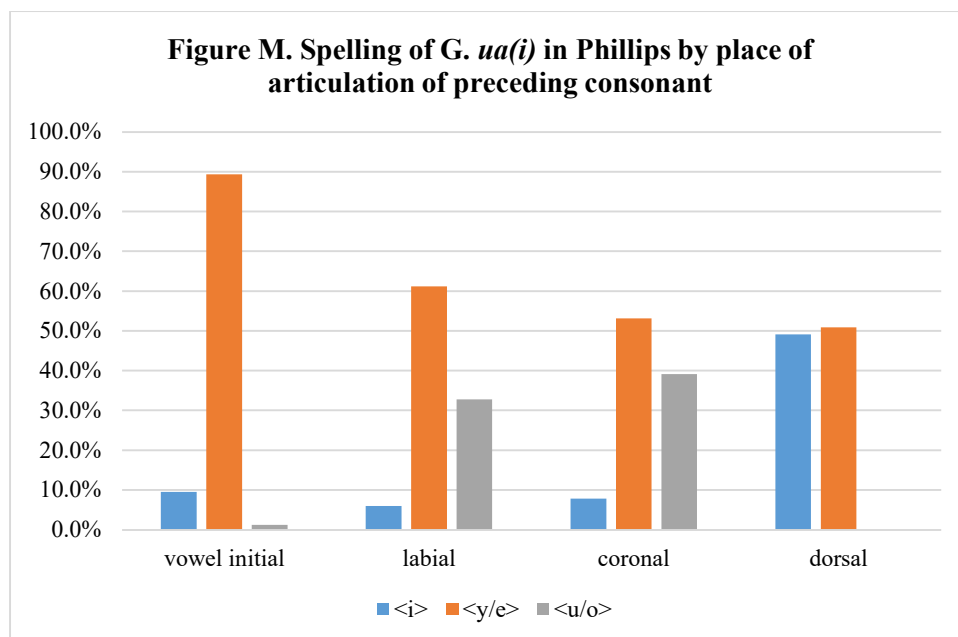
In the analysis in **Figures L and M** the letter combinations are again split into categories according to the initial letter in the sequence. It is assumed that <i> spellings represent the most fronted and unrounded realizations, while <u> spellings represent the most back and rounded realizations. The letters <y> and <e> are combined as they both appear to represent an intermediate degree of backness, without obvious distinction.

There is clear evidence of conditioning by preceding consonant. In **Figures L and M** the preceding consonants are split into three categories, according to place of articulation: labial (lips – /p/, /b/ etc.), coronal (around the teeth – /t/, /d/ etc.), and dorsal (back of mouth – /k/, /g/ etc.).

Figure L. Spelling of G. *ua(i)* in Phillips by place of articulation of preceding consonant

	no. of lemmas	total	<i>	<y/e>	<u/o>
vowel initial	8	84	9.5% (8)	89.3% (75)	1.2% (1)
labial	12	67	6.0% (4)	61.2% (41)	32.8% (22)
coronal	25	179	7.8% (14)	53.1% (95)	39.1% (70)
dorsal	8	53	49.1% (26)	50.9% (27)	0.0% (0)

¹⁵ In headwords beginning A–C in Thomson’s (1953) glossary.



For both the labial and coronal categories, <u/o> spellings represent around a third or more of instances. For the dorsal category, there are no instances of <u/o> at all, although it should be noted that the number of words in this category is relatively low. Also, there are no lexical items with preserved back /uə/ in Classical or Late Manx which have preceding dorsal consonants.

Superficially similar fronting and unrounding of *ua* in Ulster Irish after labials has been explained by Ó Dochartaigh¹⁶ as dissimilation between the labial consonant and the round quality of the vowel in items such as *fuair* ‘cold’. Ó Dochartaigh briefly mentions the Manx comparison but does not discuss it. In Manx, however, *feayr* ‘cold’ is among the items which may have retention of backness, and it might be hypothesized that the Manx fronting instead represents dissimilation between a dorsal consonant and the back quality of the following vowel, with subsequent (incomplete) extension to other environments.

This would explain why no instances of <u> spellings occur after dorsal consonants in Phillips, and why no lexical items are found in the which there is categorical blocking of fronting after dorsal consonants. In addition, the earlier and more complete fronting of *ua(i)* after dorsal consonants is suggested by the much greater prevalence of <i> spellings in this environment (49.1%) than in the others (all <10%).

Moving to the level of individual lexical items, it appears that a process of lexical diffusion was underway, which was less advanced in the period of the language represented by the Phillips text, judging by spellings such as *lua* ‘early, soon’ for later *leah* (G. *luath*), *luagh* ‘reward’ for later *leagh* (G. *luach*), *tua* ‘common people’ for later *theay* (G. *tuath*), *búan* ‘eternal’ for later *beayn* (G. *buan*).

¹⁶ Ó Dochartaigh 1987: 110.

Classical Manx orthography

We shall now move a century and a half forwards in time to examine the representation of Gaelic *ao(i)* and *ua(i)* in the standardized orthography of the main eighteenth-century texts such as the Bible and the new prayer book translation.

In the Classical Manx orthography, most items have one fixed spelling, making less feasible the kind of fine-grained analysis of orthographic variation possible with Phillips. There also appears to be considerably more overlap between orthographic sequences representing *ao*, *aoi*, *ua*, *uai*, and front vowels, as shown in **Figure N**.¹⁷ The words themselves are given in **Appendix B**.

There are no orthographic forms which are completely exclusive to reflexes of Gaelic *ao(i)*, *ua(i)* and *agh* (with the near exception of <eo>), and there is little to distinguish *ao(i)* and *ua(i)* from one another orthographically. Nevertheless, we can make the following observations:

(a) The representational overlap is mainly between *ao(i)* /ə:/ and *ua(i)* /iə/, /ə:/ on the one hand and *é* /e:/ on the other, and to a much lesser degree *á* /ɛ:/, *í* /i:/, *ia* /iə/. This would appear to support the conclusion that there was a significant degree of phonetic similarity between these vowel sounds, and that *ao(i)* and *ua(i)* were fairly fronted, and mid to high.

Figure N. Spellings representing *ao*, *aoi*, *ua*, *uai* in Classical Manx orthography

	(✓) - 3 instances or fewer				✓ 4 or more instances			
Classical Manx grapheme	<i>ao</i>	<i>aoi</i>	<i>ua</i>	<i>uai</i>	<i>é</i> ¹⁸	<i>í</i> ¹⁸	<i>ia</i> ¹⁸	<i>á</i> ¹⁸
eay, eayi	✓	✓	✓	✓	✓		(✓)	
ea, eah	(✓)	✓	✓	(✓)	✓	(✓)		✓ ¹⁹
ey, eyi	✓	(✓)			✓			
eo, eoa, eoy, eoh	(✓)	(✓)	✓					
ei, eih, eiy	(✓)	(✓)		(✓)	✓			
ee, eey, eei						✓		
eea							✓	
ia							✓	
ay					✓			✓
e_e					✓	(✓)		
a_e								✓
aa, a								✓

¹⁷ For meanings of *ao(i)*, *ua(i)* and *agh* items, see tables in the appendix.

¹⁸ Including also secondary long vowels arising from loss of fricatives, e.g. *bea* ‘life’ (G. *beatha* > **bé*).

¹⁹ Mainly raised allophones / mergers to [e:] before /rj/, e.g. *nearey* ‘shame’ (G. *náire*), *gearey* ‘laugh’ (G. *gáire*).

(b) Although some of the main spellings of *ao(i)* and *ua(i)*, namely <eay>, <ea>, <ey>, can also represent the front mid to high vowels, it is noteworthy that the reverse is not true. That is, there are a number of representations which never represent *ao(i)*, *ua(i)*, such as <ee, eey> (/i:/), <eea, ia> (/iə/), <ay, ai, e_e> (/e:/), <aa, ay> (/ɛ:/). This would suggest that there were indeed phonological contrasts between reflexes of *ao(i)*, *ua(i)* and these other vowels.

(c) Only one letter combination, <eo> (including <eoy>, <eoh>, <eoa>, <eoi>), is more or less unique to *ao(i)* (e.g. *eoylley* ‘dung’, G. *aoileach*) and *ua(i)* (e.g. *seose* ‘up’, G. *suas*), although it does not help in distinguishing between the two.

(d) <eay> is also very strongly associated with *ao(i)* (e.g. *meayll* ‘bald’, G. *maol*) and *ua(i)* (e.g. *eayn* ‘lamb’, G. *uan*).

The orthographic unit <eo>

We have seen the Classical Manx orthography contains clues suggesting the maintenance of the historical contrasts between Gaelic *ao(i)*, *ua(i)* and the front vowels, although with less clarity than that seen in the Phillips system.

The degree of ambiguity in the Classical Manx orthography requires explanation. It might be wondered why, firstly, no systematically clear way to distinguish these vowel sounds was adopted, and secondly, why less ambiguous representations such as <eo> (or the likes of Phillips’ <yy> and <ya>) seem to have been dispreferred and replaced by more ambiguous spellings such as <ea>.

Indeed, the use of <eo> in the Bible orthography seems to be a recessive survival from more widespread use in earlier, less standardized versions of the Classical Manx orthography. It is used for example:

- in the 1707 catechism, the first printed Manx text: *sleoi* ‘sooner’ (*s’leaie*, G. *is luaithe*), *feosle* ‘relieve’ (*feayshil*, G. *fuascail*);
- in the Manx adaptation of *Paradise Lost*:²⁰ e.g. *cheoy* ‘sea’ (*keayn*, G. *cuan*), *feon* ‘expansive’ (*feayn*, G. *fao(i)n*), *beoy* ‘eternal’ (*beayn*, G. *buan*), *chleosh* ‘ear’ (*cleaysh*, G. *chuais*), *feoyr* ‘cold’ (*feayr*, G. *fuar*);
- in variant spellings in Cregeen’s dictionary, e.g. *theo* ‘common people’ (*theay*, G. *tuath*), *cleoy* ‘propensity’ (*cleayn*, G. *claon*);
- in various manuscripts of the Bible translation, sermons etc.

To an extent, this probably reflects the organic way in which the orthography evolved through the interplay of the idiosyncratic preferences of different individuals and texts. In such a process, certain distinctions and patterns might, in time, come to be made more clearly and

²⁰ Printed c. 1796, but possibly deriving without substantial revision from a manuscript from the first half of the eighteenth century and with an earlier author than previously thought (Max Wheeler 2020).

consistently, but equally, there was no guarantee that the most “logical” orthographic forms would prevail.

In both spoken language and the writing systems based on them, native and proficient speakers can happily tolerate a good deal of redundancy and ambiguity, and very few writing systems come close to eliminating these entirely – certainly all iterations of the Irish-Scottish system are themselves burdened with numerous levels of opacity and historical accretions which the detractors of Manx orthography are happy to gloss over.

It should be remembered that accurate sound-spelling correspondence was not necessarily the chief concern of Manx writers.²¹ They were native or near-native speakers of Manx, immersed in Manx-speaking communities, and knew how the language was pronounced. Their concern was with the transmission of the texts they needed to write, and with distinguishing individual lexical items (especially the many homophones and near-homophones) for the sake of semantic clarity, rather than with accurate representation of phonological contrasts which, in any case, would often have had a light functional load.

A fair-minded assessment would also observe that the historical development of Manx orthography may be compared to the early stages of the Gaelic orthography, which took centuries to develop systematic representations of initial lenition and palatalized consonants, and did not distinguish hiatus from monosyllabic diphthongs until the clumsy adoption of unhistorical <th> etc. in Scottish Gaelic. The origins of the two systems — clerics adapting the orthography of a dominant prestige language, whether Latin or English — are also comparable. In a wider perspective, we should note that throughout history the vast majority of new orthographies and writing systems are adaptations from pre-existing systems used by another language. New systems created *ex nihilo* are very rare.

Another consideration is that the very complexity and fluidity of the situation with regard to the Manx reflexes of Gaelic *ua(i)* and *ao(i)* may have militated against marking the contrasts too finely, since this would result in spellings suited only for certain dialects or idiolects.

That is, there may have been an impetus, whether conscious or unconscious, to develop an orthography which could encompass multiple varieties of Manx, especially in view of the collaborative process by which the Bible was translated by clergy originating from and residing in many different parts of the island. Consider the variation attested in the following items:

[iə] ~ [uə]	<i>feayr</i> ‘cold’ G. <i>fuar</i>
[ə:] ~ [e:] ~ [uə]	<i>hooar</i> G. <i>fuair</i> ‘got, found’ (non-standard also <i>heyr</i> etc.)
[iə] ~ [ə:]	<i>geay</i> ‘wind’ G. <i>gaoth</i>
[iə] ~ [ə:] ~ [e:]	<i>cleaysh</i> ‘ear’ G. <i>cluais</i>
[i:] ~ [u:] ~ [o:]	<i>heose</i> etc. ‘up’ G. <i>thuas</i>

²¹ Thomson 1984: 307; Thomson and Pilgrim 1988: 4.

Attempting to distinguish these variant pronunciations more precisely in writing would have resulted in irreconcilable spelling variants between different writers. Perhaps it was better to have vaguer spellings than to be forced to come down explicitly in favour of one variant or the other — although this was unavoidable in the case of *feayr* and *hooar*, both of which had front and back spoken forms.

The very consistent retention of <eo> in *heose* ‘up’, both in the standard orthography and in otherwise less standardized manuscripts, may reflect the existence of a variant with /o:/ (cf. early Gaelic *ós*).

Otherwise, the apparent restriction in the use of <eo> in the standard may reflect an aversion to orthographic forms which diverge too far from English norms, since the letter sequence <eo> is not a frequent or phonologically meaningful orthographic unit in English spelling (largely restricted to the individual word *people*). This would also help to explain why there seems to have been no widespread attempt to adopt Phillips’ <y(y)>, <ya> etc., despite the use of <yy> in one early sermon manuscript,²² since these might seem too alien from an English point of view.

Spelling reform?

I will conclude my discussion of the Classical Manx spelling by mentioning the present-day situation. As mentioned earlier, the orthography has been largely fixed since the completion of the Bible in the 1770s, and subsequent printed texts largely follow this standard. Today the same standard, with only minor modifications, is used in the context of the revived language, as well as in normalized academic editions of Manx texts.

As seen in the quotation from the revivalist lexicographer Douglas Faragher at the start of this presentation, a common attitude within the revival community has been one of only grudging acceptance of the Classical Manx spelling system as a necessary evil.

Some have hankered after the more “Gaelic” system used in Ireland and Scotland, although it is generally accepted that the upheaval and technical questions involved in switching over to some version of the “Gaelic” system would be more trouble than they are worth, as discussed by Ó hIfearnáin (2007: 169):

Even if the potential for disagreement among the most active members of the speech community were to be overcome, and the majority of the Manx population won over to the need for a change, there would still be many difficulties to be overcome for Manx to adopt a Gaelic orthography. The biggest of all of these is the lack of expertise to create a Manx version of Gaelic orthography that would be an improvement on the current system from the perspective of Manx itself. It is not possible simply to start writing Manx as if it was Scottish or Irish Gaelic. It would need its own conventions. It would not be impossible to define these, but such work

²² Lewin 2015: 74.

would require a research team, professional training over several years, and would after that be time and resource consuming in itself. All of this would be without any certainty of agreement before such Manx Gaelic orthographic conventions could be published. Currently there are not enough experts in Manx to develop such a system, nor is there a clear majority who would be willing to subscribe to its implementation.

(Ó hIfearnáin 2007: 169)

My own view is that the inferiority complex of Manx speakers with regard to the “Gaelic” orthography is unwarranted, and we have every right to be proud of our forebears’ achievement in creating and standardizing an orthographic system which, despite its flaws, was more than adequate to meet their needs, and considerably more sophisticated and systematic in terms of sound-spelling correspondence than other attempts to write Gaelic in English or Scots orthography, such as that found in the Book of the Dean of Lismore.

Of course, some of the ambiguities in the present standard could in principle be ironed out. Taking one of the sets of words discussed earlier, we could make more consistent use of the existing spelling conventions to eliminate the ambiguities:

standard	hypothetical reform		
<i>fainey</i>	<i><u>fa</u>ainey</i>	/fɛ:nə/	‘ring’ G. <i>fáinne</i>
<i>fainagh</i>	<i><u>fea</u>nagh</i>	/fɛ:nax/	‘chariot’ ScG. <i>feun</i>
<i>faitagh</i>	<i><u>fai</u>ttagh</i>	/fatʰax/	‘shy’ G. <i>faiteach</i>
<i>bainney</i>	<i>bainney</i>	/banə/	‘milk’ G. <i>bainne</i>
<i>daaney</i>	<i>daaney</i>	/dɛ:nə/	‘bold’ G. <i>dána</i>
<i>baney</i>	<i><u>ba</u>aney</i>	/bɛ:nə/	‘white’ (pl.) G. <i>bána</i>
<i>glenny</i>	<i>glenny</i>	/glənə/	‘clean’ (pl. / vn.) G. <i>glana(dh)</i>
<i>genney</i>	<i><u>ge</u>inney</i>	/genə/	‘dearth’ G. <i>gainne</i>
<i>gien</i>	<i>gien</i>	/gʲen/	‘cheer’ G. <i>gean</i>
<i>gennal</i>	<i><u>gi</u>ennal</i>	/gʲenal/	‘cheerful’ G. <i>geanamhail</i>
<i>Mian</i>	<i><u>Mi</u>ean</i>	/maian/	‘Matthew’ G. <i>Maitheán</i>
<i>mian</i>	<i><u>me</u>ean</i>	/miən/	‘desire’ G. <i>mian</i>
<i>kere</i>	<i><u>ke</u>ir</i>	/kʲe:rʲ/	‘wax’ G. <i>céir</i>
<i>kere</i>	<i><u>ke</u>eyr</i>	/kʲi:r/	‘comb’ G. <i>cíor</i>

I suspect, however, that even such modest reforms would probably be more trouble than they are worth in terms of potential disagreement, confusion and relearning, and the need to replace existing published materials.

In general, it appears to me that most spelling reforms are motivated more by pedantry and purism than by genuine functional necessity or objective assessment of costs and benefits. Either they are so thorough-going as to achieve a significant functional improvement, but at the cost of considerable upheaval (for example, the introduction of Roman instead of Arabic alphabet for Turkish, or perhaps the introduction of the Irish *Caighdeán Oifigiúil*), or else a reform is too modest to make much functional difference, but can still cause significant

disruption and lingering controversy (as with the German spelling reform of the 1990s, and elements of the successive *GOCs* in the Scottish Gaelic context).

There are advantages to having an established standard where, by and large, every word has a single, agreed spelling, even if some of the sound-spelling correspondences could in principle be more consistent than they are.

Conclusion

To wrap up, I hope that I have shown that, although the Manx orthographies are certainly complex and not free from inconsistency and ambiguity, they nevertheless represent considerably more sophisticated attempts to represent Gaelic phonology than has often been appreciated. Combined with other evidence, Manx spelling is an important tool for reconstructing the pronunciation of the language, which in turn contributes to our understanding of the development of the Gaelic languages more broadly.

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Appendix A. Lexical items with *ao(i)*, *ua(i)* etc.

The following tables show most of the items with historical G. *ao(i)*, *ua(i)*, *agh* (etc.), with the exception of the new diphthongs arising from vocalized fricatives and certain other problematic lexical items (see Lewin 2020, §3.9).

ao > /ə:/

	Phillips	CM pronunciation	etymology	English
bleayst		/blə:st/	blaosc	husk, egg-shell
ceaghley		/kə:xlə/	claochlódh, ScG. caochladh	change
cleayn (Bible, Cr.), cleoyn (Cr.); cleayn(agh)ey		/klə:n/, /klə:nə/	claoadh	enticement, propensity, seduction; entice, seduce, tempt
deyll (K.), tarroo-deyill (Cr.)		/də:l/	daol	beetle
deyr	ýa (3), ýy (4), ýæ	/də:r/	daor	dear
deyrey	uæ, ý (2)	/də:rə/	daoradh	condemn
Ph. dysyn, cf. deyrnys (Cr.)	ý (2), y, éy	*/də:ʒən/	ScG. daorsainn	dearth
eayl		/ə:l/	aol	lime
eaynagh, eaynee		/ə:nax/	aonach	desert, waste
eanin (Cr.), eaynin (Cr., K.)		/ə:nən/	cf. ScG. aonan	precipice
feayn	ýy	/fə:n/	fao(i)n	wide, expansive, void, waste
freoagh		/frə:x/	fraoch	heather
gaer		/gə:r/	ScG. gaorr	short dung, ordure
geay; geayagh	yei, ýæi, ya (2), ýa (3), ýæ (3), ye, ua, úa	/gə:/, /giə/	gaoth; gaothach	wind; windy
inney-veyl	éy, ýy (2), yy (2), ée	/in'ə 'və:l/	inghean mhaol	handmaid, servant girl
keirn		/kə:rn/	caorthann	rowan
keyl		/kə:l/	caol	slender
keyllys		/kə:ləs/	caolas	sound

keynnagh		/kə:nax/	caonach	moss
keyrrey, gen. keyrragh	y (4), e (2)	/kə:rə/, /kə:rax/	caora, caorach	sheep
kirree	kirri, kiri	/kiri/, ? /kiri/	caoirigh, caoraigh, ScG. caoraich	sheep (pl.)
kyagh (K.)		/kə:x/ ?	caoch	one-eyed, blind
kyaghan (K.)		/kə:xan/ ?	caochán	mole
leaum (Cr.), lheaym (K.)		/lə:m/	laom	sudden heavy shower of rain
meayl		/mə:l/	maol	bald
meayllee		/mə:li/	maolaidhe	hornless cow
meoir		/mə:r/	maor	moar, bailiff, government officer
seihll; seihlt(agh)	ýy (11), yy (5)	/sə:l/, /sə:ltax/	saoghal; saoghalta	world; worldly
seyr	y, ýy (3), éy (3), ey	/sə:r/	saor	free
seyr		/sə:r/	saor	carpenter
seyrey	ýy (3), ya	/sə:rə/	saoradh	acquit, free
sleaydey; sleaydagh		/slə:də/, /slə:dax/	slaodadh	drag
t(h)eaymey (Bible, K.), teaumey (Cr.)		/tə:m/	taomadh	bail out water, teem
teaym		/tə:m/	taom	whim, fancy, fit
teayst		/tə:st/	taos	dough
teaystney		/tə:snə/	taosnadh ScG.	knead
un	y (13), ý, ú (2), u (2)	/un/	aon	one

aoi > /ə:/ (>/e:/)

	Phillips	CM pronunciation	etymology	English
aaie eayil, aaie gheayil		/e:i (γ)ə:l/	áith aoil	limekiln
deiney	é (3), e (4)	/də:nə/	daoine	men
eash	yæ, ýæ, áy, ey (2), êýy, úe, ué	/ə:j/	aois	age
coylley	ýy	/ə:lə/	aoileach	dung

feoilt(agh)	ei (2), êy	/fə:lɪtʲ/	faoilte(ach)	generous
feysht	ey, yá (2), úea, uá, eay, úey (2), ýey, æy, áy, úe, uéy, yé, éye, éâ, ua, yey	/fə:ʃtʲ/	faoiside	examine, question
geaysh(t)		/gə:ʃ(t)/	gaoisid	animal hair
Jecrean (Cr.), Jy-curain (K.)		/dʒe'krə:nɪ/	Dia Céadaoin	Wednesday
Jeheiney (Cr.), Jy-heney (K.)	é (2)	/dʒe'hə:nʲə/	Dia hAoine	Friday
Jerdein (Cr.), J'ardain (K.)	ey	/dʒar'də:nɪ/	Diardaoin	Thursday
keayney	e, é, æ (2), ee, ýe	/kə:nʲə/	caoineadh	weep, cry
keiyn (Bible, Cr.), keayn (Cr.), keain (K.) ²³	éy	/kə:nɪ/	caoin	kind, delicate
meaish (Cr.) meays (K.)		/mə:ʃ/	maois	mease, measure of herring
riyr (see §3.9.4)		/rairɪ/	araoir, aréir, EIr. irráir	last night
skeayl(l)ey; skeayltagh	e (6), é, ýa, y (2), ý, ýy, éy (2), îê, æy, ai, ey	/skə:lʲə/	scaoileadh	spread, scatter
tarroo-deyill		/, taru 'də:lɪ/	*tarbh daoil	bull-worm

ua > /iə/, /iː/

	Phillips	CM pronunciation	etymology	English
beayn; co- beayn	úa (4), ýâ, ýa (2), ya	/biəɲ/	buan	eternal, lasting; co- eternal
beaynee	úa	/biəni/	buanaidhe	reaper
beoyñ		/biəɲ/	buan ?	tendency, drift, instinct (Cr.), 'necessity, fate' (K.)

²³ Thomson (1953: 248 s.v. KEYN) wrongly indicates that this word is found only in Phillips; in fact it is a securely-attested, if not especially common, item in Classical Manx.

cheayll, geayll	ýy (7), yy (2), ý	/xi̯əl/, /gi̯əl/	chuala	heard
creagh		/kri̯əx/	cruach	rick, stack, heap
creoghys, creoighys; creoghan (K.)	ye, yey, ýo, úa, iy	/kri̯əxəs/	cruas, cruadhas, cruachás; cruadhachán	hardness, hardship; gadfly, harsh creditor
deayrtey	iâ, îy, ýa (4), ýy (2), ue, ie, ya (2), yá (2), ýy, iy (3), ye, iê	/di̯ərtə/	dortadh, doirteadh, *duartadh	pour, spill
eaghtyr	iy (3)	/i̯əxtər/	uachtar	surface
eayn	ey (2), éy (2), áy (2), æy, eâÿ, eay, yea, yeã, ýêa, yéa, ýea, ýe, êya	/(y̯)i̯ə̃n/	uan	lamb
feaysley, feayshil	ýa (5), ya (8), iâ, ia (2), ýâ, ea, ue, yá	/fi̯əslə/	fuascladh	untie, release, relieve
feoh	ûÿ, ua (3), ýa, uá, úa (5), úua	/fi̯ə/	fuath	hate
geayl	ýy	/gi̯əl/	gual	coal
geaylin	ýa	/gi̯ələni/	gualainn	shoulder
keayn	ie, êy, ýa	/ki̯ə̃n/	cuan	sea
leagh	úa (7), uá	/li̯əx/	luach	value, reward
leah	ýa, iæ, iæ, úa (3), ua (3), ýæ	/li̯ə/	luath	early, soon
leaystey		/li̯əstə/	luascadh	swing, rock, reel, stagger
leaghyr, laghyr, leoighyr (Cr.), leeaghar (K.)		/li̯əxər/	luachar	rushes
leoh (Cr.)		/li̯ə/	luaith, gen. luatha	ash (gen.)
Lhein, Lheiun (Cr.)		/li̯ə̃n/	Luan	Monday
skeab	y (2)	/ski̯ə̃b/	scuab	brush, broom
sleayst		/sli̯ə̃st/	sluasaid	shovel, fan
they, theo (Cr.)	ua	/ti̯ə/	tuath	common people

***uai* > /ə:/ (>/e:/), /iə/ (>/i:/)**

	Phillips	CM pronunciation	etymology	English
cleaysh	ye, ua (2), úa (6), úæ, ya (4), ýa (6)	N /kliəʃ/, S /klə:ʃ/	clua(i)s	ear
eayin	iĕ (2), yĕ, yǣ	/(y/j)iəni/, /(y/j)ə:ni/	uain	lambs
geayltn	ýy	/giəltʃən/	*guailtean, G. guailne, ScG. guailnean	shoulders
g(h)eayney	ûÿ, iæ	/(y)ə:nə/	uaine	green
gleashagh(t)	y, ýa (3), ya, yy	/glə:ʃax(t)/	gluaiseacht	move
Ph. ienchys etc.	ie (2), e, æy	*/ə:ntʃəs/	uain	opportunity, leisure
Jelhein (Cr.); Jy-luain (K.) Jelune, Jelhuin (Cr.) ²⁴	í, iy, úey	/dʒe'lə:ni/	Dia Luain	Monday
keayrt	iy (5), iý, íy (2), ýi, yi, iê, eiy, yy (2), ýy, iÿ	/kiərt/	cuairt	time, occasion
lhei hll (Bible, Cr., K.), lhei ll (Bible), lheil (Cr.)		/lə:l/	luadhail ²⁵	motion, power of movement
mygeayrt	iy (8), iÿ (2), íy (2), yi (2), iÿ, i (2), y, éy	/mə'giərt/	ma gcuairt	around, about
neayr's		/n ⁰ iəɾəs/	? an uair agus	since
treickney, treicknane (Cr.), tratney, traitney, tratneayn (K.)		/trə:k'nə/, /trə:t'nə/; /trik'i'n'e:n/, /trit'i'n'e:n/	tuairgneadh, tuairgnín	beat; beetle, mallet

²⁴ Spelling based on supposed etymology.²⁵ Apparently treated as > *luail*, or via */lə:i.əl/.

ua(i) > /uə/, /u:/, /o:/

There are a number of items which categorically retain back /uə/ (> Late Manx /u:/). Included are certain items such as *mooar*, *booa*, *sto(o)amey* which may also have /o:/ within Manx or in other Gaelic varieties; this generally appears to block development of fronting, although cf. *deayrtey* ‘pour’ (G. *dórt-*, *doirt-*, *duart-*). There are also a number of items with both fronted and unfronted variants (see below).

	Phillips	CM pronunciation	etymology	English
booa	uó	/buə/	bó, cf. dat. pl. buaibh; buachaille etc.	cow
druaiaght (Bible), druaight (Cr.), druiagh(t) (Bible, K.), cf. drualtys, driualtys (Cr.)		/druəjəxt/, ? /drə:jəxt/	draoidheacht, druadh-	enchantment
dwoaie; dwoaiagh, dwoaioil	dùôi, duoi; (<i>dwoaioil</i>) duoiyl, duoióyl, duoióel	/duəj/	duadh (Ir. m.), duaidh, ScG. duaidh (f.)	hate, dislike
groamagh (Cr., K., Bible), grooamagh (K.)		/gro:məx/, /gruəməx/	gruaimeach	gloomy, sorrowful, sullen
gruaie		/gruəj/	gruaidh	cheek; grimace
mooar	ua (5), úa (10), úy, úay	/muə/	mór, Munster Ir. muar	big, great
smooïnaghtyn (§3.9.9)	ú (11), u (5), úi (2), ui, uy	/smu:njəxtən/	smuain, smaoin	think, thought
stoamey, stooamey		/sto:mə/, /stuəmə/	stuamdha	comely
tuarystal (Cr, K., Bible), tooarystal (SW)		/tuəɾəstal/	tuarascbháil	appearance, form, resemblance
twoaie	uoi (2), ûôi, ûêi	/tuəj/	tuaidh	north
twoaie; twoaiagh	uôi (2), ûôi (2), uói, oi, ôi	/tuəj/, /tuəjəx/	tuaithe (Dinneen)	beware; wary

ua(i): items with variable reflexes

	Phillips	CM pronunciation	etymology	English
clooiesag (Cr.), cleayshteig ²⁶		? /klu:isag/, /klə'ʃt̪e:g/	ScG. cluasag	pillow, bolster, cushion
feayr	úa, íya	/fiə̀r/, fuə̀r/	fuar	cold
feayght, feayraght	ya	/fiə̀xt/, /fuə̀xt/, /fiə̀rxt/, /fuə̀rxt/	fuacht	cold, coldness
heose, seose, neose	ua (6), úa (14), uá (4), u, ya (2)	/hiə̀s/, /hu:s/, /ho:s/	thuas, suas, anuas	up
hooar, dooar, fooar (PC, Ph.)	éy (12), áy (2), ey (3), æy (4), óy (2), eý, êÿ, ýy, uóe, ûêy	/huə̀ri/, /hə:r/	fuair	got, found
ooasle; ooashley	ýa (10), yá, ya (5), ýæ	/uə̀səl/, /wusəl/, /uə̀ʃl̪ə/, /wuʃl̪ə/	uasal; uaisle	noble, worthy; worship, honour

²⁶ Cregeen's form is apparently influenced by *clooie* 'small feathers, fur' (G. *clúmh*, ScG. *chlùmh*, *clòimh*), as further suggested by his definition of *clooiesag* 'a bolster of feathers'.

Appendix B. Spellings representing *ao*, *aoi*, *ua*, *uai* in Classical Manx orthography

The following lists show the letter combinations employed to represent G. *ao(i)*, *ua(i)* and *agh* (>/ə:/) in the Classical Manx orthography and the lexical items in which they appear, together with other etymological phones which the same orthographic elements can also represent. To avoid more sporadic or idiosyncratic spellings, only those forms attested in the completed Bible (1819 edition), and/or from both Cregeen's and Kelly's dictionaries, are given. For glosses of items with *ao(i)* and *ua(i)*, see Appendix A.

- <eay> **ao:** *bleayst* (*blaosc*), *cleayney* (*claonadh*) *eaynagh* (*aonach*), *eayl* (*aol*), *feayn* (*fao(i)n*), *geay* (*gaoth*), *meayl* (*maol*), *sleaydey* (*slaodadh*), *teaym* (*taom*), *t(h)eaymey* (*taomadh*), *t(h)eayst* (*taos*)
- aoi:** *keayney* (*caoineadh*), *geaysh(t)* (*gaoisid*), *skeayl(l)ey* (*scaoileadh*)
- ua:** *beayn* (*buan*), *beaynee* (*buanaidhe*), *cheayll*, *geayll* (*c(h)uala*), *deayrtey* (*dórtadh*, **duartadh*), *eayn* (*uan*), *feayr* (*fuair*), *feayght* (*fuacht*), *feaysley* (*fuascladh*), *geayl* (*gual*), *geaylin* (*gualann*), *keayn* (*cuan*), *leaystey* (*luascadh*), *theay* (*tuath*)
- uai:** *cleaysh* (*clua(i)s*), *feayshil* (*fuascail*, **fuaisil*), *geayllyn* (*guailne*, **guailtean*) *g(h)eayney* (*uaine*), *keayrt* (*cuairt*), *mygeayrt* (*ma gcuairt*), *neayr's* (?*an uair is*)
- agh:** *reayrt* 'view' (*radharc*)
- é:** *eayst* 'moon' (*éasca*), *falleays* 'gleam' (EIr. *folés*, ScG. *faileas*), *geayr* 'sour' (*géar*), *s'leayr* 'clear' (*is léir*)
- ia:** *shleayst*, also *slheeyast*, *slheas(s)id* 'thigh' (*sliasaid*)
- other: *freyll* 'keep' (*friotháladh*), *jeayst* 'beam' (Eng. 'joist'), *meayn* 'ore' (? *mian*, *méin*), *skeay*, also *skeeah* (*sceith*, *scéith*)
- <eayi> **aoi:** *eayil* (*aoil*)
- uai:** *eayin* (*uain*)
- <ea(h)> **ao:** *ceaghley* (*claochlódh*, ScG. *caochladh*),
- aoi:** *eash* (*aois*), *freaney* 'rage, roar' (*raoineadh*)
- ua:** *creagh* (*cruach*), *eaghtyr* (*uachtar*), *leagh* (*luach*), *leah* (*luath*), *seaghyn* 'sorrow, trouble' (? **suathachán*), *skeab* (*scuab*), *sleayst* (*sluasaid*)
- uai:** *gleashagh(t)* (*gluaiseacht*)
- agh:** *earkan* 'lapwing' (*adharcán*)
- é:** *beasagh* 'compliant' (*béasach*), *blean* 'flank, groin' (*bléan*), *breag* 'lie' (*bréag*), *clea* 'roof' (*cliath*, *cléith*), *crea* 'creed' (*créadh*), *eadaghey* 'jealousy' (*éad*), *eaddagh* 'clothes' (*éadach*), *eam* 'call' (*éigheamh*), *fea* 'rest, quiet' (*féath*), *greasee* 'shoemaker' (*gréasaidhe*), *kease* 'buttock, ham' (*céas*), *jea* 'yesterday' (*indé*), *jiulean* 'tenant farmer' (*deidhbhléan*), *mea* 'fat' (*méith*, *méath*), *pleat* 'talk (cf. *pléadáil*), *rea* 'flat' (*réidh*), *rheam* 'province' (*réim*), *sheayney* 'bless' (*séanadh*), *trean* 'valiant' (*tréan*)
- /e:/: *bea* 'life' (*beatha*), *clean* 'cradle' (*cliabhán*), *chea* 'flee' (*teitheadh*), *drea(i)n* 'wren' (*dreathan*), *feanish* 'witness, evidence' (*fiadhnaise*), *imnea* 'anxiety' (*imnidhe*), *jeadjagh* (*deithideach*), *jean* 'do, make' (*déan*), *llean* 'wide' (*leathan*), *mean* 'middle' (*meadhón*), *millchea* 'mildew' (ScG. *mill-cheò*), *offishear* 'officer', *peeikear* 'spy', *rea* 'ram' (*reithe*), *soilshean* 'shine' (*soillseán*)
- ái:** *earroo* 'number', (*áireamh*), *gearey* 'smile, laugh' (*gáire*), *nearey* 'shame' (*náire*).
- íó:** *creagh* 'furrow' (*críoch*)
- i:** *earish* 'time, weather' (*iris*)

- ea:** *feallagh* ‘ones, people’ (? *eallach*)
- <ei> **uai**/i/: *s’leaie* (*is luaithe*)
agh: *eairk* ‘horn’ (*adharc*)
éi: *eaishtagh* ‘listen’ (*éisteacht*), *eajee* ‘abominable’ (*éidigh*), *feailley* ‘feast, festival’ (*féile*), *reais* ‘span’ (*réise*)
 other: *keagh* ‘madness’ (*cuthach*, ScG. *caothach*, *caoch*)
- <ey> **ao:** *deyll* (*daol*), *deyr* (*daor*), *deyrey* (*daoradh*), *feysht* (*faoiside*), *inney-veyl* (*inghean mhaol*), *keyl* (*caol*), *keyllys* (*caolas*), *keynnagh* (*caonach*), *keyrrey* (*caora*), *seyr* (*saor*), *seyrey* (*saoradh*)
aoi/i/: *fey-yerrey* (*faoi dheireadh*)
é: *dangeyr* ‘danger’ (*dainséar*), *geyre* ‘sharp’ (*géar*), *rey* ‘rid’ (*réidh*), *shey* (*sé*)
ái: *-eyr* (*-(e)óir*) e.g. *shiolteyr* ‘sailor’ (*seóltóir*)
eith: *brey* ‘birth’ (*breith*)
eadh: *fey* ‘throughout’ (*feadh*)
 /e:/ *livrey* ‘deliver’
oi: *keyll* ‘wood’ (*coill*), *rheynn* ‘share, divide’ (*roinn*)
 other: *veyge* ‘voyage’
- <eyi> **ao:** *seyir* (*saor*)
aoi: *tarroo-deyill* (**tarbh daoil*)
- <ei(y)(gh)>
aoi: *keiyn* (*caoin*)
ao(i)/i/: *lhey* (*laogh*), *meiygh* (*mao(i)th*), *streyraght* (*sraothar*)
ua(i)/i/: *sey* (*suaitheadh*)
 /e:i/: *jeigh* (*iadhadh*)
 /əi/, /ei/:
ey ‘footlock’ (*iodh*), *eiystyr* ‘halter’ (*adhastar*), *eyrt* ‘follow, chase’ (*adhart*), *feiy* ‘noise’ (*foghar*), *leigh* (ScG. *lagh*), *cleiy* ‘dig’ (*cladh*), *shleiy* ‘spear’ (*sleagh*), *teiy* ‘choose’ (*togha*)
 other: *beiy* ‘animals’ (ScG. *beathaichean*)
- <eo(a),(y),(h)>
ao: *freoagh* (*fraoch*)
aoi: *eoylley* (*aoileach*), *feoilt(agh)* (*faoilte*)
ua: *beoy* (?*buán*), *creoghys* (*cruadhas*), *feoh* (*fuath*), *heose*, *neose*, *seose* (*thuas*, *anuas*, *suas*)
agh: *leodaghey* ‘diminish’ (*laghdaghadh*)
 other: *ben-treoghe* ‘widow’ (*baintreabhach*), *scarleod* ‘scarlet’ (*scarlóid*), *skeog* ‘lock of hair’ (*ciabhóg*),
- <eo(a)i(e)>
aoi/i/: *freoai* (*fraoich*)
uai/i/: *leoai* (*luaidhe*), *leoie* (*luaith*), *creoi* (*cruaidh*)
 other: *keoi* ‘mad’ (*cuthach*, ScG. *caothach*, *caoch*), *skeoigh* ‘tidy’ (*sciamhach*)

<ae> **ao:** *gaerr* (ScG. *gaorr*)
ó /ɛ:/: *aeg* ‘young’ (*óg*)
ae /ɛ:/: *aer* ‘air, sky’ (*aer*, Elr. *aër*, ScG. *adhar*, *aighear*)

<ei>

ao: *keirn* (*caorthann*)
aoi: *deiney* (*daoine*)
uai: *lheill*, *lheiill* (*luadhail*)
é: *beill* ‘mouths’ (*béil*), *beisht* ‘beast’ (*béist*), *beishteig* ‘beast’ (*béisteog*), *breid* ‘veil’ (*bréid*), *boteil* ‘bottle’ (cf. Ir. *buidéal*), *brein* ‘stinking’ (*bréan*), *-eil* (verbal noun ending, *-(e)áil*), *eilley* ‘armour’ (ScG. *féileadh*), *eisht* ‘then’ (*éis*), *er-jeid* ‘on edge’ (*déad*), *erreish* ‘after’ (*tar éis*), *garveigagh* ‘roar’ (*béic*), *jeig* ‘teen’ (*déag*), *jeir* ‘tear(s)’ (*déar*), *jeirk* ‘alms’ (*déirc*), *keiley* ‘sense’ (gen.) (*céille*), *keim* ‘step, stile’ (*céim*), *lheim* ‘jump’ (*léim*), *lheiney* ‘shirt’ (*léine*), *meill* ‘lip’ (*méill*), *meir* ‘finger(s)’ (*méar*), *my-yeish* ‘in ear’ (*ma dhéis*), *reir* ‘satisfy’ (*réir*, *riar*), *sheidey* ‘blow’ (*séideadh*), *sleityn* ‘mountains’ (*sléibhte*), *treigeil* ‘abandon’ (*tréig*), *veign* ‘I would be’ (*bhéinn*, *bhínn*), *y cheilley* ‘each other’ (*a chéile*)
/e:/ *ben-rein* ‘queen’ (*ríoghan*), *blein* ‘year’ (*bliadhain*), *bundeil* ‘bundle’, *carmeish* ‘canvas’, *freill* ‘keep’ (*friotháil*), *geill* ‘attention’ (*géill*), *greiney* ‘sun’ (gen.) (*gréine*), *lheid* ‘such’ (*leithéid*), *meiley* ‘bowl’ (?), *oaseir* ‘overseer’, *preis* ‘press’, *reill* ‘rule’ (*riaghladh*), *sheiltyn* ‘think’ (*saoil*, *síl*), *shirveish* ‘serve, service’ (*seirbhís*), *treisht* ‘trust, hope’
éi/ĭ/: *jei* ‘after’ (*i ndéidh*)
ei: *beinn* ‘peak’ (*beinn*), *bheill* ‘grind’ (*meil*, ScG. *beil*), *creid* ‘believe’ (*creid*), *greimmey* ‘grasp’ (*greimeadh*), *greinnaghey* ‘encourage’ (ScG. *greannachadh*, **greinn-*), *keilty* ‘hide’ (*ceilt*), *keird* ‘craft’ (*ceird*), *meinn* ‘meal’ (*min*, *mein*), *sheilg* ‘hunt’ (*seilg*)
ai, oi: *clein* ‘kin’ (*clainn*), *airin(n)agh* ‘farmer’ (*aireamh*), *geid* ‘steal’ (*goid*), *geill* ‘spring’ (*gail*, *goil*), *geinnagh* ‘sand’ (*gainmheach*), *skeilt* ‘cloven’ (*scoilte*), *s’meilley* ‘feebler’ (*is maille*), *teirroo*, *terriu* ‘bulls’ (*tairbh*)
ai, oi + /ĭ/: *deinagh* ‘wearisome’ (? *doighean*, *daighear*), *eirey* ‘heir’ (*oighre*),
 other: *eilkin* ‘errand’ (?), *-eig*, also *-age*, *-aag*, *-aig* (diminutive suffix, *-(e)óg*), *keint* ‘kind’, *queig* ‘five’ (*cúig*, *cóig*), *steillyn*, *steillin* (ScG. *stàillinn*)

<ei(g)h>

ao: *seihll* (*saoghal*)
aoi/ĭ/: *dreih* (*draoi*), *mreih* (*mnaoi*)
uai: *lheiill*, *lheill* (*luadhail*)
ua(i)/ĭ/: *sleih* (*sluagh*), *treih* (*truagh*), *teigh* (*tuagh*), *veih* (*uaidh*)
éi/ĭ/: *lheihys* ‘healing’ (*léigheas*), *spreih* (*spréidheadh*) *ny-yeih* ‘however’ (*ina dhéidh*)
ei/ĭ/: *jeih* ‘ten’ (*deich*), *meih* ‘weight’ (*meidh*), *sneih* ‘vexation’ (*snighe*)
/əĭ/: *leih* ‘forgive’ (*loghadh*), *reih* ‘choose’ (*rogha*)

<oaie>

ua(i)/ĭ/: *oaie* (*uaigh*)
óigh: *doaie* ‘decency’ (*dóigh*)
éi/ĭ/: *oaiagh* ‘perjurious’ (*éitheach*)
oiche: *cloaie* ‘stone’ (gen.) (*cloiche*)

- /əi̯/: *oaie* ‘face’ (*aghaidh*)
- <i> **ao(i)**: *kirree* (*caoraigh*, *caoirigh*)
i(o): *ching* ‘sick’ (*tinn*), *shimmey* ‘many’ (*is iomadh*), and many others.
- <u> **ao**: *un* (*aon*)
u(i): *muc* ‘pig’ (*muc*), *tushtey* ‘understanding’ (*tuigse*), and many others.
io: *urley* ‘eagle’ (*iolar*), and others.
- <iy> **aoi**: *riyr* (*araoir*, *aréir*)
aoi/ī: *siyr* (*saothar*, *saoithear*)
/ai̯/: *criy* ‘gallows’ (*croich*), *lhiy* ‘colt’ (*lo(i)th*), *piyr* ‘pair’ (ScG. *paidhear*), *siyn* ‘vessels’ (ScG. *soithichean*)
io: *er-giyn* ‘following’ (*iar gcionn*)
- <uy> **aoi**: *nuy* (*naoi*)
ua/ī: *ruy* (*ruadh*)
iodh: *fuygh* ‘wood’ (*fiodh*)
iú: *shuyr* ‘sister’ (*siúr*)
iu: *juys* ‘fir’ (*giuthas*)
- <y>
agh: *yummyd* ‘use’ (*adhmad*)
io: *fynney* ‘fur’ (*fionnadh*), *myn* ‘fine’ (*mion*), *yummyd* ‘place’ (*ionad*), and many others
- <egh> **ao/ī**: *streghernee* (*sraothar*)