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Aspects of the historical phonology of Manx

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Tràchdas airson ceum Dotair Feallsanachd

Oilthigh Dhùn Èideann

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Declaration

Tha mi a' dearbhadh gur mise a-mhàin ùghdar an tràchdais seo, agus nach deach an obair a tha na bhroinn fhoillseachadh roimhe no a chur a-steach airson ceum eile.

I confirm that this thesis has been composed solely by myself, and that the work contained within it has neither previously been published nor submitted for another degree.

Christopher Lewin

Geàrr-chunntas

'S e a tha fa-near don tràchdas seo soilleireachadh a thoirt seachad air grunn chuspairean ann an cinneachadh eachdraidheil fòn-eòlas Gàidhlig Mhanainn nach robhas a' tuigsinn gu math roimhe seo. Le bhith a' leantainn atharrachaidhean fòn-eòlach bho àm na Seann Ghàidhlig is na Meadhan-Ghàidhlig air adhart, agus taobh a-staigh ùine na fianais sgrìobhte agus clàraichte a th' againn airson Gàidhlig Mhanainn fhèin, tha e a' suidheachadh nan cinneachaidhean seo ann an co-theacsa farsaing a thaobh rannsachadh dhualchainntean is cànanachas eachdraidheil na Gàidhlig.

'S e tobar cudromach de dh'fhiosrachadh airson cinneachadh nan cànanan Gàidhealach a thuigsinn a tha ann am fianais Gàidhlig Mhanainn. Tha cion sgrùdaidhean siostamach is sheataichean-dàta earbsach airson na cànan air seo a chumail am falach ge-tà, agus air fàgail gun do rinneadh dearmad oirre am broinn raon rannsachaidh na Gàidhlig.

Tha cuideam air leth air a thoirt anns an tràchdas air atharrachaidhean ann am feartan prosaideach agus os-mhìreach, air siostam nam fuaimreagan, agus cuideachd air na consain shonarach, a tha dlùth-cheangailte ris na fuaimreagan. Tha na modhan-rannsachaidh a' tarraing air còig prìomh thùsan:

- Ath-mheasadh air tuairisgeulean is seataichean-dàta a tha air an toirt seachad le sgoileirean mu thràth, gu h-àraid na chaidh a thrusadh le Rhÿs anns na 1880an is 90an, agus clàraidhean den ghinealaich mu dheireadh de luchd-labhairt a tha air an toirt am follais le Broderick anns an *Handbook of Late Spoken Manx*.
- Eadar-mhìneachadh na fianais a tha an lùib an dà phrìomh dhòigh-litreachaidh a tha air an cleachdadh gu Gàidhlig Mhanainn a sgrìobhadh, agus tionndaidhean neo-ghnàthach dhiubh.
- Sgrùdadh stèidhte cho fad 's a ghabhas air stòr-fhaclan na cànan air fad, a' cur gu feum faclairian Cregeen agus Kelly bhon naoidheamh linn deug.
- Measadh uimhireil air na tùsan dàta seo gu lèir far a bheil sin iomchaidh.

- Sgrùdadh innealach fogharach air clàraidhean den luchd-labhairt mu dheireadh.

Tha Caibideil 1 a' toirt seachad cunntas goirid air eachdraidh Ghàidhlig Mhanainn is a co-theacsa cànanach an taca ri dualchainntean Gàidhlig eile, a' measadh obair sgoileirean an ama a dh'fhalbh, a' toirt sùil air na bun-thùsan, agus a' mìneachadh nan duilgheadasan is nan cothroman a tha an lùib nan dòighean-litreachaidh dhan sgoileir.

Tha Caibideil 2 a' sgrùdadh chinneachaidhean anns na fuaimreagan goirid is fada, agus a' bhuidh a th' air a bhith aig siostam nan consan air na cinneachaidhean sin.

Tha Caibideil 3 a' coimhead gu mionaideach air cinneachadh nam fuaimreagan *ao(i)* /ə:/ agus *ua(i)* /uə/ ann an Gàidhlig Mhanainn. Tha an fhianais sgrìobhte, na tuairisgeulan agus an dàta clàraichte gu math toinnte, agus tha cuid de sgoileirean a' cumail a-mach gu robh an dà fhuaimreig seo air tuiteam còmhla ri chèile agus ri fuaimreagan eile. Leigear fhaicinn gu robhas fhathast a' cumail suas eadar-dhealachadh eadar na fuaimreagan seo airson a' chuid as motha anns a' Ghàidhlig Mhanannaich Anmoich.

Tha Caibideil 4 a' coimhead air cinneachaidhean ann an siostam nan consan sonarach, gu h-àraid na fuaimnean R, L is N. Thathar cuideachd a' sgrùdadh nan atharrachaidhean ann am fuaimreagan ro na sonaraich theanna eachdraidheil, agus a' toirt sùil às ùr air pròiseas an ro-dhùnaidh.

Tha Caibideil 5 a' gabhail beachd air feartan os-mhìreach agus prosaideach, a' gabhail a-steach gluasad a' bheum agus giorrachadh fhuaimreagan fada gun bheum, agus na factairean cumhachaidh a thug buaidh orra seo.

Tha Caibideil 6 a' toirt seachad cho-dhùnaidhean far am measar na tha an tràchdas a' cur ri sgoileireachd an latha an-diugh, agus dè tha fhathast ri dhèanamh a thaobh rannsachaidh san àm ri teachd.

Abstract

This thesis elucidates some of the hitherto poorly understood aspects of the diachronic development of Manx phonology. By tracing phonological changes from earlier varieties of Gaelic, and within the attested period of written and recorded Manx, it frames these developments within the wider contexts of Gaelic dialectology and historical linguistics. Manx provides an important source for understanding the linguistic development of the Gaelic languages. A lack of systematic treatments and reliable datasets for the language, however, has obscured this fact and led to its neglect within Gaelic studies.

The thesis focuses, in particular, on the development of the language's prosody, suprasegmental features, vowel system and sonorants, the latter having a particular bearing on vowels. Five principal methodologies are deployed to investigate these topics:

- Re-evaluation of existing descriptions and datasets provided by previous scholarship, especially those collected by Rhÿs in the 1880s and 1890s, and material from the last generation of speakers presented by Broderick in his *Handbook of Late Spoken Manx*.
- Interpretation of the evidence of the two main Manx orthographies and non-standard variations thereof.
- Analyses based, as far as possible, on the whole attested lexis of the language, making use of Cregeen's and Kelly's dictionaries.
- Quantitative approaches to all of these sources of data where appropriate.
- Instrumental phonetic analysis of recordings of the terminal speakers of Manx.

Chapter one places Manx in its historical and dialectological context, reviews previous scholarship, discusses the primary sources, and introduces the interpretative difficulties of the orthographies.

Chapter two examines developments in the short and long vowels, and the impact of the consonant system on vowel changes.

Chapter three examines the development of the vowels *ao(i)* /ə:/ and *ua(i)* /uə/ in Manx. The written evidence, description and recorded data are complex, and some scholars have claimed that these vowels fell together with one another and with other vowels. It will be shown that these vowels in fact remained contrastive for the most part in Late Manx.

Chapter four investigates developments in the sonorant consonants, especially the R, L and N phones. Changes in vowels preceding historically tense sonorants are also examined, as well as the origins and spread of the phenomenon of preocclusion.

Chapter five examines suprasegmental and prosodic features including stress shift, unstressed long vowel shortening, and the conditioning factors for these.

Chapter six provides concluding remarks assessing the thesis' contribution to current scholarship, and the prospects for future research.

Lay summary

This thesis is concerned with the pronunciation of Manx Gaelic, the historical Celtic language of the Isle of Man which was the community language of the bulk of the island's population until the mid nineteenth century, with a few elderly speakers remaining into the second half of the twentieth century. It examines changes in the pronunciation during the period for which we have extensive written, and latterly sound-recorded, evidence (the seventeenth century onwards), and also the changes which separate Manx from the other Gaelic languages past and present. It does not tackle the revived language spoken today mostly by adult learners, which is quite a distinct topic, and deserving of separate attention in its own right.

Serious academic study of the spoken language did not begin until the 1880s, and the first audio recordings date from the first decade of the twentieth century, with the bulk being made in the mid twentieth century from some of the very last speakers. This material is extremely valuable, but inevitably limited, and by necessity we must rely extensively on earlier written material and on deductions from variation and changes in the orthography (spelling system).

Fortunately, Manx has a fairly extensive corpus of written material, albeit mostly religious translations, including a complete Bible translation (finished in 1772). This material is written in two largely independent orthographies, both of which are in turn largely independent of the conservative literary standards of Ireland and Scotland. This makes Manx unique among Gaelic dialects in having an independent and vigorous orthographic tradition during this period, and provides extensive evidence of changes in pronunciation which would be obscured if the Irish-Scottish system had been in use.

The fact that the Manx orthographies are English-based (although with significant innovations and adaptations to represent non-English sounds) has led to neglect and even derision on the part of scholars, but this thesis shows that the orthographies are considerably more systematic, and therefore useful as evidence for linguistic changes, than has previously been assumed.

In contrast to most previous linguistic scholarship on Manx, which is largely impressionistic in its use of data, quantitative approaches form a major focus of this thesis, and often reveal details, and even major trends, which challenge other scholars' claims. These methodologies include taking an exhaustive approach to the vocabulary of the language, drawing on four major dictionaries or glossaries, and analysis of large amounts of variant spellings from the earliest Manx manuscript and other sources. There is also computerized analysis of some of the audio recordings of the last native speakers using the phonetics software package Praat, which is a first for Manx studies.

Re-evaluation of the data and analyses of previous scholarship is also a major part of the project, including especially the important early fieldwork and descriptions by Sir John Rhŷs, the first Professor of Celtic at Oxford University.

In terms of the topics covered, it was not possible to deal with every area of Manx historical phonology in depth. The decision was taken to focus on vowels, sonorant consonants (L, N, M and R sounds), and stress patterns. The first chapter is an introduction to the history of the language, previous scholarship, and the sources and methods used in the rest of the thesis. Chapter 2 covers most of the vowel sounds, while chapter 3 goes into further depth about a particularly complex area of vowel developments. Chapter 4 concerns the sonorant consonants, and related developments including vowel lengthening and preocclusion — the insertion of a stop consonant [b], [d], [g] before some of the sonorants. Chapter 5 deals with certain suprasegmental or prosodic phenomena. This means properties of the phonology above the level of individual vowels and consonants, especially stress patterns, which show particularly intriguing and complex changes in Manx. Chapter 6 provides a brief conclusion, bringing different threads from the thesis together.

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Tha mi cuideachd fo fhiachaibh don fheadhainn air fad a bhrosnaich is a theagaisg mi agus mi ag ionnsachadh nan cànanan Gàidhealach.

Mu dheireadh, tha mi fada an comain luchd-labhairt agus sgrìobhaidh Gàidhlig Mhanainn fad nan linntean, a tha an cuid fhaclan a' nochdadh air feadh na h-obrach seo. S' mooar ta my wooise as my eeaghyn daue ooilley.

'S ann leam-sa a-mhàin a tha gach mearachd is mì-thuigse a th' air fhàgail.

Er jerrey ooilley, ta mee chymney yn obbyr shoh da'n sleih Gailckagh ooilley ta as vees ayns Mannin.

Christopher Lewin

Samhainn 2019, Dùn Èideann (tionndadh na deuchainn)

An t-Iuchar 2020, Dùn Èideann (an tionndadh deireannach).

That a language so venerable for its antiquity and so estimable on many accounts should be so generally neglected, is much to be lamented. The consequence of this neglect has been, that numerous corruptions have crept into the dialect in general use, and so many anglicisms been adopted, that the Manks is now seldom spoken or written in its original purity. Despised and neglected, however, as the language appears to be at present, it is susceptible of high improvement, and justly entitled to the attention of the scholar. The sublime strains of Ossian mark the capabilities of the language, and commend it to the regard of the philologist as a subject of curious enquiry, and deserving accurate investigation.

(Archibald Cregeen, *A Dictionary of the Manks Language*, 1835: iii)

[I]t is always a source of delight to me to be able to trace the phonetics of a language from the earliest dawn of its documentary existence down to the most curtailed pronunciations of its vocables in the mouths of one's contemporaries. In the Manx of the present day we have one of the lineal descendants of the Goidelic attested by the earliest Ogmic monuments of Great Britain and Ireland. Besides, the study of Manx phonology is by no means a bad corrective of the effect of seeing Irish written in an orthography which is more historical than phonetic. Manx, it is true has no vast stores of literature; but from the point of view of the phonologist even poverty of that kind has its consolation. For it leaves the natural tendencies of the language less trammelled, and keeps a freer sphere of evolution for its sounds. The result in Manx, as it would be found also in the other Goidelic dialects, is, that the changes of sound to which it testifies, work out with a precision falling not hopelessly short of mathematical accuracy. To suppose that modern Goidelic, because not blessed with a vigorous literature, must be a lawless jargon — lawless like the savages that speak it, as it is sometimes put — is not only not true, but is almost the exact contrary of the truth, so far at least as concerns the phonology. The mere spelling is a different matter, though even that has its interest, a wider interest, in fact, than has hitherto been usually supposed in the case of Manx.

(John Rhÿs, *The Outlines of the Phonology of Manx Gaelic*, 1894: x)

No apology is needed for the considerable amount of space devoted to Scottish and Manx. So closely are the three Gaelic languages allied that it would be futile to investigate the history of any one of them without taking full account of the other two. It is, perhaps, too much to expect that Manx, that Cinderella of Gaelic tongues, should ever attract many students [...]

(T. F. O'Rahilly, *Irish Dialects Past and Present*, 1932: viii–ix)

Eisht dooyrt ad rish, Abbyr nish SHIBBOLETH; as dooyrt eh SIBBOLETH: son cha daink e hengey lesh dy ockley eh dy kiart. Eisht ghow ad, as varr ad eh ec aaghyn Yordan; as huitt ec y traa shen jeh ny Ephraimiteyn, daa housane as da-eed.

Then said they unto him, Say now SHIBBOLETH: and he said SIBBOLETH: for he could not frame to pronounce it right. Then they took him, and slew him at the passages of Jordan: and there fell at that time of the Ephraimites forty and two thousand.

(Briwnyn 12:6)

Son eisht ver-yms da'n pobble glare ghlen, dy vod ad ooilley geamagh er ennym y Chiarn, dy hirveish eh lesh un aigney.

For then will I turn to the people a pure language, that they may all call upon the name of the Lord, to serve him with one consent.

(Zephaniah 3:9)

Shen-y-fa te enmyssit Babel, er-yn-oyr dy nee ayns shen hug y Chiarn shaghrynys er glare ooilley yn seihll: as veih shen ren y Chiarn ad y skeayley harrish slane eaghtyr y thalloonin.

Therefore is the name of it called Babel; because the Lord did there confound the language of all the earth: and from thence did the Lord scatter them abroad upon the face of all the earth.

(Genesis 11:9)

As dob eh reesht. As tammylt ny lurg shen, dooyrt paart jeh'n cheshaght reesht rish Peddyr, Son shickyrys t'ou uss fer jeu: son she Galilean oo, as ta dty ghlare dy hoilshaghey eh.

And he denied it again. And a little after, they that stood by said again to Peter, Surely thou art one of them: for thou art a Galilaean, and thy speech agreeth thereto.

(Mark 14:70)

Ta mee coyrt booise da my Yee, dy vel mee loayrt ny s'lhee glare na shiu ooilley
I thank my God, I speak with tongues more than ye all

(1 Corinthianee 14:18)

Contents

Declaration	iii
Geàrr-chunntas	v
Abstract	vii
Lay summary	ix
Taing / Acknowledgements	1
List of tables	17
List of charts	20
List of figures	21
Prefatory notes	23
0.1 Transcription practices	23
0.1.1 Phonetic and phonological transcriptions	23
0.1.2 Transcriptions cited from other authors	24
0.1.3 Examples cited in original orthography	24
0.2 Citation of Gaelic forms	25
0.3 Names of Gaelic varieties.....	26
0.4 Linguistic terminology	27
0.5 Citation of reference works	27
0.6 General abbreviations and symbols.....	28
0.7 Abbreviations of names of speakers and fieldworkers.....	30
0.8 Map of the Isle of Man	31
Chapter 1 Introduction	33
1.1 Purpose and scope of the thesis	33
1.2 Descriptive and theoretical concerns.....	35
1.3 Historical background of Manx.....	36
1.3.1 Periodization of Manx.....	38
1.3.1.1 Early, Classical and Late Manx	38
1.3.1.2 The language of the terminal speakers	39
1.3.1.3 Revived Manx.....	40
1.4 The place of Manx within the Gaelic dialect continuum	40

1.5	Review of previous scholarship.....	43
1.5.1	Material collected for Edward Lhuyd	44
1.5.2	Rhÿs (1894).....	45
1.5.3	Strachan (1897)	49
1.5.4	Marstrander (1932).....	49
1.5.5	Kneen (1931, 1938).....	50
1.5.6	Carmody (1947, 1954)	52
1.5.7	Jackson (1955).....	52
1.5.8	Wagner (1969).....	54
1.5.9	Broderick (1984–86)	55
1.5.10	Toponymic and onomastic evidence	56
1.5.11	Summary	57
1.5.12	Recent linguistic literature	58
1.6	Primary sources	58
1.6.1	The written corpus and the orthographies	58
1.6.2	Scholarly views on the Manx orthographies	59
1.6.3	Phillips' Prayer Book translation and orthography	60
1.6.4	The Classical Manx orthography and variants	68
1.6.4.1	Characteristics of the Classical Manx orthography	68
1.6.4.2	Homophones differentiated by spelling	69
1.6.4.3	One sound, several spellings.....	69
1.6.4.4	One spelling, several sounds.....	70
1.6.4.5	English v. 'continental' vowel values.....	71
1.6.4.6	Representation of palatalization.....	72
1.6.4.7	Redundant symbols.....	76
1.6.5	Late spellings (especially Cregeen).....	77

1.6.6	Interpreting the Manx orthographies: summary of difficulties	79
1.6.7	Non-standard orthographies	80
1.6.8	Dictionaries	80
1.6.8.1	Kelly (1866).....	81
1.6.8.2	Cregeen (1835)	82
1.6.8.3	Revival era English–Manx dictionaries	83
1.6.8.4	Pitfalls in the use of Manx dictionaries	84
1.6.9	Native speech: recordings and transcriptions.....	85
1.6.9.1	The Manx of the ‘last native speakers’	85
1.6.9.2	Features of Terminal Manx phonology	89
1.7	Outline of synchronic phonology of Classical Manx	90
1.7.1	Stressed vowels	91
1.7.2	Unstressed vowels in pretonic position.....	92
1.7.3	Unstressed vowels in post-tonic preconsonantal position.....	92
1.7.4	Unstressed vowels in post-tonic final position	93
1.7.5	Diphthongs and triphthongs	93
1.7.6	Consonants	95
1.7.7	Stress	96
1.7.8	Vowel nasalization	97
1.7.9	Presentation of data	98
Chapter 2	The Manx vowel system.....	99
2.1	Short vowels	99
2.1.1	<i>a</i> /a/ > /a/, /e/, /o/	99
2.1.1.1	<i>a</i> /a/ > /e/	99
2.1.1.2	<i>a</i> /a/ > /o(:)/, /u(:)/	101
2.1.2	<i>ai</i> /a/ > /a/, /e/	105
2.1.2.1	<i>ai</i> /a/ > /a/	105

2.1.2.2	<i>ai</i> /a/ > /e/	107
2.1.2.3	<i>ai</i> /a/ > /o/	110
2.1.3	<i>ea</i> /e/ > /e/, /a/, /o/	110
2.1.3.1	Analysis.....	117
2.1.3.2	<i>ea</i> /e/ > /o/	121
2.1.3.3	<i>ea</i> /e/ > /i/	122
2.1.3.4	Lexical diffusion	123
2.1.3.5	Semantic splits between /e/ and /a/ variants	123
2.1.4	<i>ei</i> /e/ > /e/, (/i/).....	124
2.1.5	<i>o</i> /o/ > /o/, /a/, (/u/)	125
2.1.5.1	Conditioning environments for /o/ > /a/.....	131
2.1.5.2	Diachronic development of /o/ > /a/ and Gaelic dialectological context	132
2.1.5.3	<i>foddey</i> ‘far, long’, G. <i>fada</i> , OIr. <i>fota</i>	133
2.1.5.4	/o/ > /u/	134
2.1.6	<i>oi</i> /o/ > /o/, /a/	135
2.1.6.1	<i>kemmyrk</i> ‘refuge’, G. <i>coimirce</i> etc.....	137
2.1.7	<i>i, io</i> /i/	137
2.1.7.1	<i>io</i> /i/ > /u/.....	138
2.1.8	<i>u, ui</i> /u/.....	139
2.1.8.1	<i>ui</i> /u/ > /wa/	142
2.1.9	Morphophonological alternations /a/, /o/ > /i/, /u/	142
2.1.10	OIr. <i>air-</i> , <i>aur-</i>	145
2.2	Long vowels	147
2.2.1	Stressed final vowels in monosyllables.....	147
2.2.2	Fronting of /a:, o:/ > /ε:/	148

2.2.3	/ɛ:/ and /e:/	153
2.2.4	<i>a(i)th</i> /ah/ > /a:/	154
2.2.5	/o:/ and */ɔ:/	156
2.2.6	Monophthongization of /iə, iɔ, uə/ > /i:, i:, u:/	157
2.2.7	Breaking of <i>éa</i> /e:/ > /iə/	158
Chapter 3 Manx reflexes of Gaelic <i>ao(i)</i> and <i>ua(i)</i>		163
3.1	Introduction	163
3.2	Historical development of G. <i>ao(i)</i> and <i>ua(i)</i>	163
3.2.1	<i>ao(i)</i> /ə:/	163
3.2.2	<i>ua(i)</i> /uə/	165
3.3	Summary of Manx developments.....	165
3.4	Lexical items with <i>ao(i)</i> , <i>ua(i)</i> , <i>agh</i> etc.	166
3.4.1	<i>ao</i> > /ə:/	167
3.4.2	<i>aoi</i> > /ə:/ (>/e:/)	169
3.4.3	<i>ua</i> > /iə/, /i:/	170
3.4.4	<i>uai</i> > /ə:/ (>/e:/), /iə/ (>/i:/).....	172
3.4.5	<i>ua(i)</i> > /uə/, /u:/, /o:/	173
3.4.6	<i>ua(i)</i> : items with variable reflexes.....	175
3.4.7	<i>agh</i> , <i>adh</i> > /ə:/	176
3.4.7.1	<i>eab</i> ‘attempt’	177
3.4.7.2	<i>eairk</i> ‘horn’, G. <i>adharc</i>	178
3.4.7.3	<i>oyr</i> ‘reason, cause’, G. <i>adhbhar</i>	178
3.4.7.4	<i>abane</i> ‘ankle’, EIr. <i>odbrann</i> , ScG. <i>adhbrann</i>	178
3.4.7.5	<i>yummyd</i> ‘use’, G. <i>admad</i>	179
3.4.7.6	G. <i>Raghnall</i> (N. <i>Rognvaldr</i>) in <i>Roonyrvie</i> and <i>Crennell</i>	179
3.5	Previous accounts of Manx <i>ao(i)</i> , <i>ua(i)</i>	180
3.5.1	Rhÿs	180

3.5.1.1	<i>ao</i> > \bar{y} [ə:].....	180
3.5.1.2	Allophonic realizations of <i>ao</i>	181
3.5.1.3	<i>ua</i> > $\bar{u}y$ [uə], $\bar{u}y$ [iə], <i>iy</i> [iə].....	182
3.5.1.4	<i>aoi</i> and <i>uai</i> > \bar{e} [ə:].....	185
3.5.2	Marstrander (1932).....	186
3.5.2.1	\bar{e} [e:] < G. <i>aoi</i> , <i>uai</i>	187
3.5.2.2	\bar{e} [e:] < G. <i>ao</i>	187
3.5.2.3	\bar{i} [i:] < G. <i>ua</i>	188
3.5.2.4	\hat{i} [ɪ:].....	188
3.5.2.5	$\hat{i}\bar{o}$ [ɪə] < G. <i>ua(i)</i> , <i>ao</i>	189
3.5.2.6	<i>ei</i> [ɛi] < G. <i>ao</i>	189
3.5.2.7	\bar{u} [u:] < G. <i>ua</i>	190
3.5.2.8	‘ \emptyset ’.....	190
3.5.2.9	Analysis.....	193
3.5.3	Jackson (1955).....	194
3.5.4	Wagner (1969).....	198
3.5.5	Broderick (1986) (<i>HLSM</i> III).....	201
3.5.5.1	A quantitative analysis of data from <i>HLSM</i> (II).....	205
3.5.6	Front rounded realizations?.....	208
3.6	Written evidence.....	209
3.6.1	Representation of <i>ao(i)</i> , <i>ua(i)</i> in Phillips.....	210
3.6.1.1	Overview.....	210
3.6.1.2	<i>ua(i)</i> in Phillips: preceding consonant conditioning and lexical diffusion	215
3.6.2	Representation of <i>ao(i)</i> and <i>ua(i)</i> in CM orthography.....	218
3.7	Instrumental data.....	225
3.8	Fronting and unrounding of <i>ua(i)</i> in Manx and Ulster Irish.....	230

3.8.1	/i̯ə/ ~ /u̯ə/ in <i>feayr</i> ‘cold’ (G. <i>fuar</i>): register, dialect, idiolect.....	232
3.8.2	<i>hooar, dooar</i> ‘got, found’ (G. <i>f(h)uair, d’fhuair</i>)	233
3.9	Other developments.....	234
3.9.1	New diphthongs: <i>ao(i), ua(i)</i> + vocalized fricatives	234
3.9.1.1	<i>ao(i)</i> + /i̯/	235
3.9.1.2	<i>ua(i)</i> + /i̯/	237
3.9.1.3	Interpreting the developments of <i>ao(i), ua(i)</i> + /i̯/	238
3.9.1.4	/ai̯/ ~ /əi̯/ contrast	241
3.9.1.5	<i>lhey</i> ‘calf’, G. <i>laogh</i>	243
3.9.1.6	<i>leoie</i> etc., G. <i>ua(i)</i> + /i̯/.....	244
3.9.1.7	/əi̯/, /ə:i̯/, (/u:i̯) > /ei̯/	246
3.9.1.8	/əi̯/, /ə:i̯/, (/u:i̯) > /i:/	246
3.9.1.9	<i>ao(i)</i> + /u̯/	247
3.9.2	/e:/ > /ə:/ in Scottish Gaelic and Manx.....	248
3.9.3	<i>geay</i> ‘wind’, G. <i>gaoth</i>	251
3.9.4	<i>riyr</i> ‘last night’, G. <i>aréir, arair</i>	252
3.9.5	<i>cleaysh</i> ‘ear’, G. <i>clua(i)s</i> etc.	252
3.9.6	<i>keayrt</i> ‘time, occasion’, G. <i>cuairt</i>	253
3.9.7	<i>seaghyn</i> ‘sorrow, affliction, trouble’	254
3.9.8	<i>deayrtey</i> ‘pour’, G. <i>dort, doirt, dórt, duart</i>	255
3.9.9	<i>smooïnaghtyn</i> ‘think’, G. <i>smuain, smaoin</i>	255
3.9.10	Manx derivatives of G. <i>draoi, druadh</i>	256
3.9.11	Unstressed and shortened <i>ao(i), ua(i)</i>	257
3.9.11.1	Pre-tonic <i>ao, ua</i> > /w/	259
3.9.11.2	<i>unnane, annan</i> ‘one’, G. <i>aonán</i>	260
Chapter 4 Sonorant consonants and associated developments.....		261

4.1	Introduction	261
4.2	Rhotics	262
4.2.1	/r ~ r ⁱ /	262
4.2.1.1	/r ⁱ / in Classical Manx	263
4.2.1.2	/r ⁱ / in clusters	264
4.2.1.3	/r ~ r ⁱ / in pre-terminal Late Manx.....	265
4.2.1.4	/r ~ r ⁱ / in terminal Late Manx	268
4.2.1.5	Initial /r ⁱ /	269
4.2.2	Early loss of /r/, /r ⁱ /	271
4.2.2.1	/rs, rʃ/ > /s/ (?/ʃ/)...	272
4.2.2.2	Other cases of early rhotic deletion	272
4.2.3	Weakening and loss of /r/ Late Manx	273
4.2.4	Fortis /R/	276
4.2.5	Other realizations of rhotics	276
4.3	Laterals	277
4.3.1	Introduction	277
4.3.2	Lateral contrasts in Late Manx	277
4.3.2.1	Merger of /L/ and /l/	281
4.3.2.2	Alveolar /l̥/	281
4.3.2.3	Initial lenition of laterals	284
4.3.3	Lateral contrasts in Early Manx	284
4.4	Coronal nasals.....	285
4.4.1	Introduction	285
4.4.2	Contrasts in coronal nasals in Late Manx	285
4.4.3	Evidence for /n ⁱ / > /n̥/	287
4.4.4	/N/ and /n/ > [n̥], [n̥]	290
4.4.5	/n̥/ representing fossilized initial lenition.....	291

4.4.6	Reflexes of G. /N ⁱ /	292
4.4.6.1	/N ⁱ / in final unstressed syllables.....	295
4.4.6.2	Other developments of /N ⁱ /	297
4.4.7	Unstressed final /an/, /ən/, /ən ⁱ /	297
4.4.7.1	verbal nouns in <i>-yn</i> , <i>-in</i>	299
4.4.7.2	<i>-in</i>	301
4.4.7.3	<i>-an</i>	302
4.4.7.4	Stressed reflexes of G. <i>-éan</i> , <i>-án</i>	306
4.4.8	Summary of developments in coronal and velar nasals	308
4.5	Preocclusion	308
4.5.1	Introduction	308
4.5.1.1	Cross-linguistic typology	311
4.5.2	Descriptions	312
4.5.3	Written evidence	318
4.5.4	The origins of Manx preocclusion: previous hypotheses.....	322
4.5.4.1	Rhÿs (1894).....	323
4.5.4.2	Chaudhri (2007).....	323
4.5.4.3	Ó Maolalaigh (2014b).....	329
4.5.4.4	Broderick (2018e).....	332
4.5.5	The origin and spread of preocclusion	332
4.5.5.1	Typological and phonetic considerations	332
4.5.5.2	Generalization and reanalysis of preocclusion	334
4.5.5.3	Preocclusion as a synchronic prosodic process	335
4.6	Vowel lengthening and diphthongization before coda fortis sonorants	336
4.6.1	In monosyllables	336
4.6.1.1	<i>-ionn</i> /iN/ > /in/, /u:n/	337

4.6.1.2	-im /im/ > /i:m/	337
4.6.1.3	-inn /iN ⁱ / > /iŋ ⁱ / (/in/)	337
4.6.1.4	-ill /iL ⁱ / > /i:l ⁱ /, /il ⁱ /	338
4.6.1.5	-eam /em/ > /am/	338
4.6.1.6	-eim /em ⁽ⁱ⁾ / > /em/, /im/, /e:m/ (?).....	338
4.6.1.7	-eann /eN/ > /o:n/, /a ^u n/, (/u:n/, /on/).....	339
4.6.1.8	-einn /eN ⁱ / > ?/e:n ⁱ /	341
4.6.1.9	-eall /eL/ > /o:l/, (/ol/)	341
4.6.1.10	-earr /eR/ > /ε:r/	342
4.6.1.11	-eang /eŋg/ > /eŋ/, /aŋ/	342
4.6.1.12	-am /am/ > /am/	342
4.6.1.13	-ann /aN/ > /o:n/, /a ^u n/, (/u:n/).....	343
4.6.1.14	-ainn /aN ⁱ / > /e:n ⁱ /, /a ⁱ n ⁱ /	343
4.6.1.15	-all /aL/ > /o:l/, (?/a ^u l/)	344
4.6.1.16	-aill /aL ⁱ / > /al ⁱ /, /el ⁱ /	345
4.6.1.17	-arr /aR/ > /ε:r/	345
4.6.1.18	-a(i)ng /aŋg/ > /aŋ/	346
4.6.1.19	-om /om/ > /o:m/, ?/a ^u m/	346
4.6.1.20	-oim /om ⁽ⁱ⁾ / > /em/	347
4.6.1.21	-onn /oN/ > /o:n/, /a ^u n/, (/on/).....	347
4.6.1.22	-oinn /oN ⁱ / > /e:n ⁱ /	348
4.6.1.23	-oll /oL/ > /o:l/, /a ^u l/.....	348
4.6.1.24	-oill /oL ⁱ / > /ol ⁱ /	348
4.6.1.25	-orr /oR/ > /o:r/	349
4.6.1.26	-ong /oŋg/ > /oŋ/.....	349
4.6.1.27	-um /um/ > /um/	349

4.6.1.28	- <i>uim</i> /u ⁱ m/ > /i:m/	350
4.6.1.29	- <i>unn</i> /uN/ > /u:n/	350
4.6.1.30	- <i>uinn</i> /uN ⁱ / > /un ⁱ /, /in ⁱ /, /iŋ ⁱ /	350
4.6.1.31	- <i>uill</i> /uL ⁱ / > /u:l ⁱ /	351
4.6.1.32	- <i>uing</i> /uŋ ⁱ g ⁱ / > /wiŋ ⁱ /	351
4.6.1.33	Summary	351
4.6.1.34	Dialectal variation	352
4.6.2	Voiced homorganic rhotic clusters	353
4.6.3	Other medial clusters	357
4.6.4	Paradigmatic uniformity	359
Chapter 5 Suprasegmental phonology		361
5.1	Stress	361
5.1.1	Previous accounts of stress shift and long vowel shortening	363
5.1.1.1	O’Rahilly (1932)	363
5.1.1.2	Jackson (1955)	364
5.1.1.3	Ó Baoill (1980)	364
5.1.1.4	Broderick (1986)	365
5.1.1.5	Ó Sé (1991)	367
5.1.1.6	Green (1997)	371
5.1.2	An explanation for stress shift targeting heavy-heavy items	372
5.1.3	Initial syllable shortening in items with forward stress	373
5.1.4	Long vowels arising from vocalization of fricatives	375
5.1.4.1	Exceptions	380
5.1.5	First syllable conditioning: further details	381
5.1.5.1	Heavy sonorant clusters	381
5.1.5.2	Exceptions	382

5.1.5.3	Stress-shift in items with fricative vocalization in initial syllable:	
	384	
5.1.5.4	Verbal nouns in <i>-ail, -eil, -al</i> (G. <i>-áil</i>).....	384
5.1.5.5	Items with original heavy third syllables	385
5.1.6	Quality of post-tonic shortened vowels.....	387
5.1.7	Irregular stress in <i>reeriaght</i> ‘kingdom’	387
5.2	Apocope.....	387
5.3	Syncope	391
5.4	Epenthesis.....	392
5.5	Vowel shortening and lengthening	397
5.5.1	Vowel shortening	399
5.5.2	Vowel lengthening	406
5.6	Vowel nasalization	408
Chapter 6	Conclusion.....	411
6.1	Topics covered.....	411
6.2	Progress made.....	412
6.3	By-products	417
6.4	Prospects for future research	418
Bibliography	421
	Primary sources	421
	Secondary sources	422

List of tables

	Page
Table 1	64
Examples of variant spellings in Phillips' MS (after Thomson 1953)	
Table 2	100
<i>a</i> /a/ > /e/	
Table 3	101
<i>a</i> /a/ > /o(:)/ (/u(:)/)	
Table 4	103
<i>a</i> /a/ > /a/, /o/	
Table 5	105
<i>ai</i> /a/ > /a/	
Table 6	107
<i>ai</i> /a/ > /e/	
Table 7	110
<i>ai</i> /a/ > /o/	
Table 8	111
<i>ea</i> /e/ > /e/	
Table 9	112
<i>ea</i> /e/ > /a/	
Table 10	116
<i>ea</i> /e/ > /o/	
Table 11	117
Incidence /e/ > /e/ and /e/ > /a/, /o/ in the lexicon by following consonant	
Table 12	119
Incidence of <i>ea</i> /e/ > /e/ and /e/ > /a/, /o/ in the lexicon by preceding consonant	
Table 13	121
Combined conditioning effect of preceding and following consonant on G. <i>ea</i> /e/ in Manx	
Table 14	122
<i>ea</i> /e/ > /i/	
Table 15	125
<i>o</i> /o/ > /o/	
Table 16	129
<i>o</i> /o/ > /a/	
Table 17	131
Incidence of <i>o</i> /o/ > /o/, /a/ in the lexicon by preceding consonant (cluster)	
Table 18	134
<i>o</i> /o/ > /u/	
Table 19	135
<i>oi</i> /o/ > /o/	
Table 20	136
<i>oi</i> /o/ > /a/	
Table 21	136
<i>oi</i> /o/ > /e/	
Table 22	138
<i>io</i> /i/ > /u/	
Table 23	140
<i>ui</i> /u/ > /u/, /(w)i/	
Table 24	142
<i>ui</i> /u/ > /wa/	
Table 25	142
Morphophonological alternations /a/ > /i/, /u/	
Table 26	144
Morphophonological alternations /o/ > /u/, /i/	
Table 27	146
OIr. <i>air-</i> , <i>aur-</i>	
Table 28	149
<i>ó</i> /o:/ > /o:/ etc.	
Table 29	150
<i>óí</i> /o:/ > /o:/	
Table 30	151
<i>ó</i> /o:/ > /ɛ:/	
Table 31	152
<i>óí</i> /o:/ > /ɛ:/	
Table 32	155
<i>a(i)th</i> /ah/ > /a:/	
Table 33	159
<i>éa</i> /e:/ > /e:/	

Table 34	<i>éa</i> /e:/ > /i̯/	160
Table 35	<i>ao</i> /ə:/ > /ə:/	167
Table 36	<i>aoi</i> /ə:/ > /ə:/ (>/e:/)	169
Table 37	<i>ua</i> /uə/ > /i̯/ (>/i:/)	170
Table 38	<i>uai</i> /uə/ > /ə:/ (>/e:/), /i̯/ (>/i:/)	172
Table 39	<i>ua(i)</i> /uə/ > /uə/ (>/u:/), /o:/	174
Table 40	<i>ua(i)</i> /uə/ > /i̯/ (>/i:/), /ə:/ or /uə/ (>/u:/), /o:/	175
Table 41	<i>agh, adh</i> /aɣ/ > /əɣ/ > /ə:/ and other developments	176
Table 42	Realizations of G. <i>ao</i> in <i>HLSM</i> II	206
Table 43	Realizations of G. <i>aoi</i> in <i>HLSM</i> II	206
Table 44	Realizations of G. <i>ua</i> in <i>HLSM</i> II	206
Table 45	Realizations of G. <i>uai</i> in <i>HLSM</i> II	207
Table 46	Spelling of G. <i>ao(i)</i> , <i>ua(i)</i> in Phillips, by initial letter of orthographic sequence	211
Table 47	Breakdown of orthographic categories <e> and <y>, taking into account following vowel characters	212
Table 48	Spelling of G. <i>ao(i)</i> and <i>ua(i)</i> in Phillips	212
Table 49	Orthographic representations of /i:/, /i̯/, /e:/, /u:/ in Phillips (A–C, Thomson [1953] glossary)	215
Table 50	Spelling of G. <i>ua(i)</i> in Phillips by place of articulation of preceding consonant	216
Table 51	<i>ao(i)</i> + /i̯/	235
Table 52	<i>Gaoidhealg, Gaoidhilg</i>	237
Table 53	<i>ua(i)</i> + /i̯/ (excluding items with synchronic /uəi/)	237
Table 54	Interpretation of Rhÿs's descriptions of /ai̯/, /əi̯/, /ə:i̯/ etc.	241
Table 55	<i>ao(i)</i> + /u̯/	247
Table 56	<i>seaghyn</i>	254
Table 57	Pre-tonic <i>ao(i)</i> , <i>ua(i)</i>	258
Table 58	Pre-tonic <i>ao</i> , <i>ua</i> > /w/	260
Table 59	Incidence of palatalized and non-palatalized realizations of Gaelic laterals and coronal nasals in data from <i>HLSM</i> II	287
Table 60	<i>inn</i> /'iN̪i/ > /iŋ̪i/, /in̪i/	294
Table 61	Other instances of /N̪i/ > /ŋ̪i/	294
Table 62	Summary of developments of post-tonic unstressed /Vn ⁽ⁱ⁾ /	297
Table 63	Unstressed reflexes of G. <i>-ín</i>	301
Table 64	Some examples of Manx <i>-an</i> < G. <i>-án</i>	303
Table 65	Unhistorical <i>-an</i>	303
Table 66	Unhistorical <i>-yn</i> < G. <i>-án</i>	305
Table 67	<i>-an</i> < G. /V:n̪i(ə)/	305
Table 68	Manx <i>-ean</i> /e:n/ < G. <i>-éan</i> (Mod.Ir. <i>-eán</i>)	307
Table 69	Representation of preocclusion in MNHL MD 900 MS 08307 (ed. Broderick 2015)	319

Table 70	<i>-ionn</i>	337
Table 71	<i>-im</i>	337
Table 72	<i>-ill</i>	338
Table 73	<i>-eam</i>	338
Table 74	<i>-eim</i>	338
Table 75	<i>-éim</i>	339
Table 76	<i>-eann</i>	339
Table 77	<i>-einn</i>	341
Table 78	<i>-eall</i>	341
Table 79	<i>-earr</i>	342
Table 80	<i>-eang</i>	342
Table 81	<i>-am</i>	342
Table 82	<i>-ann</i>	343
Table 83	<i>-ainn</i>	343
Table 84	<i>-all</i>	344
Table 85	<i>-aill</i>	345
Table 86	<i>-arr</i>	345
Table 87	<i>-a(i)ng</i>	346
Table 88	<i>-om</i>	346
Table 89	<i>-oim</i>	347
Table 90	<i>-onn</i>	347
Table 91	<i>-oinn</i>	348
Table 92	<i>-oll</i>	348
Table 93	<i>-oill</i>	348
Table 94	<i>-orr</i>	349
Table 95	<i>-ong</i>	349
Table 96	<i>-um</i>	349
Table 97	<i>-uim</i>	350
Table 98	<i>-unn</i>	350
Table 99	<i>-uinn</i>	350
Table 100	<i>-uill</i>	351
Table 101	<i>-uing</i>	351
Table 102	Predominant CM/LM reflexes of stressed short vowels before final fortis sonorants	351
Table 103	Dialectal splits in stressed short vowel + final fortis sonorant sequences	352
Table 104	Representation of dialect variants in Bible orthography	352
Table 105	Vowel developments before <i>rd, rn, rl</i>	353
Table 106	Vowel developments before other medial clusters	357
Table 107	Long vowel shortening	400
Table 108	Vowel lengthening shown in orthography	407

List of charts

		Page
Chart 1	Realizations of G. <i>ua(i)</i> , <i>ao(i)</i> in <i>HLSM</i> II	207
Chart 2	Spelling of G. <i>ao(i)</i> , <i>ua(i)</i> in Phillips, by initial letter of orthographic sequence	211
Chart 3	Spelling of G. <i>ao(i)</i> and <i>ua(i)</i> in Phillips	213
Chart 4	Spelling of G. <i>ao(i)</i> , <i>ua(i)</i> in Phillips, with <e(V)y(V)> and <ye(V)> combined	214
Chart 5	Spelling of G. <i>ua(i)</i> in Phillips by place of articulation of preceding consonant	216
Chart 6	F1 tracks for front and central long vowels (corresponding to vowel height), all speakers, Irish Folklore Commission recordings	226
Chart 7	F2 tracks for front and central long vowels (corresponding to backness), all speakers, Irish Folklore Commission recordings	226
Chart 8	Means for each category with 95% confidence intervals, all speakers, Irish Folklore Commission recordings, showing F1 (height) and F2 (backness)	227
Chart 9	Incidence of palatalized and non-palatalized realizations of Gaelic laterals and coronal nasals in data from <i>HLSM</i> II	287

List of figures

		Page
§0.8	Map of the Isle of Man	31
Figure 1	Examples from Phillips' MS (cf. Table 1)	64
Figure 2	Stressed vowels in Classical Manx	91
Figure 3	Unstressed pretonic vowels in Classical Manx	92
Figure 4	Unstressed post-tonic vowels in closed syllables	92
Figure 5	Unstressed word-final post-tonic vowels	93
Figure 6	<i>ə</i> -diphthongs	93
Figure 7	<i>i</i> -diphthongs	94
Figure 8	<i>u</i> -diphthongs	94
Figure 9	Consonants in Classical Manx	95
Figure 10	Main developments of G. <i>ua(i)</i> , <i>ao(i)</i> , <i>agh</i> in Manx	166
Figure 11	Pairwise comparisons using <i>t</i> -tests with pooled standard deviation for Irish Folklore Commission data, F1 (height)	229
Figure 12	Pairwise comparisons using <i>t</i> -tests with pooled standard deviation for Irish Folklore Commission data, F2 (height)	229
Figure 13	Summary of developments of coronal and velar nasals	308
Figure 14	Spectrograms showing preocclusion	309– 311

Prefatory notes

0.1 Transcription practices

0.1.1 Phonetic and phonological transcriptions

In my own transcriptions I follow the usual convention of giving material intended as a phonological or phonemic representation in slanted brackets / / and narrower phonetic transcriptions in square brackets [].

Conventions of the International Phonetic Alphabet are generally used, for example in using the yod diacritic ^j for palatalization rather than the prime symbol ' which has been commonly used in Celtic Studies. Certain fully palatal or post-alveolar “slender” consonants are transcribed with the conventional unitary symbols \int ζ j , even in the phonological transcriptions, in preference to s^j x^j γ^j . However, in historical discussions the symbols L L^j N N^j R R^j are retained from conventional Celticist practice for the fortis or tense sonorants (Chapter 4), both for clarity, and because their exact realization is not always clear.

Diphthongs and triphthongs are shown as follows: a_i , i_u , $i_ə$ $u_ə$, ε_i , $i_ə_u$ etc.

In transcriptions of Scottish Gaelic, the unaspirated stops are transcribed /b, d, g/ and the aspirated stops /p, t, k/, rather than /p, t, k/ and /p^h, t^h, k^h/ respectively, in keeping with practice for Irish and Manx, where the distinction is conventionally regarded as one of voicing, although in all Gaelic varieties the primary distinction is likely to be one of aspiration rather than voicing.

Stress is generally only marked when it does not fall on the first syllable.

Other conventional symbols utilized include:

C = (broad / non-palatalized) consonant

C^j = slender / palatalized consonant

V = vowel

V: = long vowel

= word boundary

. = syllable boundary

> = becomes (diachronic sound changes)

* = hypothetical form

0.1.2 Transcriptions cited from other authors

Phonetic and semi-phonetic transcriptions cited from other authors, primarily Rhÿs, Marstrander, Jackson, Wagner and Broderick, are given in bold type (silently added within quotations) and without brackets, e.g. **ghœñey**, **gø:n'ə**.

The original transcriptions are reproduced as closely as typographically possible.

Where this is considered helpful, these may be converted into my own transcription immediately after, e.g. [ʏə:n'ə], including within quoted passages. My interpretations of other scholars' transcriptions are for guidance only, and should not be considered definitive.

0.1.3 Examples cited in original orthography

Examples from Manx and other languages in the original orthography are given in italics, except for orthographic units which are given in angled brackets, e.g. <ýa>, <eay>. Manx lexical items are cited as far as possible in the standardized form as they appear in the Manx Bible and/or Cregeen's and Kelly's dictionaries (§1.6.8), but spelling variants are given where these provide additional information, or where there is no clear standard form.

Where diacritics in the Phillips manuscript (§1.6.3) occur between or over two adjacent vowels (according to the interpretation of Moore and Rhÿs [1895], Thomson [1953]), they are transcribed here on both vowels, so <íí> rather than <i'í>.

0.2 Citation of Gaelic forms

Gaelic phones and forms, where the focus is on their diachronic development and not on their phonetic or phonological value at any given time, are given in Gaelic (Early Modern or Classical Irish) orthography in italics, e.g. *ao*, *ua*, *aoi*, *é*. Where parallel forms flanked by broad or slender consonants are referred to, this is often shown by adding the diacritic vowel symbols in brackets, e.g. *ao(i)* (= *ao* /ə:C/ or *aoi* /ə:Cj/), *-(e)aghadh* (= *-aghadh* /Cəγəγ/ [>Ir. /Cu:/, ScG. /Cəxəγ/, Manx /Caxə/] or *-eaghadh* /Cjəγəγ/ [>Ir. /Cju:/, ScG. /Cjəxəγ/, Manx /Cjaxə/]).

Cognates cited for comparative purposes are given in their Early Modern Irish or Classical Gaelic form (usually following the spellings in Dinneen's Dictionary),¹ except where otherwise stated. These forms are what is primarily meant by 'Gaelic' or 'G.'. Here I follow the practice of Jackson (1955: 7), although I do not subscribe to his reductive notion that these forms represent a 'Common Gaelic' ('that stage of the Goedelic branch of the Celtic languages immediately preceding its break-up into Irish, Scottish and Manx Gaelic, while they were still one undifferentiated speech'), which has been rightly problematized by a number of scholars, including Gillies (1994), Ó Buachalla (2002), Ó Maolalaigh (1996; 2008a) and Ó Muircheartaigh (2015) (cf. §1.4).

Nevertheless, in most cases, the Manx forms can be understood as deriving from something close to the forms represented by the Early Modern Irish orthography. Where relevant, Scottish Gaelic forms, contemporary Irish forms, or Early (Old or Middle) Irish are also given, the latter usually following the headwords in *eDIL*. Occasionally Manx developments, attested or hypothetical, are transliterated into Gaelic orthography for illustrative purposes; these are marked *. Also 'Gaelic' forms are sometimes given for illustration which are not actually attested outside Manx, e.g.

¹ Except that for clarity I mark vowel length on *eó* and *iúí*, and use the spelling *-(e)aghadh* of the verbal noun ending in preference to *-(i)ughadh* (Manx *-aghey*, ScG. *-(e)achadh*, Caighdeán Ir. *-(i)ú*).

**iascóir*,² Manx *eeasteyr* for usual Ir. *iascaire*, ScG. *iasgair* (which could represent either form) (cf. Ó Sé 1991).

0.3 Names of Gaelic varieties

Although the terms ‘Old Gaelic’ and ‘Middle Gaelic’ have been used by some scholars (e.g. Clancy 2010: 351; Ó Maolalaigh 2013: 42), and are more accurate in the sense that they refer to varieties used throughout Ireland, Scotland and presumably Man rather than Irish alone, the more conventional and widely-used terms ‘Old Irish’ and ‘Middle Irish’ (collectively ‘Early Irish’) have been retained here (cf. Ó Muircheartaigh 2015: 8–9).

In this thesis the term ‘Goidelic’ is not used except in quotations from other authors, and ‘Gaelic’ refers either to the Gaelic languages as a whole, or specifically to the standardized written varieties of Early Modern Gaelic/Irish which were used in Ireland and Scotland from the thirteenth to the seventeenth century (§0.2), and which formed the basis of the orthographic conventions used in Ireland until the adoption of the *Caighdeán Oifigiúil* in the mid-twentieth century (Ahlqvist 1994).

Although orthographic forms belonging to, or close to, the *Caighdeán Oifigiúil*, are occasionally given as illustrating Irish developments, generally such forms are avoided as they obscure historical developments and represent specifically Irish developments.⁴ Hence, of the standard modern Irish–English reference dictionaries, Dinneen is more often cited than Ó Dónaill.

² The National Terminology Database for Irish <tearma.ie> gives *iascóir* for ‘fishkeeper’, but this is presumably a neologism. But cf. the variant *iascadóir* for *iascaire* given by Dinneen.

⁴ And sometimes exclude even some Irish dialects; see Ahlqvist (1994: 52).

0.4 Linguistic terminology

Conventional linguistic terminology is generally used without special explanation, although less commonly used or specialized terms are defined and contextualized as appropriate.

Certain terms from traditional Celticist analyses of Gaelic phonology are retained in order to refer to abstract categories of sounds persisting throughout periods and varieties, when their synchronic phonetic and phonological analysis may vary, and in order to avoid taking positions on theoretical questions when this is not immediately relevant to the discussion.

Most notably, the terms ‘slender’ and ‘broad’ in reference to consonant quality are retained, in preference to ‘palatalized’ and ‘non-palatalized’, both because the former terms are less cumbersome and are well-known within Gaelic studies (and popular discourse), and because it has been argued that in some dialects, namely those of Munster, velarization is more important in distinguishing between velarized (broad) and non-velarized or palatalized (slender) consonants (Ó Maolalaigh 1997: 36); and ‘palatalization’ is not necessarily a very accurate term for the articulation of the Irish slender labials (Oftedal 1963: 73–4; McKenna 2001). In addition, the slender category contains both palatalized and fully palatal consonants.

On similar grounds, the traditional terms ‘fortis’ and ‘lenis’ are retained for the distinction between sonorants maintained in some Gaelic dialects and earlier varieties (also called ‘tense’ and ‘lax’ [e.g. Archangeli et al. 2011]). This should not be confused with the more widespread cross-linguistic use of ‘fortis / lenis’ in contemporary phonetics and phonology to refer to e.g. aspiration contrasts in stops.

0.5 Citation of reference works

Citation of academic works follows the conventional author–date system, except for certain frequently-cited key sources, which are given by author only or by abbreviation of the title, as shown below. Hence ‘Jackson’ always refers to Jackson (1955), unless

otherwise indicated. Full references for these abbreviated citations are given in the bibliography.

Works cited by author only:

- Cregeen, Cr. *A Dictionary of the Manks Language* (1835), Wheeler ed. (2018)
Dinneen *Irish–English Dictionary* (1927)
Dwelly *Gaelic–English Dictionary* (1911)
Jackson *Contributions to the Study of Manx Phonology* (1955)
Kelly, K. *Fockleyr Manninagh as Baarlagh* [Manx dictionary] (1866)
MacBain *An Etymological Dictionary of the Gaelic Language* (1911)
Marstrander ‘Det Norske Landnâm på Man’ (1932)
Ó Dónaill *Foclóir Gaeilge–Béarla* (1977)
O’Rahilly *Irish Dialects Past and Present* (1932)
Rhÿs *Outlines of Manx Phonology* (1894)

Works cited by initials of title:

- EDD* *English Dialect Dictionary*, Wright (1898–1905)
eDIL *Electronic Dictionary of the Irish Language*
GOI *Grammar of Old Irish*, Thurneysen (1946)
HLSM *Handbook of Late Spoken Manx*, Broderick (1984–86)
LASID *Linguistic Atlas and Survey of Irish Dialects*, Wagner (1958–69)
LEIA *Lexique étymologique de l’irlandais ancien*, Vendryes et al. (1959–96)
OED *Oxford English Dictionary*
PNIM *Placenames of the Isle of Man*, Broderick (1994–2005)
SGDS *Survey of the Gaelic Dialects of Scotland*, Ó Dochartaigh (1994–97)

All translations of works in languages other than English are my own.

0.6 General abbreviations and symbols

– word boundary

* – unattested or hypothetical form

_ – segment(s) in question

? – doubtful or uncertain conclusion, reconstruction etc.

/abc/ – phonological / phonemic transcription

[abc] – phonetic transcription

abc – phonetic transcription in non-IPA system, quoted from external sources

abstr. – abstract noun

- adj. – adjective
AV – Authorized Version (King James Bible)
C – consonant; broad consonant
C^ˠ – slender / palatalized consonant
CM – Classical Manx (18th century)
comp. – comparative (and superlative)
cond. – conditional
Cr. – Cregeen’s dictionary (Cregeen 1835)
dat. – dative
dial. – dialect, dialectal
ed. – edition, edited by
EIr. – Early Irish (Early Gaelic) (=Old and Middle Irish)
EM – Early Manx (17th century, Phillips’ prayer book)
Eng. – English
f. – feminine
f. – folio (leaf in manuscript)
fn. – footnote
Fr. – French
fut. – future
G. – Gaelic (Goidelic), Early Modern Irish / Gaelic (see §0.4), ‘Common Gaelic’
gen. – genitive
Goi. – Goidelic (in quotations from Rhŷs), = G., Gaelic
H – heavy syllable
'H – stressed heavy syllable
impv. – imperative
invar. – invariable
IPA – International Phonetic Alphabet
Ir. – Irish
J: – data in *HLSM* from Jackson (1955) (with speaker initials)
K. – Kelly’s dictionary (Kelly 1866)
L – light syllable
'L – stressed light syllable
L1 – first language
L2 – second language
l., ll. – line(s)
len. – lenition, lenited
Lh. – Manx vocabulary collected for Edward Lhuyd (Ifans and Thomson 1980)
LM – Late Manx (19th – 20th century)
LSM – Late Spoken Manx (Broderick’s term for the speech of the 20th-century informants)
m. – masculine
Mlr. – Middle Irish (Middle Gaelic)

Mod. – Modern

MS, MSS – manuscript(s)

N – north, northern Manx

n. – neuter

n. – noun

OIr. – Old Irish (Old Gaelic)

p., pp. – page(s)

part. – participle

Ph. – John Phillips’ prayer book manuscript and orthography

pl. – plural (1pl. = first person plural, etc.)

pret. – preterite

r – recto (front side of leaf in manuscript)

S – south, southern Manx

s.v. – see under entry (sub verbo)

ScG. – Scottish Gaelic

sg. – singular (1sg. = first person singular, etc.)

usu. – usual(ly)

V – phonetic or phonological vowel; orthographic vowel symbol

v – verso (reverse of leaf in manuscript)

vn. – verbal noun

voc. – vocative

vol. – volume

W:N, W:S – data in *HLSM* from Wagner (1958–69), northern or southern informant(s)

0.7 Abbreviations of names of speakers and fieldworkers

Examples from the last native speakers (§1.6.9) are marked with the initials of the speaker as given by Broderick (*HLSM* I: xxvii–xxviii), e.g. NM for Ned Maddrell, JTK for John Tom Kaighin (see also map §0.8). All such data are from Broderick’s dictionary (*HLSM* II) unless otherwise stated. These abbreviations are also used in presenting data from Jackson and Wagner (whether directly cited or via Broderick) rather than their own abbreviations of the informants’ names. ‘J’ means that the example is taken from Jackson (e.g. J:EK = example from Eleanor Karran noted by Jackson), and ‘W’ means Wagner (his data are marked only S ‘south’ or N ‘north’). Wagner also includes data from Marstrander which is labelled M.

0.8 Map of the Isle of Man



Shown are parish⁵ boundaries, major settlements, and certain other places mentioned in the thesis. The informants whose speech is transcribed in Broderick's *Handbook of Late Spoken Manx (HLSM)* are located on the map by place of upbringing, so far as this can be determined (following Broderick 2018a).⁶ Their initials are given as listed

⁵ The parishes date back at least to the late Middle Ages, and are still (together with more recently established town and village authorities) the basis of local government at the present day.

<<https://www.gov.im/media/1351687/map-local-authorities.pdf>> [accessed 21.09.2019]

⁶ * born in Lezayre but brought up in Lonan (Broderick 2018a: 164); ** born(?) and brought up initially in Liverpool (Broderick 2018a: 146); *** born Jurby (Broderick 2018a: 142); **** resident at Ballaskeig Beg, Maughold, when visited by Marstrander; no further information (Broderick 2018a: 181).

in *HLSM* (I: xxvii–xxviii) (§0.7). The traditional (pre-1796) north-south administrative division (running along the central ridge of mountains) is shown (Broderick 1999: ix) which has a bearing on dialect, although the status of Maughold in particular is ambiguous,⁷ and Broderick (*HLSM* I: xxvi) treats Thomas Christian (TC) as a northern speaker.

⁷ <<http://www.isle-of-man.com/manxnotebook/parishes/parishes.htm>> [accessed 21.09.2019].

Chapter 1 Introduction

1.1 Purpose and scope of the thesis

The purpose of this thesis is to elucidate some of the hitherto poorly understood aspects of the diachronic development of Manx phonology, both from earlier varieties of Gaelic and within the attested period of written and recorded Manx, and to situate these developments in the wider context of Gaelic dialectology and historical linguistics.

The lack of systematic analyses of the linguistic features of Manx has been recognized as a serious hindrance to Gaelic studies. For example, Ó Maolalaigh (1997: 5, 11), in his doctoral thesis on the historical phonology of Gaelic short vowels, states the difficulties of working with the existing research on Manx and the ‘raw’ phonetic data which it presents:

Manx dialects have not been referred to in the core chapters [...] for practical reasons, the main ones being (i) the absence of a monograph on a single dialect or dialect area of Manx and (ii) the difficulty of comparing the mass of raw phonetic Manx data to the phonological data of Irish and Sc[ottish] G[aelic] dialects [...] [a]lthough the evidence of Manx is crucial for a full understanding of the development of Gaelic.

(Ó Maolalaigh 1997: 5)

All accounts of Manx exhibit a phenomenal degree of phonetic diversity which is difficult at the present state of research to analyse structurally. The inclusion of such ‘raw’ data in a minute phonological study like the present would be futile.

(ibid.: 11)

The sometimes overlooked importance of Manx within Gaelic linguistics has been pointed out by Thomson (1960: 116; 1969: 178) (see also §1.6.2):

Despite the late date at which Manx first appears in a written form it has [...] the special advantage of never appearing in the usual Gaelic orthography. Had it done so it would no doubt be as coyly uninformative about the beginnings of svarabhakti as the other more conventional dialects are.

(Thomson 1960: 116)

Apart from the intrinsic interest of the development of an isolated branch of East Gaelic, the non-traditional orthography allows us to observe sound-changes which are masked by conventional Gaelic spelling [...], and with regard to grammar and meaning early Manx can shed light on that early period of Scottish Gaelic when writers of the languages still felt bound to the standards of literary Irish.

(Thomson 1969: 178)

In the spirit of the titles of Rhÿs's *Outlines of the Phonology of Manx Gaelic* (1894) and Jackson's *Contributions to the Study of Manx Phonology* (1955), it is recognized that the present thesis is only a partial and incomplete treatment of the topic. It has not been possible to deal with every aspect of Manx historical phonology here, but it is hoped that the thesis goes some way to filling the gap noted by Ó Maolalaigh.

There is a particular focus on the development of the vowel system (Chapters 2, 3, also §4.6), along with developments of the sonorant consonants (Chapter 4), which have a particular bearing on the vowels, and prosodic phenomena (particularly stress) (Chapter 5).

With regard to sources and methodologies I have throughout the thesis particularly focused on two previously neglected sources: (a) the extensive early descriptions of native Manx speech by Rhÿs (1894) (§1.5.2), and (b) the rich but difficult to interpret evidence of the Manx orthographies (§§1.6.1–1.6.7).

I have also applied quantitative methods to existing bodies of data, which is largely new in the study of Manx,⁸ together with instrumental phonetic analysis of some of the recordings of the terminal speakers. Given the time-consuming nature of these methodologies, it has not been possible to apply them to every area where they might prove useful, but it is hoped that these analyses indicate what can be achieved and provide a basis for future research (§§6.2, 6.4).

⁸ Although see Ó Sé (1991) (§5.1.1.5), also Thomson (1969) and Broderick (2011), where some quantitative data are provided. See also Max Wheeler's recent papers which apply corpus methodologies to various aspects of Manx morphology and syntax. <<https://sussex.academia.edu/MaxWheeler>> [accessed 29.08.2019].

1.2 Descriptive and theoretical concerns

It is hoped that the topic of this thesis will be of interest to a wide range of scholars, including those who specialize in descriptive and theoretical phonology, as well the broad fields Gaelic or Celtic Studies. I have therefore sought to keep the discussion as accessible as possible, and to avoid detailed discussion of issues of phonological theory except where essential to the argument being made. This thesis takes as its starting point the above observation that insufficient fundamental descriptive data on Manx phonology has hitherto been available, and that the first task of the researcher, in such circumstances and with limited space, is to present as much data as possible in an intelligible fashion, with analysis limited to initial and cautious interpretation of the data using a minimum of basic theoretical concepts defined as broadly and non-committally possible.

For example, when I refer to ‘phonemes’, the reader should understand in broad terms what is conventionally understood by such a concept in phonology, but I do not endorse any of the particular rival analyses of what exactly a ‘phoneme’ is, or take a position on whether the existence of such units can in a final analysis actually be justified. Similarly, in my discussion of the history of stress patterns in Gaelic (§5.1.1.6), I cite Green’s (1997) analysis of this topic, referring in general terms to typological generalizations such as the observation that unstressed heavy syllables are dispreferred, but without detailing Green’s particular Optimality Theory analysis of the phenomena in question, which can and have been analysed in a number of other frameworks.

My approach thus has regard to the tension between descriptive and theoretical approaches mentioned by Hayes (1995: 5):

I often found that it was precisely by moving beyond theory-centred writings to the original sources on which they were based that the data could be found to support a sharply different analysis. It is only natural that theorists, pressed for space, will focus on the data most relevant to their own analyses.

(Hayes 1995: 5)

There is, of course, also a risk that spurious or contradictory suppositions about the data will be made if insufficient attention is given to theoretical concerns. It is therefore my hope that the data presented here will be built on by future scholarship, which will subject them to more detailed and rigorous theoretical analysis where appropriate.

1.3 Historical background of Manx

Scholars have conjectured that Gaelic entered the Isle of Man around the same time as the expansion into Scotland (by around AD 500) (Jackson 1953: 173; Williams 1994b: 739; Broderick 2009: 305), although later dates have also been suggested such as the eighth or ninth century (Watson 1926: 172–4). For an assessment of the options, see Thomson (2015). Ogham inscriptions dating from the fifth to the seventh century are the first attestations of Gaelic writing in the island (Broderick 1999: 13). A Brythonic language was apparently spoken before or alongside Gaelic, as evidenced by the bilingual and biscriptal Latin / Brythonic and Gaelic Knock-y-Dhoonee stone (c. 600) (Jackson 1953: 173; Thomson 2015: 241–3), and possibly the placename *Hentre* if this represents Welsh *hen dref* ‘old settlement’ (*PNIM* I: xxiii). Thomson (1992: 100; 2015: 252) also suggests that Manx, along with Scottish Gaelic, shows signs of a Brythonic substrate, e.g. in the verbal system.

Whether Gaelic survived the Norse period or was reintroduced has been a matter of debate, especially on the basis of place-name evidence (Marstrander 1932; Gelling 1971, 1991; Megaw 1976; Fellows-Jensen 1983, 2015; Thomson 1983, 2015). I have argued (Lewin 2017a: 164–6, 171–3) that survival is more likely — and, at any rate, that the specific sociolinguistic circumstances did not exist which would result in a significant Norse substrate in Manx grammar, contrary to the hypothesis of Williams (1994b: 737–41).

There is some evidence of the participation of Man in a wider culture of Gaelic learning at an early period (Macquarrie 2015), but this seems to have been disrupted first by Norse invasion (c. 900) and especially later when the island came under rule by English magnates in the fourteenth century. An early bardic praise poem to the King of Man, Rognvaldr (Ragnall, Reginald) Guðrøðarson (Ó Cuív 1953; Clancy 1998:

236–41; Macquarrie 2015: 297–300; Etchingham et al. 2019: 123–96) appears to attest to a mixed Norse-Gaelic culture in the island, but it is not clear to what extent the Irish literary tradition was established in the island. Given Raghnaill’s involvement in the politics of the wider Irish Sea world (McDonald 2007), the poem could well have been composed and performed at the court of an ally, relative or subordinate in Ireland or Scotland.

If the Gaelic literate tradition was present in the medieval period, no trace of it has survived, and it does not seem to have been known in the period when it became necessary to write Manx for religious purposes after the Reformation.⁹ The first continuous Manx prose text, Bishop Phillips’ manuscript translation of the Anglican prayer book, is dated to around 1610 (Thomson 1953), and has an orthography diverging in several respects from the later eighteenth-century system (§1.6.3). Both systems are based to a large degree on contemporary English orthographic conventions. The first printed text is a bilingual catechism from 1707, and the orthography used in this volume was gradually developed through the eighteenth century, culminating in the completion of a Bible translation in 1773. Later texts include hymn books (Lewin and Wheeler 2019), religious tracts, and newspaper articles (Lewin 2014a).

Literacy in Manx apparently became fairly widespread, as attested by the large quantity of manuscripts of carvals or religious ballads surviving from the mid-eighteenth century onwards, often composed and copied by ordinary people (Moore 1891). The carval and sermon manuscripts remain largely unstudied and are often in less standardized versions of the Manx orthography (see Lewin 2015b), providing valuable evidence of pronunciation. The eighteenth and nineteenth centuries also saw the collection of a significant number of Manx traditional songs (Moore 1896; Strachan 1897; Gilchrist et al.: 1924–26; Thomson 1960–62; Broderick 1981a; 1981c; 1982b; 1984a; 1984b; 1984c; 1990; 2015b; 2018e; 2018f; Ó Muirheartaigh 2016).

⁹ See Lewin (2015b: 83) for discussion of Rhÿs’s (33–4, 170) and Williams’ (1994b: 704–6) claims that Phillips’ orthography is based on a pre-existing Manx writing tradition, which I judge to be unlikely.

The unmarked use of written Manx for vernacular purposes petered out in the middle of the nineteenth century as monoglots became scarce and language shift to English gathered pace (Thomson and Pilgrim 1988: 16–17; Broderick 1999: 27–30, 254; Lewin 2014a: i), and the composition and publishing of Manx texts from then on has been essentially an antiquarian or revivalist activity.

1.3.1 Periodization of Manx

1.3.1.1 Early, Classical and Late Manx

For Manx the conventional periodization outlined e.g by Broderick (1999: 77) and Thomson (2015: 247) is used, i.e. Early Manx (seventeenth century, essentially the language of Bishop Phillips’ translation of the Anglican prayer book, c. 1610), Classical Manx (eighteenth century, the language of the Manx Bible completed in 1773) and Late Manx (nineteenth century). See also Lewin (2016a: 183).

These are of course only vague labels of convenience and do not imply clear boundaries between the periods. Notably, the ‘Traditional Ballad’, although preserved only in eighteenth-century manuscripts, shows some linguistic features more archaic than those of Phillips, in accordance with its presumed date of composition prior to 1520 (Thomson 1960–62), and the second-earliest known Manx prose text, a sermon from 1696 (Lewin 2015b), can be regarded as transitional between Early and Classical Manx. The Fenian Ballad *Finn as Ossian* (Broderick 1990; 2018f; Ó Muirheartaigh 2016), and the lament *Baase Illiam Dhone* on the death of William Christian in 1663 (Broderick 1981a), as well as other folk-songs, likewise show older linguistic features, although again transmitted in eighteenth and nineteenth-century manuscripts.

As for *Pargys Caillit*, the Manx adaptation of Milton’s *Paradise Lost*, printed c. 1796 and previously believed to have been composed in his youth in the early 1770s by Thomas Christian (1754–1828), Vicar of Malew (1780–99) (Thomson 1995), strong

internal and circumstantial evidence has recently been adduced¹⁰ to suggest that it was in fact composed in middle age (1730s or 40s) by his grandfather, also Thomas Christian, Vicar of Rushen (1713 to 1727) and of Marown (1734 to 1752). The poem shows a number of linguistic archaisms reminiscent of Phillips, Woods' sermon, and Bishop Thomas Wilson's bilingual catechism *Coyrle Sodjeh*, the earliest printed text (1707).

Early eighteenth-century texts, including *Pargys Caillit*, *Coyrle Sodjeh* and the first edition of Matthew's gospel (1748, although apparently translated c. 1722), are thus more linguistically archaic than texts from the second half of the century. To an extent which is difficult to assess, the choice of linguistically conservative or innovating forms is also likely to reflect dialect, idiolect, or register variation. The latter factor must always be borne in mind especially when considering texts from the late eighteenth and nineteenth centuries when literacy had become more established, and the archaizing influence of the Bible is sometimes to be suspected (cf. Broderick 1982a: 178–9).

1.3.1.2 The language of the terminal speakers

In addition to the above periodization, I consider it important to distinguish, although not necessarily categorically, between the language of those born up until the early decades of the nineteenth century, who (in more isolated areas and marginalized socioeconomic strata at least) (Lewin 2019a: 79–82) were evidently Manx-dominant speakers with a full native command of the language, and those born late enough to be recorded in the mid twentieth century, all of whom are to be regarded, though to varying extents, as English-dominant 'semi-speakers' (cf. Dorian 1977) showing clear signs of 'incomplete acquisition' (Montrul 2008) (§1.6.9.1).

¹⁰ Max Wheeler, personal communication.

Broderick (1999) does not always distinguish clearly between these two categories of speakers, classing both as ‘Late Manx’ and claiming to find some of the attrition or language shift features of the last speakers in the language of earlier writers, which Lewin (2017a: 189–91) disputes. The language of these last speakers (here ‘terminal speakers’) is here distinguished as ‘Terminal Manx’ (=Broderick’s ‘Late Spoken Manx’). ‘Late Manx’ here, unless otherwise qualified, refers to the speech of those born from the late eighteenth century to the mid-nineteenth century, which may show an intensification of language contact, but not necessarily the features of language obsolescence and incomplete acquisition found in the terminal speakers.

1.3.1.3 Revived Manx

‘Revived Manx’ is a variety spoken by a few hundred people today as a second language (or, in a few cases, as a first language acquired from second-language speakers). The development of this variety can be traced back to the late nineteenth century and especially the mid-twentieth century when a small number of enthusiasts sought out the last remaining traditional speakers (Broderick 1999: 172–87; Stowell 2005; George and Broderick 2009; Lewin 2015a; 2016c).

This thesis is concerned only with developments in ‘Traditional Manx’, i.e. the Early, Classical and Late Manx periods referred to above, representing speech varieties passed down by uninterrupted intergenerational transmission from earlier periods of Gaelic (cf. Jackson: vi).

For discussion of the linguistic differences between Traditional and Revived Manx see Lewin (2015a; 2016c).

1.4 The place of Manx within the Gaelic dialect continuum

Manx shares features both with Irish and Scottish dialects, although it has generally been held that Manx is closer overall to Scottish Gaelic (O’Rahilly 128–40). Jackson (1951: 91–2) groups Manx and Scottish Gaelic together as ‘Eastern Gaelic’, branching off from an earlier ‘Common Gaelic’. While critiquing Jackson’s concept of ‘Common

Gaelic’, Ó Buachalla (2002) continues to regard Manx and Scottish Gaelic as varieties of ‘Eastern Gaelic’, although he considers that the difference between northern dialects (Ulster Irish, Manx, Scottish Gaelic) and southern dialects (Connacht and Munster Irish) is more significant. Recently, this ‘tree model’ approach has been problematized by Ó Muirheartaigh (2015: 45):

The classification of Manx and Scottish Gaelic together is not unproblematic, especially in light of evidence for an early fundamental structural feature (the development of eclipsis) shared by Irish and Manx to the exclusion of Scottish Gaelic [...] In short, the tree model seems particularly ill-suited to a description of the position of Manx.

(Ó Muirheartaigh 2015: 45)

Manx has also been linked to Munster Irish, especially on the basis of shared phonological developments such as non-initial stress, as well as some shared lexis (Williams 1994b: 740–1). The ‘distinctiveness’ of Manx lexis has also been highlighted by Ó Muirheartaigh (2015: 75–76), on the basis of data from Elsie (1986) showing Manx basic lexis to be closer to Old Irish than to any other modern dialect. According to Ó Muirheartaigh,

The situation of Manx, although covering a small geographic area, is particularly interesting for a variety of reasons. In historical linguistic terms, it is perhaps the Gaelic variety least suited to the strait-jacket of the Darwinian tree-model in which it has traditionally been analysed (O’Rahilly 1932; Jackson 1955; Broderick 2009). Given the mix of extremely archaic and innovative features one finds in Manx, along with its historical and geographic position as a centre, for a period at least, of traffic between Ireland, Britain and the Scandinavian north, it provides an interesting test case for an array of sociolinguistic theories discussed in this thesis. Most especially, it appears that Manx could be usefully analysed in terms of medieval new-dialect formation.

(Ó Muirheartaigh 2015: 311)

If it is accepted, however, that the ‘tree model’ is only really valid when one population is almost entirely isolated from another, it is no surprise that important isoglosses are found in various locations throughout the Gaelic-speaking area, and that no definitively unproblematic categorizations of Gaelic dialects can be attained. As Ó Muirheartaigh (2015: xx) has observed, commenting on Ó Buachalla (2002), ‘it

would not be difficult to find twenty-three linguistic features linking any two parts of the Gaelic-speaking world’.

Given that the Isle of Man is geographically both central in the Gaelic area (on the north-south axis and in terms of sea routes) and peripheral (in that it is located on the eastern edge, and has been socially and politically isolated from other Gaelic areas since the Late Middle Ages), it is also not surprising that Manx shows a number of highly distinctive and divergent features, as well as sharing features with diverse points of the dialect continuum. It is not clear that ‘new-dialect formation’ (implying a founder population of geographically diverse origins) is necessary to explain the features observed, although it is not implausible that this occurred. The Isle of Man would certainly have been within fairly easy reach of settlers from along the east coast of Ireland, Galloway, and the Hebrides and western Highlands. Further historical research, including historical genetics, as well as work on Manx personal and place-names, and those of neighbouring areas, may potentially elucidate this issue.

Moreover, it is not clear that some shared features are necessarily the “same” feature at all. For example, diphthongization of historically short /e, a, o/ + /N/ is found in both Munster Irish and northern Scottish Gaelic, as well as *the* northern dialect of Manx (*HLSM* I: 161), in e.g. G. *ceann* ‘head’, Manx *kione*, S /kʲo:n/, N /kʲaʉn/. Some form of lengthening, rounding or diphthongization in this position is widespread in Gaelic dialects (*LASID* I: 120; *SGDS* II: 165–6) as developments of what the Irish bardic grammarians called *síneadh meadhónach* ‘middle quantity’ (Greene 1952: 212; Mac Cárthaigh 2014: 168–71) before original fortis /N/.¹¹ Phillips’ spellings (such as *kian*) suggest retention of a pronunciation [kʲaN:] in c. 1610, so the development of the forms represented by the eighteenth-century spelling *kione* must be fairly late, and it is not clear that it should be linked to the Munster or northern Scottish forms. It is not surprising that shared inherited structures give rise to a limited range of distinct outcomes in different dialects, which may nonetheless be parallel, independent developments.

¹¹ Even in those dialects of Ulster and southern Scotland where the forms can be phonologically represented as /kʲeN/ or /kʲaN/, there may be some phonetic lengthening of the vowel as well as the consonant, i.e. [kʲeːn̪ˠ], [kʲaːn̪ˠ] (cf. Jones 2010: 61). See §4.5.4.2.

Similarly, stress shift in Manx has been compared to the southern Irish development (Williams 1994b: 740), but is distinct in significant ways, such as its being conditioned by the length of the vowel in the preceding syllable (§5.1), the fact that unstressed syllables containing /ax/ attract stress in Munster dialects but not in Manx, and the fact that pretonic long vowels (at least in items which are synchronically monomorphemic) are shortened in Manx but not in Munster Irish (§5.1.3). It is interesting that developments in stress in Manx involve a combination of “Munster” stress shift and “Scottish / Ulster” vowel shortening, but whether this reflects dialect affinity or contact, or independent developments, is not immediately obvious (§5.1). Again, all Gaelic dialects inherited the violation of the weight-to-stress principle (whereby long vowels are disfavoured in unstressed syllables), and the options for eliminating this tension are limited (cf. Green 1997: 69–97).

Another example is the ‘breaking’ of /e:/ to /ia/, which outside Manx is found mostly in northern Scotland and in Munster. From orthographic evidence this would seem to have developed in Manx quite late, during the seventeenth century (§2.2.7). As in the other cases, it is unclear that this represents any particular relationship with other Gaelic dialects, not to mention that it is a recurring development from Old Irish onwards (McCone 1994: 89).

Although further detailed consideration of the question of how to classify Manx within the Gaelic languages is beyond the scope of this thesis (but see §6.2), it is hoped that the data and analysis presented here will at least provide a clearer picture of some of the features present in Manx for scholars interested in comparative questions.

1.5 Review of previous scholarship

Given that the evidence of Manx is both copious and valuable for Gaelic historical linguistics and dialectology, it is regrettable that the language has received so little scholarly attention, notwithstanding the best efforts of a small number of researchers. No comprehensive historical grammar, phonology or dictionary of Manx exists; the only works available are dated publications by amateur scholars such as Kneen’s grammar (1931) and dictionary (1938), or prescriptive revivalist works such as

Fargher's (1979) dictionary and Kewley Draskau's (2008) grammar, as well as works from the late eighteenth and early nineteenth century by native scholars (Kelly's grammar and dictionary, Cregeen's dictionary). Otherwise, the only general academic descriptions are short chapters by Thomson (1984; 1992; 2000), Williams (1994b) and Broderick (2005; 2010).

Much work of value is to be found in fairly obscure or local publications, even from the perspective of Celtic Studies. Notably, some of the most extensive linguistic notes on Manx are in editions or commentaries on texts by Thomson (1981, 1995, 1997, 1998) published in the Isle of Man by the language organization Yn Cheshaght Ghailckagh. Linguistic commentary is also to be found in Broderick's articles, mostly editions of various texts (1981a; 1981b; 1981c; 1982a; 1982b; 1983; 1984a; 1984b; 1984c; 1990; 2011; 2017; 2018a; 2018b; 2018c; 2018d; 2018e), Thomson's articles and editions in various journals and volumes (e.g. 1950; 1954–59; 1960; 1960–62; 1963; 1969; 1976; 1988; 1990; 1991; 1999), and my own work (Lewin 2011; 2014; 2015; 2016a; 2016b; 2016c; 2017a), as well as papers from a few other authors who have taken an occasional or inchoate interest in Manx, such as Ó Sé (1991), Breatnach (1993) and Ó Muirheartaigh (2016).

Work on wider Gaelic linguistics has tended to ignore Manx, or to mention it only in passing, although as Ó Maolalaigh observes in the quotation given above, this does not necessarily reflect neglect or apathy, but rather the lack of readily available and interpretable descriptions to set beside Irish and Scottish data. A perception that Manx, the 'Cinderella of Gaelic tongues' (O'Rahilly 1932: ix; Thomson 1969: 177) has little of value to offer the scholar, and is merely an anglicized dialect which 'hardly deserved to live', to quote O'Rahilly's (1932: 121) notorious evaluation, may also have played a role; see Lewin (2017a) for discussion.

1.5.1 Material collected for Edward Lhuyd

The pioneering polymath and scholar of the Celtic languages Edward Lhuyd (1660–1709) includes in a multilingual glossary in his *Archæologia Britannia* (Lhuyd 1707:

290–8) a selection of Manx lexical items in an idiosyncratic orthography (Thomson 1968), but these were apparently collected by William Jones, one of Lhuyd's assistants (Ifans and Thomson 1980: 129), who did not understand the language; as a result the attempted phonetic representation is very approximate. Moreover, the choice of informant appears not to have been ideal (Thomson 1999: 390).

Upon the discovery of Jones' manuscript (National Library of Wales MS 13234A, pp. 73–128), the word list was edited by Ifans and Thomson (1980), and the linguistic information which can be gleaned from the data is analysed by Thomson (1999). Where this material is cited in the present thesis, the abbreviation 'Lh.' is used; this refers to Ifans and Thomson's edition.

1.5.2 Rhÿs (1894)

Despite its neglect by later generations of Celticists, Manx did not escape the notice and interest of the first Professor of Celtic at Oxford, the Welshman Sir John Rhÿs. His analysis of Manx historical phonology is published in his treatise *Outlines of the Phonology of Manx Gaelic* (1894), and is based on extensive fieldwork across all parishes of the island carried out during six visits between 1886 and 1893. The initial purpose of the visits was to study the Ogham stones of the island, but Rhÿs soon developed an interest in the vernacular language and folklore of the Manx people. In addition to his *Outlines*, significant amounts of data survive in notebooks now preserved in the National Library of Wales (Broderick 2016a; 2016b; 2018c; 2019; Lewin 2019a).

Rhÿs's work has a number of important advantages over that of later scholars, including the number, geographical range and birth-dates of his informants. Rhÿs records 107 potential informants in his notebooks, of whom 88 were interviewed (Broderick 2018c: 45). These were largely native speakers of an earlier generation than the terminal semi-speakers encountered by Marstrander, Jackson and Wagner and transcribed by Broderick (*HLSM*). Many were born in the 1810s to 1840s, in contrast with the terminal speakers who were born from the 1840s to 1870s (Broderick 1999: 54–66).

Rhÿs's informants would be more likely to be Manx-dominant or balanced bilinguals. They are reported as having features such as consistent *h*-prefixation after certain clitics (Rhÿs: 72), in contrast to the terminal speakers' limited use of this feature (*HLSM* I: 23), extensive vowel nasalization (Rhÿs: 31–48; Lewin 2019a: 82–9), and grammatical gender concord (Lewin 2019a: 79–82). In most cases, those interviewed by Rhÿs would have been raised in a largely Manx-speaking community, socialized among Manx-speaking peers, and would have continued to use the language regularly for a substantial portion of their lives (albeit perhaps less regularly by the time of Rhÿs's visit owing to the changing sociolinguistic situation).

In contrast, the terminal speakers were raised a few decades later in communities already undergoing rapid language shift, with the language widely stigmatized as a marker of backwardness (Broderick 1999: 35–7). While they may have used Manx (actively or passively) in their youth with the older generation, peer group socialization was largely in English (Lewin 2014b, 2017a: 191–3; Miller 2007, and see §1.6.9 for further discussion), and their speech shows clear signs of uneven and incomplete acquisition (§1.6.9.1). Rhÿs's data are thus particularly valuable in providing details obscured or unavailable in the speech of the later terminal speakers.

In addition to his principal informants, Rhÿs relates that he engaged in briefer exchanges with many more Manx speakers as he travelled around the island. This seems to have given him a “feel” for what were the most common forms, perhaps leaving him less susceptible to the idiosyncrasies of individual informants in giving a general overview of the language. Rhÿs is, however, also careful to note any unexpected features and the circumstances in which his data were collected, which are frequently of use in analysing the material. When he is uncertain of the articulation of a particular sound, he notes his uncertainty, and explains his thought process for coming to his conclusions. Rhÿs was well-aware of his lack of training as a phonetician and readily admits it:

In attempting to deal with the Manx vowels, I have had to classify them as best I could according to their effect on my ear; for I rarely could ascertain with any precision how they are formed. I should have been glad to have described them in the exact terminology with which Dr. [Henry] Sweet's works on English philology have made us familiar; but convinced as I am that my ear has not been

trained—under no circumstances probably could it have been trained—to appreciate the nice distinctions which English phonologists think it requisite to draw between closely related vowels, I have abstained from the attempt to follow their example. Even if I escaped blundering hopelessly in such an effort, it would only tend to make the reader fancy that I am blest with a power of discrimination which I cannot claim in the matter of phonetics.

(Rhÿs: 1)

Jackson (4) criticizes the accuracy and intelligibility of Rhÿs's work:

Sir John Rhys was the pioneer, with his "Outlines of the Phonology of Manx Gaelic" [...] This gives a good deal of information, but it is not always very intelligible, and in some cases one suspects his accuracy.

(Jackson: 4)

Rhys and Kneen both give the equivalents of **ü**: [y:], **ü:ə**, or **üə**, but it may be doubted whether they really knew what this means [...] and what they heard was probably **u:**, **u:ə**, **uə**, or **ʌ**: [ʊ:], **ʌ:ə**, **ʌə**.

(Jackson: 48)

Jackson (48) seems to confuse Rhÿs's description of Manx reflexes of G. *ua* (probably [iə, i:] or similar), with those of *ao* and *uai / aoi* ([ə:] or [e:]), which Rhÿs carefully distinguishes (§3.5.1).¹² That Rhÿs may admittedly have confused rounded and unrounded vowels here may be a more widespread problem of early phonetic descriptions of Gaelic (§3.5.6), and his descriptions are at least useful in determining which vowel sounds were alike and which were distinct, even if other evidence is needed to confirm their exact quality.

Nevertheless, the weaknesses of Rhÿs's work must be borne in mind in making use of his descriptions. Many of these can be overcome by judicious and patient analysis of the text in context, but nevertheless may have contributed to later scholars' difficulty in making use of it. These weaknesses include the following:

¹² For another problem with Jackson's dismissal of Rhÿs, cf. Broderick's (1999: 74) comment '[i]n view of the abundance of native Manx speech material now available, Jackson's [4] view that claims for North/South dialectal differences do not stand up to examination cannot be endorsed.'

(a) As noted above, phonetics was not Rhÿs's primary area of expertise and it was not one in which he had any formal training. In addition, the science in general was in its infancy, as was its application to the Gaelic languages. As noted by Sommerfelt (1959: 51), Rhÿs's work was only the second publication on the phonetics and phonology of a Celtic language 'which was up to the standards of contemporary science', and the first major phonetic description of any Gaelic dialect.

(b) His transcriptions are inconsistent in various ways. Frequently, and without indication, items are left partially in their orthographic form with only certain phones, often only the one under discussion, being transcribed. Rhÿs seems to have tried as far as possibly to avoid the use of symbols not yet introduced in the text of the book, rather than using a consistent notation all the way through his treatise and providing a key or index (as Jackson does).

(c) Despite his disavowal of overly narrow transcription (Rhÿs: 1, quoted above), he sometimes seems to attempt to draw just such overly narrow distinctions, only to disregard or forget about them later on.

(d) Vowel length is indicated by a macron over long vowels, and sporadically by a breve over short ones. However, frequently, no indication of length is given at all, especially if the vowel character already has a diacritic (e.g. **ũ**, **ü**). The length intended can, however, often be deduced from the context (e.g. whether the item is cited in a section discussing a long or a short vowel).

(e) Sounds are often described by comparison with other languages, principally English, Welsh, French and German, as well as Irish and Scottish Gaelic. It is, however, often unclear exactly what sound is meant by these comparisons, or what precise varieties are intended.

(f) Sometimes different indications of a phone's value seem to contradict one another, and it is difficult to work out what Rhÿs probably heard, at least from his descriptions alone. His \bar{y} (§3.5.1) is a case in point.

(g) Rhÿs's work is written in rather flowery and anecdotal continuous prose, with many digressions, and there is no index, which makes it less accessible than would be desirable, and may have contributed to Jackson and other scholars' neglect of it.

1.5.3 Strachan (1897)

In 1883 Strachan phonetically transcribed the Manx folksong *Ec ny Fiddleryn*¹³ from Thomas Kermode (1825–1901), a fisherman of Bradda near Port Erin. (Bradda was one of the strongholds of Manx noted by Rhÿs.) By the time of publication in the first issue of *Zeitschrift für celtische Philologie* (1897), he states that he has modified the notation to agree with Rhÿs's system:

I wrote down the song phonetically as well as I could, but, as I have unfortunately had no special training in phonetics, my attempt is at the best only an approximation. However I read the song as I had written it down to two other Manxmen and it was intelligible to them. As to symbols, ə, æ, ũ, y, and ȳ have been used as in Prof. Rhÿs's *Outlines of Manx Phonology*, though I am not quite sure that ȳ is exactly the long sound of y.

(Strachan 1897: 54)

1.5.4 Marstrander (1932)

In his long article on the Norse place-names in the Isle of Man, Marstrander includes a brief overview of Manx phonology, based on data from six informants (three from the north, including Peel, and three from the south), born between 1846 and 1854.

The different phones listed are categorized according to the Gaelic (or Norse) sounds of which they can be a reflex. The transcription is broader and somewhat simpler to interpret than that of Wagner and Broderick, and perhaps more accurate than that of Jackson in certain respects (e.g. Marstrander shows long diphthongs, which are not noted by Jackson). In addition to his published materials, Marstrander left a considerable amount of recorded and transcribed material (Manx National Heritage Library MSS 5354–57B) (Broderick 2018d). The original spoken material is

¹³ See Broderick (1984c) for an edition of manuscript versions of this song with discussion and notes.

incorporated by Broderick (*HLSM*) and some also appears in Wagner (*LASID*). Little use has so far been made of the large amount of transcriptions of Thomas Christian reading aloud, mostly from the Bible, apart from a short article discussing Christian's vowel phonology (Thomson 1976).

1.5.5 Kneen (1931, 1938)

J. J. Kneen was an amateur Manx scholar and revivalist active from the end of the nineteenth century to the 1930s. Although unable to pursue a formal academic career, he was recognized for his contributions to Manx and place-name studies with an honorary degree from the University of Liverpool and an award from the government of Norway. His two principal works on the Manx language, his grammar (completed in 1910, but not published until 1931), and his dictionary (published 1938), both contain phonetic information. The grammar contains a brief guide to Manx pronunciation in a phonetic transcription close to IPA (with some idiosyncrasies e.g. $\text{æ} = [\epsilon]$, $\text{ü} = [y]$), while the dictionary contains a transcription based on English orthography.

Jackson (4) claims that 'Kneen made use of phonetic symbols of the usually accepted types, but it is doubtful whether he fully understood them'. Despite the above comment, Jackson regards the dictionary as the more reliable of Kneen's works for pronunciation, 'if properly interpreted', and Jackson includes a number of references to Kneen throughout his work.

More fundamental questions may be raised over the degree to which Kneen's works can be regarded as independent sources and the amount of exposure he himself had to vernacular Manx. It seems he had some degree of contact with native speech (Kneen 1927), but his ideas on the language were certainly coloured by his knowledge of written Manx and his archaizing tendencies, and his knowledge of Irish, as seen in the grammar (cf. Jackson 1955: 5), which is in many respects, according to Thomson (1969: 189), 'merely a transcript of the Christian Brothers' Irish grammar'. None of

Kneen's transcriptions are presented as directly representing the speech of a particular informant or informants.

In the dictionary it seems that more frequently-occurring items are more likely to reflect genuine spoken usage, whereas less common words sometimes reveal Kneen's uncertainty about pronunciation. For example, *boght* 'poor' (G. *bocht*) is transcribed as **bawkh** [bɔ:x], with characteristic Late Manx lengthening of the vowel (see §5.5.2) and loss of the stop in the final cluster /xt/ (*HLSM* II: 38), while most other words ending in <ght> are transcribed with retention of the final /t/.¹⁴ A further example is Kneen's erroneous transcription of *maynrey* 'happy' (G. *méanar*, EIr. *mo-génar*) as **mahnra** [ma:nrə] rather than expected /me:nrə/, attested **mendra** (*HLSM* II: 293). Here he is apparently led astray by the ambiguous orthographic sequence <ay> (§§1.6.3, 1.6.4.4), and pronunciations with [a:] are subsequently found in the later revived language (Lewin 2016c: 45).

Some of the information given by Kneen is clearly based on other sources, especially Rhÿs. Kneen's (1931: 29–30) section on 'Dialect' in the grammar is a near word-for-word, unacknowledged reproduction of parts of Rhÿs's (160–1) corresponding section. Kneen also uses some of the same terminology as Rhÿs, such as '*mouillé*' for 'palatalized' or 'slender' (Kneen 1931: 38), and quotes Rhÿs on the subject of secondary lenition (Kneen 1931: 39).

As Thomson (1969: 189) warns, 'Kneen's description of the language should not be relied upon except where it is independent of its source or other evidence confirms it'. In view of the foregoing, Kneen's data are not used in this thesis.

¹⁴ E.g. *toshiaght* 'beginning', transcribed as **tozhakht**, where the final orthographic *t* is probably a hypercorrection on the model of other nouns in *-aght*, cf. G. *toiseach*, *tosach* (Phillips mostly has spellings without *t*, e.g. *tossiagh*, once *tossiaght*). None of the terminal speakers have final [xt] (*HLSM* II: 454). Kneen also gives the gender incorrectly as feminine, on the pattern of most nouns in *-aght*, whereas it is masculine in Cregeen, and in Irish and Scottish Gaelic, earlier neuter.

1.5.6 Carmody (1947, 1954)

Carmody's first work on Manx, *Manx Gaelic Sentence Structure in the 1819 Bible and the 1625 Prayer Book* (1947), contains some highly dubious phonetic material obtained from a woman in California who had attended some Manx classes (cf. Jackson: 6). His subsequent article (1954) contains phrases and sentences in a broad phonetic transcription noted from five of Jackson's informants as well as one learner or semi-speaker. The material is occasionally garbled and mistranslated, presumably owing to Carmody's limited knowledge of Manx. There is no discussion of the diachronic development of Manx sounds; nor is any phonological outline or phonemic inventory given besides a few introductory remarks. The work is thus of limited usefulness, and is not used in this thesis. See Broderick (2018b) for further discussion of Carmody's material.

1.5.7 Jackson (1955)

Jackson's data are derived from seven informants (four in the south, three in the north, born 1852–1877) (Jackson: 2–3) whom he interviewed on a 'hurried trip' (*SGDS* I: 36) over Christmas 1950–51. Unfortunately, Ned Maddrell, 'the youngest and much the most fluent and alert of the surviving speakers', was in hospital during most of Jackson's stay and he was able to visit him only on the very last day (Jackson: v–vi). The trip was a pilot for the Linguistic Survey of Scotland (*SGDS* I: 36, 53), and as a consequence most of the data collection involved a questionnaire eliciting single words. Wagner, in a review of the book, criticizes this approach:

Professor Jackson confines himself to phonology. But, in a case like this, one ought to present as much linguistic evidence, i.e. sentences and phrases, as possible. This was definitely the last chance to hear native Manx spoken. He says (p. v): 'I took with me a questionnaire already prepared to cover the phonology of Manx from a historical point of view.' In the light of contemporary method this approach must be considered antiquated or 'neogrammarian', but it proves quite successful in the case of Manx.

(Wagner 1956: 107)

Jackson defends his approach partly on practical grounds:

Only two speakers had any real fund of continuous narrative material, in the form of little anecdotes or verses; and the inaccessibility of their homes, the number of distracting casual visitors present, and the fact that of the two one is blind and the other very old, made in their case an insuperable barrier to the accurate recording of phonetic texts other than single words and brief phrases.

(Jackson: v)

The work begins with a short description of the vowel and consonant sounds encountered in the data and an explanation of the phonetic symbols used. The body of the work is diachronic, arranged according to the phonology of ‘Common Gaelic’ (essentially Classical Early Modern Irish) (§0.4) and comparing the Gaelic sounds with their Manx reflexes as attested in Jackson’s data.

There is, however, very little discussion of earlier stages of Manx between the presumed common Gaelic ancestor and the speech of the terminal speakers, apart from sporadic references to Rhÿs, Kneen and Marstrander. Sometimes the Manx reflexes are compared with those in other contemporary Gaelic dialects. There is little consideration of the evidence provided by the orthographies, even when these lead quite clearly to conclusions opposite to those reached by Jackson.

For example the orthography distinguishes <iu> e.g. *iu* ‘drink’ (*ibh*), <eeu, ieu> e.g. *screeu* ‘write’ (*scríobh*) and <ieau, eeau> e.g. *cleeau* ‘chest’ (*cliabh*), from G. /i/, /i:/ and /iə/ respectively + /u/. In Late Manx these are mostly found as monophthongal [u:]. Jackson (72–3) claims to have heard only short diphthongs, and 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 *íobh*, *íomh*, causing the short */iv/ and long */i:v/, */iəv/ to fall together before vocalization of the fricative. The orthography on the other hand, as with other vowel + fricative sequences, clearly suggests otherwise, and there is no motivation for the shortening posited. For other combinations, e.g. *ábh*, *ámh* > /ɛ:u/, /ɛ̃:ũ/, Rhÿs and Marstrander give clear synchronic evidence of long diphthongs, although it is possible such length contrasts were in the process of breaking down (cf. §3.9.1.7).

1.5.8 Wagner (1969)

Wagner visited the island six months before Jackson and interviewed all but one of Jackson's informants. The data are given in an appendix in vol. 4 of the *Linguistic Atlas and Survey of Irish Dialects (LASID)* and consist of five short texts plus a considerable body of individual words, phrases and sentences arranged in a glossary under English head-words. The individual informants are not noted, but each word or sentence is labelled N 'north' or S 'south'. Also some data from Marstrander are included, labelled 'M'.

Wagner's transcription is extremely narrow, to the extent that one doubts the reality (or significance) of some of the minute distinctions made in, say, central vowels or degrees of palatalization and velarization. As also noted by Broderick (2017: 51), there are occasional signs that Wagner was influenced by cognate Irish forms. For example, in **ni'm fa:kən h□ me:rəx** *nee'm fakin oo mairagh* 'I will see you tomorrow' (*LASID* IV: 184), **hu** seems to represent Irish *thú* /hu:/ rather than Manx *oo* /u/, in which the preponderance of evidence points to /h/ having been entirely lost at an early date.¹⁵ Similarly, there are several examples of initial unstressed schwa representing Irish particles and prefixes generally considered to be lost in Manx, e.g. **ta ən gridn ə 'giri** *ta'n ghrian girree* 'the sun is rising' (Ir. ...*ag éirghe*) (*LASID* IV: 186), **ta ən kidn t'ʃət ə'ʃt'a:** *ta'n keayn cheet stiagh* 'the sea is coming in' (Ir. *isteach*) (*LASID* IV: 187). Perhaps these apparent schwas are phantoms arising in the mind of the transcriber from the transition between different consonants, or from speech discontinuities, in conjunction with Irish-based expectations.

In this thesis forms from Wagner are generally presented as given by Broderick who incorporates them into his dictionary (*HLSM* II), although Wagner's transcriptions of the *ao(i)* and *ua(i)* vowels are discussed separately (§3.5.4).

¹⁵ Although see *HLSM* I: 23.

1.5.9 Broderick (1984–86)

Broderick's *Handbook of Late Spoken Manx* contains the largest body of transcribed spontaneous speech from the terminal speakers, most of it transcribed by Broderick himself from the various sound recordings (*HLSM* I: xv–xxvi), but also incorporating material from Marstrander, Jackson and Wagner, converted by Broderick into his own transcription system, which is largely that of Wagner in *LASID* (*HLSM* I: 1). Broderick's data are presented in the texts in vol. 1, mostly narrative monologues and snippets of verse, as well as throughout the grammar in vol. 1 and the dictionary in vol. 2. These contain material from the texts in vol. 1, as well as from dialogues which are not transcribed separately.¹⁶ Volume 3 is an analysis of Manx phonology, comprising a synchronic section, and a diachronic section modelled on Jackson (1955), but drawing on Broderick's much larger corpus of data. Broderick usually follows Jackson's interpretation, as in the case of the development of *íobh*, *íomh*, *iabh*, *iamh* (§1.5.7). Broderick's dictionary (*HLSM* II) is the main source of data from the terminal speakers in the present thesis.

Broderick's conception of 'phonemes' and 'allophones' is not always clear, and much use is made of the concepts of 'free variation' and 'wild allophony', when particular divergent forms may be occasional rather than usual realizations, speech errors, or restricted to particular lexical items or reflect diachronic changes rather than synchronic variation (cf. Lewin 2017a: 187–8). According to Broderick (*HLSM* III: xxxv), it may not even be possible to arrive at a clear picture of a phonological system from the Terminal Manx data:

In circumstances such as these, where variation is more often the rule than the exception, a classical phonemic analysis as seen in Ternes (1973) is not really applicable to L[ate] S[poken] M[anx], and it has either to be adapted or considerably modified, or abandoned altogether and something else put in its place, to make some sense of the messy picture of LSM. The spread of phonetic realizations arising from different fieldworkers and the breakdown of communicative competence means that a satisfactory assignment of particular

¹⁶ Some of the recorded dialogues between terminal speakers or between terminal speakers and revivalists are transcribed orthographically, albeit with some inaccuracies, in Manx National Heritage's *Skealyn Vannin* (2003), which consists of the material recorded by the Irish Folklore Commission in 1948.

sounds to appropriate phonological units is difficult and has given rise to a number of instances of overlapping realizations [...] which may be more apparent than real.

(*HLSM* III: xxxv)

Sometimes Broderick's claims of loss of Classical Manx phonological contrasts may be overstated, as in the case of /e:/ and /ɛ:/, where quantitative instrumental analysis of data from the terminal speakers allows us to demonstrate that merger had likely not occurred (§§2.2.3, 3.7).

We may compare Ó Cléirigh's assessment of the situation of Manx phonology with reference to Jackson's work:

It may perhaps be impossible ever to offer a complete structural interpretation of Manx owing to the peculiar position it occupies as a spoken language. Indeed, it may justly be argued that the scant linguistic material available precluded anything but the phonetic approach, which Professor Jackson has employed.

(Ó Cléirigh 1961: 142)

Although we should certainly be aware of the limitations of the data and the informants, we should nonetheless perhaps be rather sceptical of treatments which go too far in seeing Manx as *sui generis* and not susceptible to the kind of systematic analyses brought to bear on other languages. The development of theoretical models to describe processes of language shift and death in the decades since the pioneering works of Dorian (1981, 1989), Dressler (1981), Sasse (1992a; 1992b) and others means that these difficulties may not be so insurmountable as Ó Cléirigh and Broderick may have supposed.

1.5.10 Toponymic and onomastic evidence

Place and personal names constitute a valuable source for the study of Manx phonology, including the period prior to the continuous texts of the seventeenth century onwards (*PNIM* I: xvii–xviii). The rent rolls or setting books of the Lordship of Man (1506–1911) are a particularly rich source of place-name data (*ibid.*: xviii), in

addition to deeds of sale, estate plans, Ordnance Survey name books, maps, etc. (ibid: xix–xxii). For place-names we have an exhaustive survey in seven volumes (*PNIM*: Broderick 1994–2005), including a brief analysis of linguistic implications (*PNIM* I: xxii–xxxvii), and chronological discussions of place-names from the pre-Scandinavian period onwards (*PNIM* VII: 337–83). There are also earlier works by Kneen (1925–28) and Marstrander (1932).

Personal names are less well-served by up-to-date treatments. Moore (1903), Kneen (1937) and Quilliam (1989) all contain etymological speculation which ranges from the sound to the implausible in terms of historical phonological analysis. These topics are clearly in need of reassessment.

These sources are outside the primary focus of the present thesis, but are referred to at certain points where appropriate.

1.5.11 Summary

In summary, the general descriptions of Manx phonology over the past century have focused on data gleaned from the terminal speakers (or semi-speakers). The diachronic element has mostly consisted of comparison with earlier stages of the Gaelic languages (mainly Old and Early Modern Irish). Since Rhÿs's work on tracing developments from the Manx of Phillips' prayer-book to the speech of his own informants, there has been little consideration of the internal historical phonology of Manx, nor its place in wider Gaelic dialectology and historical linguistics. In particular, the large amount of evidence available in the form of the corpus of Manx writing from the seventeenth century onwards has been under-utilized.

Thomson (1953: preface), at the time of writing of his dissertation on the morphology and syntax of Phillips' prayer-book, seems to have considered Rhÿs's work sufficient until such time as more data should be available, and he never produced an in-depth analysis of Manx historical phonology, beyond two short articles (1960; 1976), his brief descriptions of the language in edited volumes (1984; 1992; 2000), and sporadic notes in other works.

1.5.12 Recent linguistic literature

Apart from descriptive works within the broad ambit of Celtic Studies, very few works have considered Manx phonology in the international linguistic literature. Pickeral (1988–90) gives a brief analysis of Terminal Manx phonology from a generative perspective. Ó Sé's (1991) paper on stress shift and vowel shortening in Manx is an important example of how quantitative methods can be illuminating, and uses concepts such as dialect contact and lexical diffusion (§5.1.1.5). Green (2006) examines Manx initial consonant lenition and medial lenition from the perspective of Optimality Theory, alongside consideration of mutations in other Celtic languages. The same author's doctoral thesis (1997) examines 'The Prosodic Structure of Irish, Scots Gaelic, and Manx', and provides an analysis of the motivation from stress shift and vowel shortening in Manx and other Gaelic dialects (§§5.1.1.6, 5.5.1). Chaudhri's doctoral thesis (2007: 39–43) on the development of the Cornish consonantal system discusses Manx preocclusion in comparison with that of Cornish (§4.5.4.2).

1.6 Primary sources

1.6.1 The written corpus and the orthographies

Two main orthographies have been used for Manx (Thomson 1960: 116–8): that of Bishop Phillips' manuscript translation of the Book of Common Prayer (c. 1610) (Moore and Rhÿs 1895; Thomson 1953; Wheeler 2019), and the system used in the eighteenth and nineteenth centuries. The latter begins with in Bishop Wilson's catechism *Coyrle Sodjeh* (1707),¹⁷ and standardized to a significant extent in the printed prayer book translation of 1765 and the Bible completed in 1773, as well as in Kelly's and Cregeen's dictionaries.

Although both are based predominantly on English models with little or no influence from the Gaelic orthography used in Ireland and Scotland, these two systems appear

¹⁷ Although elements of the Classical Manx system are found already in Woods' sermon manuscript from 1696 (Lewin 2015b).

to be independent of one another to a large extent (although see below §1.6.3). One transitional text has recently come to light (Lewin 2015b) which appears to deliberately incorporate elements of Phillips' system into an early version of the later orthography. In addition, through the eighteenth and nineteenth centuries, non-standard orthographies diverging to differing extents from the standard of the Bible are used in manuscripts of carvals, sermons, folk-songs and the writings of Edward Faragher (1831–1908) (Broderick 1981b, 1982a).

1.6.2 Scholarly views on the Manx orthographies

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

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: 120–1)

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

(Jackson: 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)

Such views have also been predominant among activists and amateur scholars in the Manx revival movement (Ó hÍfearnáin 2007; Lewin 2017a: 177–8; 2017b): for example, the lexicographer Douglas Fargher (1979: vi) describes the orthography as 'a historical abomination'.

Thomson (1984: 307) (see also §1.1) gives a more balanced assessment, weighing up both the representational deficiencies of the Manx orthographies compared with the Irish-Scottish system, as well as some advantages (cf. Russell 1995: 229; Broderick 2010: 306–7):

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)

For illustration of these strengths and weaknesses of the orthography, see §1.6.4. For sociohistorical and ideological aspects of the question of Manx orthography and related issues, see also discussion in Sebba (1998) and Ó hIfearnáin (2007) as well as Lewin (2017a; 2017b).

1.6.3 Phillips' Prayer Book translation and orthography

The earliest continuous prose text to survive in Manx is a translation of the Anglican Book of Common Prayer by John Phillips, a Welshman who served as Bishop of Sodor and Man from 1605 until his death in 1633 (Thomson 1969: 178). The translation has been dated to between 1604 and 1610 (Moore and Rhÿs 1895: xi; Thomson 1953: 3), and survives in a mostly complete manuscript from 1625–1630 (Thomson 1953: 4), now preserved in the Manx National Heritage Library bound in two volumes as MSS 3 and 4. The text never reached print for liturgical use, but was edited by Moore and Rhÿs (1895), and collated in a glossary by Thomson (1953; 1954–59), who also provides some corrections and additions to the Moore-Rhÿs edition. Wheeler (2019;

2020) has recently prepared new diplomatic and critical editions of Phillips' psalter.

The text is the main representative of 'Early Manx' (§1.3.1.1), although John Woods' sermon of 1696 also belongs to the seventeenth century and shows linguistic and orthographic affinities with Phillips' text (see below and Lewin 2015b), and some of the ballads and folksongs also date to this century or earlier, though preserved in eighteenth and nineteenth-century manuscripts (Thomson 1960–62; Broderick 1981a).

Thomson (1953: 3, 6) provides evidence that Phillips' liturgy is a translation of the 1604 version of the Prayer Book. The manuscript of the liturgy contains a large number of emendations dating to after 1662, including updates to the names of royal persons mentioned in prayers. I have shown (Lewin 2015b: 50–1) that many of these emendations are in the hand of John Woods (c. 1665–1739), who was from 1695 to 1700 chaplain of Castletown and master of the town's grammar school, where he was himself earlier educated. It is likely that it is during this time that he came into contact with the Phillips manuscript and that he had enough esteem for the orthography in it that he attempted to make use of it, albeit inconsistently, in his own sermon writing.

Woods' interest in Phillips' orthography seems to have been the exception among the seventeenth-century clergy. Contemporary comment from 1610/11 suggests that it was poorly received by the clergy, since 'it is spelled with vovells wherewith none of them are acquainted' (Moore and Rhÿs 1895 I: xii). In 1663, Bishop Barrow commented that 'there is nothing either written or printed in their language, which is peculiar to themselves; neither can they who speak it best write one to another in it, having no character or letter of it among them' (Butler 1799: 305), while William Sacheverell in his 1702 *Account of the Isle of Man* claims that Phillips' text 'is scarce intelligible to the clergy themselves' (Cumming 1859: 15).

It has consequently been claimed that Phillips' text had little impact on later writing in the language, and was largely independent of the later orthography (and any early form of that orthography in use in Phillips' time, at least for writing personal and place names) (Thomson 1960: 116–8). Certainly there is no clear evidence that Phillips' text was ever widely read or appreciated. Woods' interpolations prove only his own personal interest in the text — perhaps he hoped to update it and prepare it for

publication — and not that the manuscript prayer book was in active or widespread use after 1662. The fact that the surviving manuscript is a slightly later copy, rather than an original draft, shows that copies were made, but as this is still in Phillips' lifetime, it may prove only his own enthusiasm for the project.

According to Thomson (1953: 6), '[t]here seems no reason to doubt Phillips' explicit statement that by 1610 he had in person translated the P[ayer] B[ook] into Manx; we know that he was competent to preach in the language, and was noted for doing so', and certain orthographic and morphosyntactic features may point to a degree of Welsh influence (Thomson 1953: 7, 10; 1960: 118). On the other hand, Thomson points to some minor differences in the language of the psalter which may suggest the hand of a native Manx speaker in this part of the work.

Some anomalies in the manuscript may be copying errors, which according to Thomson (1953: 12) may point to an English or possibly Welsh scribe who did not understand the text, such as <j> for initial <g> (on the basis that <g> before front vowels would be pronounced /dʒ/ in English), and occasional confusion of <u> and <y> — a possible instance of influence from Welsh, where *u* (earlier /y/) and *y* (/i/) have fallen together as /i/ or /i/ (Morris-Jones 1913: 13; Jones 1982). On the other hand, some variation can be attributed either to contemporary phonological variation and change, or to confusion of similar symbols (Thomson 1953: 12; 1969: 181–2), e.g. the occurrence of both initial <kn> and <kr>, and this should be borne in mind when making arguments based on Phillips' orthography. Thomson describes Phillips' orthography as follows:

The principal problem connected with Bishop Phillips' Prayer Book is that of its orthography. It is plainly very unlike standard literary Manx [...] While its consonantism is very similar to later Manx, the vowels are very different indeed, and appear to rest substantially on the "Continental" values, giving this older Manx in part a greater similarity to its related languages than the modern orthography does to the eye, at least. The two systems seem to be quite distinct [...] instances of distinctively modern spellings in the P[ayer] B[ook] are extremely rare. Neither does the old orthography survive as a competitor to the new. In short, one might suppose that we have two different attempts to write down Manx, which largely coincide in consonantism, having taken the same model [i.e. English], but diverge in vocalism, having chosen different standards. (Thomson 1953: 8)

It is this use of the ‘continental’ vowel qualities (i.e. roughly the values of the vowels in Latin, Spanish, Italian, Welsh, or Middle English before the Great Vowel Shift) which was probably most off-putting to the rest of the clergy, who may have been familiar only with English and Latin pronounced in the unreformed English fashion. Phillips, on the other hand, had his native Welsh and, in addition, probably a broader education:

He had three or four different systems known to him, English, Welsh, Latin, probably Greek, perhaps some modern languages, and his obvious course was to frame a system for himself out of the material he had. This, it seems, is what he did.

(Thomson 1953: 9)

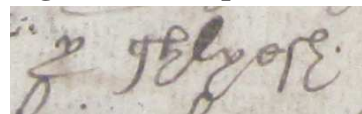
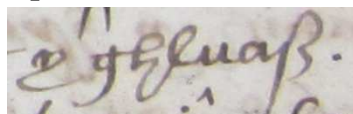
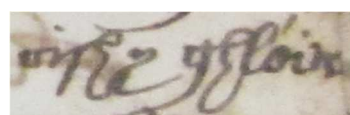
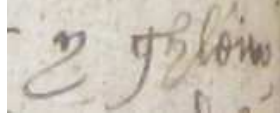
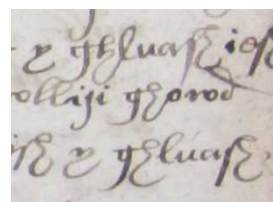
In addition to the vowels, there are some minor differences from the later system in consonant representation. For example, Phillips generally uses <k> in all positions, apart from <ck> word-finally, whereas the later orthography generally has the English distribution of <c>, <k> and <ck>; <g> represents both /g/, /gʲ/, later <g>, and lenited /y/, later <gh>, while <gh> is used for initial /x/, /ç/, for later <ch>.

However, the most notable feature of Phillips’ orthography is its wide range of variation. An individual word may be spelled in a dozen different ways (including variation in diacritic placement), although most of the variation is minor and a clear pattern is often observable.

As an example, the following fairly frequent items are taken from Thomson’s glossary (1953, 1954–59) of the text (Table 1), with discussion of the orthographic variants below. Note that the number of occurrences is given in brackets, and that Thomson presents lenited forms in their radical form (so several instances of *klyesh* etc. appear as *ghlyesh* in the manuscript). Some manuscript examples are given below.

Table 1. Examples of variant spellings in Phillips' MS (after Thomson 1953)

<i>bannaghey</i> 'bless', G. <i>beannaghadh</i>	<i>cliwe</i> 'sword', G. <i>claidheamh</i> (OIr. <i>claideb</i>)	<i>cleaysh</i> 'ear', G. <i>clua(i)s</i>
bannaghey	klêiu (2)	klyesh
banaghy (2)	kleiu (3)	kluass
banaghe (2)	kleiu	kluash
(impv.) banigi	klêiu	klúash (3)
bannigi	kléiu	klúas (2)
banni	kliu (5)	klúæsh (2)
(fut. 1sg.) banníim	klyeiu	(pl.) klyasyn (4)
(pret.) vani	(pl.) kleiuyn	klýasyn (2)
(part.) baníit (2)	kleinyn (3)	klýassyn
baniit	klyéinyn	klúashyn
banníit (8)		

Figure 1. Examples from Phillips' MS (cf. Table 1)¹⁸*y ghlyesh* 'his ear', Matthew 26:51, f. 84v*y ghluass* 'his ear', Mark 14:47, f. 96r*rish y ghléiu* 'with the sword', Acts 12:2, f. 223r.*y ghlêiu* 'his sword', Matthew 26:51, f. 84v*y ghluash, y ghlúash* 'his ear', Luke 22:50-51, f. 106r.

(a) Note the 'continental' value of vowels, e.g. *ban(n)igi* for later *bannee-jee* (Ir. *beannaígti*) /banidzi/.

(b) Final /ə/ may be <ey>, <e> or <y>, usually only <ey> in the later orthography.

(c) Note the variety of diacritics and their placement over the sequence <eiu>.

(d) Note the occurrence of both <eiu> and <ieu> – such variation in the order of elements is frequent.

(e) Note initial <kl> for later <cl>, and lenited <gh> for /x/, later <ch> (in manuscript, not shown in Thomson's glossary entries).

(f) /s/ and /ʃ/ are not consistently distinguished by Phillips in non-initial position (where <sh> = /s/ but <s>, <ss> = /s/ or /ʃ/) (Wheeler 2019: 4–5), perhaps reflecting the non-phonemic nature of the [s], [ʃ] contrast in Early Modern Welsh, as suggested

¹⁸ Reproduced with permission of Manx National Heritage Library (MNHR MS 3).

by Thomson (1953: 10). In later Manx G. *cluas* ‘ear’ is found with a generalized dative form *cluais*, CM *cleaysh*, replacing the nominative (§3.9.5), but the ambiguity of Phillips’ orthography means that it is not clear which is intended in the Prayer Book.

(g) As in the later orthography, and in Welsh, initial consonant mutation is shown by symbol substitution rather than a diacritic mark or letter as in the Irish-Scottish orthography, e.g. *vani* ‘blessed’, later *vannee* (G. *bheannaigh* or *beannaig*).

(h) In medial and final position there is much variation between single and double consonant symbols, e.g. *banni-* and *bani-*. In the later orthography double consonants are usual to mark preceding short vowels (*bannee*), as in English (e.g. ‘banner’). The use of single and double consonant symbols appears to have no relation to the historical fortis-lenis contrast, although this may well have been retained in the Early Manx period in this position (see Chapter 4), e.g. Ph. *benneylt*, *beneylt* etc., later *bennalt*, *bentyn* ‘touch, belong’ (ScG. *beanailt*), as opposed to Ph. *banni*, *bani* etc. (G. *beannaigh*).

(i) The occurrence of both <ya> and <ua> (and minor variants thereof) to represent the G. diphthong *ua(i)* may reflect the fronting of /uə/ to /iə/ which was apparently in progress in this period (§3.6.1.2).¹⁹ This is a case where Phillips’ orthography can shed additional light on the earlier stage of a phonological development. It is also an example of where Phillips is more accurate than the later orthography. The representations <ua> and <ya>, and their variants, clearly show the diphthongal nature of Manx /uə/, /iə/ in contrast to monophthongal /ə:/, G. *ao(i)*, represented in Phillips as <y>, <yy> and similar. This is in contrast with the later orthography, where G. *ua* and *ao* are represented by the same sequences of symbols, although there is reason to

¹⁹ As noted by Thomson (1953: 12) there is some apparent confusion of <u> and <y> which may represent copying errors; however, this is unlikely to be the case with representations of G. *ua*, given that both symbols are widespread in this use, both are expected, and the patterning of their frequency seems to agree with a plausible account of conditioning factors for the fronting (§3.6.1). Moreover, this variation between <u> and <y> is hardly found in representations of G. *ao*, where sequences involving <y> (and <i>, <e>) predominate. It is thus clear that the variation between <ua> and <ya> is for the most part reflective of the original text.

believe they remained distinct, e.g. CM *meayl* ‘bald’ (G. *maol*) and *eayn* ‘lamb’ (G. *uan*) (§3.6.2).

(j) A variety of diacritic marks are used, most frequently the acute and circumflex accents, and in orthographic sequences consisting of multiple vowel symbols, these may be placed over any of the symbols, or may sit above two symbols (or at least, this is how the manuscript has been interpreted by Moore and Rhÿs, and Thomson). In this thesis, these are represented for typographical reasons by placing an identical diacritic over each vowel, e.g. <êê> should be read as <ee> with one circumflex diacritic over both vowel symbols. Diacritics appear to be intended to mark length and/or stress, and perhaps the most prominent element of a diphthong; however, their use is not consistent and they have not been found to be crucial to any arguments in this thesis. Thomson reproduces them (by hand) in the typescript version of his glossary found in his 1953 thesis, but considers them unimportant enough to omit from the published version of the glossary (1954–59). They are reproduced here, following Thomson (1953), for completeness.

In one important respect Phillips’ text did have a lasting influence on later Manx writing. It appears that the psalter in his Prayer Book was adapted for the eighteenth century Prayer Book and Bible translations:

The Psalms were taken from the English Prayer Book version, which had not been superseded in 1662 by the A.V. text, and were incorporated unchanged into the O[ld] T[estament] when it appeared, so that the Manx Bible here has the same text and verse numbering as the Prayer Book. [...] The translator of the Psalms must have had access to Bishop Phillips’ version; despite the modernisation of the spelling and the continual tinkering with the vocabulary the similarity of the two versions is too great to be coincidental and Phillips’ translation may be said substantially to have lived on in the Manx Prayer Book as long as the latter continued in use.

(Thomson 1979: [ii])

Given that Phillips’ text survived, was known and was put to use in the later translation project, despite never meeting with general approbation among its intended audience, it might reasonably be expected that it would have some influence on the later Classical Manx orthography, even if the latter was substantially an independent creation. In fact,

this appears to be the case. To begin with, the use of <y> for schwa is distinctively non-English, probably of Welsh origin (Thomson 1953: 11), and occurs in both systems.

The use of <ey> to represent /ə/ in final and sometimes medial position in the CM orthography is also not a usual feature of English orthography, where it would be expected to represent final /i/ (e.g. ‘valley’), but is found in Phillips. Although not the most common representation for final /ə/ in the Prayer Book, <ey> was perhaps generalized in the later orthography to avoid confusion with the more frequent English final <y> = /i/, which is sometimes retained with this value in certain loanwords, such as *torrity* ‘authority’, and personal names.

Another case of likely retention of an element of Phillips’ system is the spelling *ayn-* in forms of the preposition ‘in’ (G. *ann*). In the Classical Manx orthography <ay> usually represents long vowels /e:/ or /ɛ:/, but *ayn* was pronounced /o:n/ in the south and /u:n/ in the north (*HLSM* II: 16). In Phillips <y> often occurs as the final element of sequences of vowel symbols, and could apparently serve as a mark of length, a feature of Northern Middle English and Older Scots orthography (Vikar 1922; Kniezsa 1997). The spelling *ayn-* makes more sense in the Phillips orthography if we assume that *ann* was still pronounced /aN/ at this period (cf. Ph. *kian* ‘head’, CM *kione*, G. *ceann*), with some degree of conditioned lengthening of the vowel (§4.6.1). The spelling *ayn-* may have been retained in the later orthography to provide a common representation for the variety of positional and dialectal realizations of the morpheme [o:n, u:n, on, un, ən, o, u, ə]. The use of <ay> in *ayrn* ‘part’ (G. *earrann*) and *tayrn* ‘pull’ (G. *tarraing*), and in forms of *ec* ‘at’ (G. *ag*), *aym* (1sg., G. *agam*), *ayd* (2sg. G. *agad*) (LM /em/, /ed/, perhaps earlier */a:m/, */a:d/?) may also be instances of retention of this orthographical feature from Phillips. The use of <y> and <i> as length markers more generally in both Manx orthographies can be traced to northern English spelling conventions, although the use of <i> in particular to mark following palatality is a Manx innovation; the resemblance to Irish-Scottish spelling conventions may be coincidental.

A final example is the CM spelling *dty* for the 2sg. possessive G. *do, d', t'*. This appears in Phillips as *tdhy* (6 instances), *thdy, tdy* (2), *ta, t'* (before vowels, 5 instances) as well

as *dy* (5) and *thy* (4). As discussed in Lewin (2015b: 72) in relation to Woods' consistent use of *tdy* in his sermon, the idiosyncratic spelling of the initial consonant of this possessive is probably prompted by the existence of two allomorphs still found in other Gaelic dialects, namely /də/ before a following consonant and /t/ prefixed to a following vowel. Despite the reversal of the order of the consonant symbols, this orthographic device seems too peculiar for there not to be a link between the similar usage in the two systems. The spelling *dty* was likely brought into the CM system with the above motivation, and also to distinguish this item from the many other functors *dy* /də/.²⁰

These survivals of usage from Phillips' orthography can all be understood as serving particular representational needs, where no English convention could easily be adapted. As with Woods' much wider adoption of elements of the earlier orthography (Lewin 2015b: 51, 53), there is no sense, however, of any interest in adopting broader principles of Phillips' system, such as the 'continental' vowel values, or the representation of G. *ua(i)* and *ao(i)*. Evidently those who developed the Classical Manx system were on the whole content to use English-based conventions familiar to them, even when these are more cumbersome or ambiguous than Phillips' usage.

1.6.4 The Classical Manx orthography and variants

1.6.4.1 Characteristics of the Classical Manx orthography

Some of the characteristics of the Classical Manx orthography will now be illustrated, in order to help the reader appreciate the challenges encountered in interpreting the orthographic evidence in the rest of the thesis.

²⁰ Whose number had in fact increased since the Early Manx period owing to phonological developments (Jackson: 92; *HLSM* III: 91–2; Lewin 2016a: 174).

1.6.4.2 Homophones differentiated by spelling

Homophones are often deliberately differentiated by spelling (Thomson 1984: 307; Thomson and Pilgrim 1988: 4):

there can be no guarantee that words of different meanings but sounding the same will be written similarly; in fact, there seems to have been a policy to ensure that they were not!

(Thomson and Pilgrim 1988: 4)

This is understandable when it is considered that Manx literacy was for the purposes of fluent (usually native) speakers, people who already knew how the language was pronounced; distinguishing clearly between similar or homophonous lexical items would thus be more important than accurate phonological representation. Examples of such homophones, following Thomson and Pilgrim, are as follows:

<i>olley</i> ‘wool’ (gen.) (G. <i>olla</i>)	
<i>ollay</i> ‘swan’ (G. <i>eala</i>)	both /olə/

<i>leigh</i> ‘law’ (ScG. <i>lagh</i>)	
<i>leih</i> ‘forgive’ (G. <i>loghadh</i>)	both /ləi/

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

<i>lieh</i> ‘half’ (G. <i>leath</i> , <i>leith</i>)	
<i>er-lheh</i> ‘apart, special(ly)’ (G. <i>ar leith</i>)	/(er ^h) ‘lɛ:/

<i>feanish</i> ‘witness, evidence’ (G. <i>fiadhnaise</i>)	
<i>fenish</i> , <i>fênish</i> ‘presence’	/fɛ:nəʃ/

<i>marish</i> ‘with’ (ScG. <i>maille ri</i>)	
<i>mârish</i> ‘with him’	/mɛ:r ^h əʃ/

1.6.4.3 One sound, several spellings

There is thus a considerable amount of variation in the way a particular phone or sequence may be represented, especially in the vowels and diphthongs. The following

are a selection of examples of orthographic representations for certain phones, some of which also further illustrate homophony with distinct spelling:

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

1.6.4.4 One spelling, several sounds

The same, or similar, orthographic sequences may also represent distinct sounds.

<oi(e)>	/o/	/orʲ/	<i>oirr</i> ‘edge’ (G. <i>oir</i>)
	/o:/	/no:dʲ/	<i>noid</i> ‘enemy’ (G. <i>námhaid</i>)
	/əi/, /i:/	/rəi/, /ri:/	<i>roie</i> ‘run’ (G. <i>rith</i>)
	/o:i/	/bo:ɨrʲə/	<i>boirey</i> , <i>boïrey</i> (G. <i>buaidhreadh</i>)
<ay>	/e/	/em/	<i>aym</i> ‘at me’ (G. <i>agam</i>) (§1.6.3)
	/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>) (§1.6.3)

<eay>	/ə:/	/blə:st/	<i>bleayst</i> ‘husk, egg-shell’ (G. <i>blaosc</i>)
	/i̯ə/, /i:/	/ki̯əɲ/, LM /ki:n/	<i>keayn</i> ‘sea’ (G. <i>cuan</i>)
	/i̯ə/, /i:/	/fri̯ə/, LM /fri:l/	<i>freyll</i> ‘keep’ (G. <i>friotháladh</i>)
	/e:/	/l̥e:r̥i/	<i>leayr</i> ‘clear’ (G. <i>léir</i>)
<ea>	/e:/	/re:/	<i>rea</i> ‘ram’ (G. <i>reithe</i>)
	/ɛ:/	/gɛ:r̥iə/	<i>gearey</i> ‘smile, laugh’ (G. <i>gáire</i>)
	/i̯ə/, /i:/	/li̯əx/, /li:x/	<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>)

Note that diacritics (diaeresis and circumflex) are used in some texts, notably the Bible, to make some distinctions, albeit not entirely consistently, for example *roie* ‘run’ /r̥oi/, /ri:/ v. *roïe* ‘before’ /r̥õ:i̯/. However, they are absent in other texts, and do not play a large role in the orthography.

1.6.4.5 English v. ‘continental’ vowel values

Long vowel representations usually have their English value, i.e. <ee> = /i:/, <oo> = /u:/, <i_e>, <ie>, <i> = /ai̯/, but may also have a ‘continental’ value, as in *feme* /fe:m/ ‘need’ (G. *feidhm*) above (presumably deriving from a more conservative pronunciation of English). This gives rise, for example, to the potentially confusing pairs such as the following:

mian /mi̯əɲ/ ‘desire’ (G. *miann*, Ph. *mian*, *mían*, *miæn*)

Mian /mai.an/ ‘Matthew’ (G. *Maitheán*, Ph. *Mein*)

kere /k̥e:r̥i/ ‘wax’ (G. *céir*, Ph. *kéir*, *káyr*, *káir*)

kere /k̥i:r̥/ ‘comb’ (G. *cíor*, Ph. *kiyr*)²¹

The ambiguity is perhaps deliberately exploited in the spelling *hene* ‘self’ (G. *féin*), which the evidence of rhyme shows can be realized either /he:n/ or /hi:n/ (cf. the Scottish variants *fhéin* and *fhìn*) (Thomson 1995: 116; Lewin 2015b: 74), with the /i:/ pronunciation apparently becoming predominant in Late Manx (*HLMS* II: 220).

²¹ These items may have been semantically associated through *kere-volley* ‘honeycomb’ (G. *cíor mheala*).

1.6.4.6 Representation of palatalization

Slender consonants for which a similar phone is found in English generally have a specific representation in the Manx orthography corresponding closely to the English convention, i.e. <sh> /ʃ/, <ch>²² /tʃ/ (G. /tʲ/), <j> /dʒ/ (G. /dʲ/), <y> /j/ (G. /jʲ/) (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> ²³	/k ⁱ u:n ⁱ /	‘calm’ (G. <i>ciúin</i>)
	<i>my chione</i>	/mə ʧo:n/	‘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 tat ⁱ əni/	‘pleases’ (G. <i>taitin</i>) (<i>s’taittyn lhiam</i> ‘I like’)
	<i>troiddey</i>	/trod ⁱ ə/	‘chide’ (G. <i>troid</i>)
	<i>bainney</i>	/ban 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> quailan</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 gə/	‘softer, softest’ (G. <i>is buige</i>)
C ⁱ #	<i>paitt</i>	/pat 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>)

²² Which is ambiguous with the use of <ch> to represent /x/ in initial position, except that the latter can usually be recognized as a mutation of initial /k/, /kʲ/. This ambiguity is resolved by the use of <çh> for /tʃ/ in the 1866 edition of Kelly’s dictionary and in some subsequent revivalist publications.

²³ Note here the lack of clear marking of the final slender /nⁱ/, attested as **kⁱu:nⁱ** (EK) (*HLSM* II: 255).

<i> may also redundantly²⁴ occur after orthographic units which already show palatality:

	<i>shiaght</i>	/ʃaxt/	‘seven’ (G. <i>seacht</i>)
but	<i>shassoo</i>	/ʃasu/	‘stand’ (G. <i>seasamh</i>)
	<i>chiamble</i>	/tʃambəl/	‘temple’ (G. <i>teampall</i>)
but	<i>chaghter</i>	/tʃaxtəri/	‘messenger’ (G. <i>teachtaire</i>)
	<i>jiooldey</i>	/dʒu:ldə/	‘refuse’ (G. <i>diúltadh</i>)
	<i>yiooldey</i>	/ju:ldə/	‘refuse’
but	<i>jalloo</i>	/dʒalu/	‘picture’ (G. <i>dealbh</i>)
	<i>yalloo</i>	/jalu/	‘picture’

In clusters, adjacency to an orthographically marked slender consonant can be taken to indicate that the other consonant is also palatalized:²⁵

	<i>ushtey</i>	/uʃtiə/	‘water’ (G. <i>uisce</i>)
	<i>ashlish</i>	/aʃlʲəʃ/	‘dream’ (G. <i>aisling</i>)
	<i>aigney</i>	/aɣnʲiə/	‘mind, will’ (G. <i>aigne</i>)

<u> can sometimes indicate a slender consonant followed by /u(:)/, apparently based on its use in English items such as ‘lute’, ‘acute’, ‘mute’ etc.

	<i>lhune</i>	/lʲu:n/	‘beer’ (G. <i>lionn</i>)
	<i>kuse</i>	/kʲu:s/	‘a few’ (G. <i>ciumhas</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>	/atʲ/	‘funny’ (G. <i>ait</i>)

²⁴ However the presence of <i> here may be motivated by the fact that the lenited form of these items, spelt with initial <hi>, may have initial /hj/ or /ç/. The <i> may perhaps represent a glide after the radical initial consonant of the kind encountered in Scottish dialects (e.g. Ternes 2006: 28–38), although such glides are not reported in Late Manx. Rhŷs (73–5) notes lexical and dialectal variation between /ç/ and /h/ as lenition of initial /ʃ/ and /tʃ/, as well as hypercorrection from /has/ *hass* ‘stood’ (G. *sheas*) (never */ças/, according to Rhŷs) to unlenited ‘*sassoo*’ /sasʲu/ (G. *seasamh*).

²⁵ Note that some clusters can show variation, e.g. [sʲ] and [ʃʲ] as in *slieau* ‘mountain’ (G. *sliabh*) (Rhŷs: 157–8, *HLSM* III: 118).

<i>meeley</i>	/mi:lə/	‘soft’ (G. <i>míonla</i> , <i>míolla</i>)
<i>meeilley</i>	/mi:lʲə/	‘mile’ (G. <i>míle</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 representations are ambiguous, since elements of an orthographic sequence can indicate either palatalization, or vowel length / quality, or both, as in:

<i>fainey</i>	/fɛ:nʲə/	‘ring’ (G. <i>fáinne</i>)
<i>faitagh</i>	/fatʲax/	‘shy’ (G. <i>faiteach</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),²⁶ is necessary in order to be confident of the vowel length. Cregeen’s alternative spelling *fashagh*, showing medial voicing and fricativization of /tʲ/ > [dʲ] > [ʃ],²⁷ would also help here, although it would be misleading taken on its own (since <sh> usually

²⁶ Even this evidence is not unambiguous, since we have to reckon with the tendency in Late Manx to lengthen certain short vowels (§5.5.2). There is a short vowel in **fat’fəx** 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).

²⁷ With <sh> being the nearest available orthographic representation for [ʃ].

indicates underlying /ʃ/). In many cases there is no clear indication as to whether a consonant is broad or slender, as the following cases illustrate:

<i>enney</i>	/en ⁱ ə/, /enə/	‘recognition’ (G. <i>aithne</i>)
<i>genney</i>	/gen ⁱ ə/	‘scarcity’ (G. <i>gainne</i>)
<i>glenney</i>	/glenə/	‘clean’ (vn.), ‘clean’ (adj. pl.) (G. <i>glanadh</i> , <i>glana</i>)
<i>s’glenney</i>	/s glen ⁱ ə/	‘cleaner, cleanest’ (G. <i>is glaine</i>)
<i>meinney</i>	/men ⁱ ə/	‘meal’ (gen.) (G. <i>mine</i>)
<i>gien</i>	/gi ⁱ en/	‘cheer’ (G. <i>gean</i>)
<i>gennal</i>	/gi ⁱ enəl/	‘cheerful’ (G. <i>geanamhail</i>)

There is no indication that *enney*,²⁸ *s’glenney* and *genney* have /nⁱ/, while *glenney* and *gennal* have /n/, whereas in *meinney* palatalization is marked by <i>. Slender /giⁱ/ is clearly shown by <i> in *gien*, but not in its derivative *gennal* (**g’*en*q̄l**: NM, *HLSM* II: 192), which has no <i> and thus is not clearly distinguished from the broad /g/ in *genney* (from *goan*, *goaun* ‘scarce’, G. *gann*). The slender consonant can be marked more clearly in the lenited form, since <yi> as well as <ghi> can represent lenition of /giⁱ/, thus in the Bible we have *yien* as well as *ghien*, and *yennal* as well as *ghennal* (cf. Thomson 1995: 133).

In unstressed syllables <i> may indicate /CⁱəCⁱ/, /CⁱəC/ or /CəCⁱ/, and even /CəC/ (§4.4.7.2).

C ⁱ əC ⁱ	<i>fakin</i>	/fak ⁱ ən ⁱ /	‘see’ (G. <i>faicsin</i> , ScG. <i>faicinn</i>)
	<i>cuishlin</i>	/kuʃl ⁱ ən ⁱ /	‘vein’ (G. <i>cuisle</i> , dat. <i>cuislinn</i>)
CəC ⁱ	<i>shiaghtin</i>	/ʃaxtən ⁱ /	‘week’ (G. <i>seachtmhain</i>)
	<i>Mannin</i>	/manən ⁱ /	‘Isle of Man’ (G. <i>Manainn</i>)
C ⁱ əC	<i>cadjin</i>	/kad ⁱ ən/	‘common’ (G. <i>coitcheann</i>)
	<i>claig(g)in</i>	/klag ⁱ ən/	‘scalp’ (G. <i>cloigeann</i>)
	<i>mwyllin</i>	/mul ⁱ ən/	‘mill’ (G. <i>muileann</i>)

²⁸ Depalatalization may have occurred in this word (§4.4.3).

CəC	<i>sheebin</i>	/ʃiəbən/	‘soap’ (ScG. <i>siabann</i>)
	<i>Manninagh</i>	/manənax/	‘Manx’ (G. <i>Manannach</i>)
	<i>eddin</i>	/edən/	‘face’ (G. <i>éadan</i>)
	<i>ynrican,</i>	/inrəkan/	‘only’ (G. <i>aonracán</i>)
	<i>ynrycan</i>		

1.6.4.7 Redundant symbols

The Classical Manx orthography is replete with letters which are redundant or largely so. As Lewin and Wheeler (2017) observe, this tendency seems to increase with the standardization of the orthography during the eighteenth century:

Where they differ, *Coyrle Sodjey* [the first printed book in Manx, 1707] is usually simpler, with fewer superfluous letters [than later texts]: thus initial *lh-* is rarely found, so we have *leid* (*lheid*), *liasagh* (*lhiasagh*), *liat* (*lhiat*), *lie* (*lhie*), *liettal* (*lhiettal*), *liggey* (*lhiggey*); *-eea-* implies two syllables, so we have *Creesteeaght*, *gimmeeaght*, etc., but *jeaghyn* (*jeeaghyn*), *gearree* ~ *gearee* (*gearree*); other ‘simpler’ spellings are: *baas* (*baase*), *callit* (*caillit*), *cheel* (*cheill*), *coal* (*coayl*), *deartey* (*deayrtey*), *deney* (*deiney*), *feasley* (*feaysley*), *foar* (*foayr*), *foas* (*foays*), *freall* (*freayll*), *geashtagh* (*geaishtagh*), *gol* (*goll*), *janoo* (*jannoo*), *loart* (*loayrt*), *meigh* (*meiygh*), *raadjin* (*raaidyn*), *reyn* (*rheynn*), *seihl* (*seihll*), *taloo* ~ *tallow* (*thalloo*), *treshteil* (*treishteil*); *tregeil* ~ *treggeil* is much more frequent than the modern *treigeil*, though this is also found.

(Lewin and Wheeler 2017: preface)

In this list we can see that some of the later additions add clarity, so *keeill* ‘church’ (G. *cill*) indicates the final slender /i/ (as opposed to ambiguous *keel*, and so with *callit* and *caillit*, G. *caillte*). The later spelling <eea> in *gearree* (G. *ag iarraidh*) and *jeeaghyn* (G. *déachain*)²⁹ shows /iə/ (§2.2.6) more clearly than <ea>, which more usually represents /e:/ (as well as /ɛ:/, /ə:/, /iə/). Similarly, <eay> in *feaysley* (‘release’, G. *fuascladh*) and *deayrtey* (‘pour’, G. *dórtadh*, *duartan*) more clearly indicates /iə/ than <ea> does (§3.6.2). However, it is unclear how *rheynn*³⁰ (‘share, divide’, G. *roinn*) is better than *reyn* (neither indicate the final slender /Nⁱ/, /nⁱ/ or /ŋⁱ/, §4.4.6), or why it is useful to add a silent <e> to *baase* /bɛ:s/ ‘death’ (G. *bás*). The English final

²⁹ Although *jeaghyn* could also indicate retention of monophthongal /e:/ here, as also indicated by spellings in Phillips, and in Woods’ sermon of 1696 (Lewin 2015b: 75) (§2.2.7).

³⁰ For <rh> see §4.2.1.5.

<e> is used as a marker of vowel length in Manx, e.g. *bane* /bɛ:n/ ‘white’ (G. *bán*), but it is also very widespread 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 (§5.2).

Other examples of superfluous final <e>:

<i>baare</i>	/bɛ:r/	‘top’ (G. <i>barr</i>)
<i>sheese</i>	/ʃi:s/, /si: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>)

1.6.5 Late spellings (especially Cregeen)

While the biblical orthography became a standard which was followed, to a greater or lesser extent, by most subsequent writers, later spellings of items not found in the eighteenth-century texts (often for secular or modern concepts, and everyday life) may diverge from the conventions of the Biblical orthography, sometimes showing later phonological developments (Thomson 1999: 402). This is notable in Cregeen’s dictionary (1835), for example, where there are forms showing the medial lenition of /s/ to [ð] and /d/ to [ʒ], which is never indicated in the Biblical orthography:³¹

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

In the Biblical orthography the diphthong /iə/ (G. *ia*, *é*) is consistently represented as <eea>, <ia>, and kept distinct from the monophthong /i:/ <ee>, <eey>, <eei>. Similarly /uə/ (G. *ua*), where it retains its back quality, is consistently written <ooa>.

³¹ Apart perhaps from *luddan-mea* (Job 41:32) ‘phosphorescence on the surface of the sea’, if this is the same as *lossan* ‘luminous particles seen in the sea by night, and on fish that are not dry, in the dark; the aurora borealis or northern lights’ (Cregeen) (G. *losán*). Cregeen and Kelly both have separate entries for *lossan* and *luddan(-mea)*.

<ua>, contrasting with monophthongal /u:/ <oo>, <ooy>, <ooi>, <ooh>, <u_e>. In Cregeen, however, there are spellings which apparently represent the changes /iə/ > [i:] and /uə/ > [u:] (§2.2.6):

keeir	/kijəɾ/	‘dark’ (G. <i>ciar</i>) (K. <i>keear</i>)
lheegh	/liəx/	‘ladle’ (G. <i>liach</i>)
hooir	/huəɾ/	‘forebode, threatened’ (G. <i>tuar</i>)

The examples *keeir* and *hooir* also illustrates another feature of Cregeen’s usage which may indicate a sound change; the superfluous <i> before a historically broad /r/ might also be taken as evidence of loss of the contrast /r ~ rʲ/ (§4.2.1). However, Cregeen seems not to have fully understood the use of <i> in the Biblical orthography, and thus inserts it in many items adjacent to broad consonants:

bwoid	/bod/, /bud/	‘penis’ (G. <i>bod</i>)
boiddagh	/bodax/	‘stingy person, churl’ (G. <i>bodach</i>) ³²
brooightooil	/bru(:)x'tu:l/	‘belch’ (G. <i>brúchtghail</i>)
jooigh	/dʒu:x/	‘greedy’ (G. <i>díbheach</i>)
mooin	/mu:n/	‘urinate’ (G. <i>mún</i>)

Sometimes Cregeen introduces such spellings instead of, or alongside, the Biblical form:

‘broigh, or broghe’	/bro:x/	‘dirty’ (G. <i>broghach</i>) (Bible <i>broghe</i>)
‘hioll, or hoyll’, thiolley	/tolə/, /hol/	‘bore, pierce’ (G. <i>tolladh</i>) (Bible <i>hoylley</i>) ³³

There are however, some such forms in the Bible itself such as *druight* ‘dew’ (G. *drúcht*), *seyir* ‘carpenter’.³⁴ Metathesis of digraphs involving <i> is quite common,

³² This spelling is perhaps intended to distinguish this sense from the homophonous (and probably etymologically identical) *boadagh* ‘cod’ (cf. Dwelly s.v. *bodach*).

³³ Thomson (1995: 120–1) notes in his edition of *PC* that ‘*hiolley* [...] is Cregeen’s spelling, but [...] the source of the palatalisation is obscure’. It is much more likely that there is no palatalization (which in any case would be expected to be represented as <ch>), and that this is simply an instance of Cregeen’s tendency to introduce redundant <i>, perhaps in this case following *PC* 1796 which has *hioalley*. In the Bible the spelling is *hoylley* (it so happens that only lenited forms are found). It is possible that the spelling is influenced by the lenited forms of *shiaulley* ‘sail’, *shiolteyr* ‘sailor’, and perhaps also by the variation in some items between /h/ and /ç/ as the lenition of radical /f/ and /tʃ/ (Rhÿs: 74–5).

³⁴ Both singular and plural in the Bible, where one might expect singular *seyr* and plural *seyir*. The motivation may be to distinguish this sense from *seyr* ‘free’, and *dooinney-seyr* ‘gentleman’ (G. *saor*).

especially in manuscripts and sometimes in print, for example <ia> and <ai>, <io> and <oi> (Broderick 1982a: 180; 1984: 166). This usually seems to involve modification of sequences unknown or rare in English to those found more commonly in English.

1.6.6 Interpreting the Manx orthographies: summary of difficulties

As observed above, native Manx speakers would of course have known how to pronounce the language, so the inconsistencies and ambiguities of the orthography would not have caused major problems (although see §1.6.9.1 for spelling pronunciations among the terminal speakers). For the scholar of Manx with a knowledge of other Gaelic varieties, they do not usually cause much trouble either, since the etymology of many items is readily apparent, as in the items presented as illustration above. In any case, the standard Manx orthography is in many respects considerably more systematic than its critics have acknowledged, as discussion throughout this thesis will show. Despite incorporating redundant features of English orthography such as silent final <e>, those who devised the Manx orthography succeeded in making considerable innovations to represent phones not found in English, including the complex system of short and long diphthongs (§§1.5.7, 3.9.1), vowels such as /ɛ:/, /ə:/ and /iə/, /i:/, and (not always so successfully) palatalized consonants.

Problems arise, however, when dealing with ambiguous spellings of items (a) where the etymology is less clear, or entirely obscure, (b) where evidence in the form of recordings, phonetic transcriptions or descriptions and variant spellings is unavailable or inconclusive, (c) where variant forms in the other Gaelic languages mean that it is not possible to determine with certainty which variant the Manx form represents, or (d) where it is suspected that the Manx form may be an irregular development. In such cases, it may not be possible to reach a firm conclusion.

1.6.7 Non-standard orthographies

In addition to the two main orthographies discussed above, various degrees of departure from the biblical standard are found in eighteenth and nineteenth century texts, both printed and especially manuscripts. Some of these diverge very substantially from the standard. The manuscript corpus is extensive, consisting of carvals (religious ballads), folksong manuscripts (e.g. Broderick 2015, see §4.5.3), Bible translation drafts, sermons, and Edward Faragher's writings. Faragher at least appears to have been an avid reader of the Manx Bible, but nevertheless seemingly had little interest in conforming to its orthography in his own usage (Broderick 1982a: 178–9).

Much of this corpus has yet to be subjected to in-depth scholarly analysis, although as noted by Thomson (1960: 116–7) this would no doubt be rewarding:

For linguistic purposes these carvals, especially in their manuscript form, are probably more important than anything else, for the books were written and copied by native speakers with no very accurate recollection of the standard spelling [...], and many points of phonological interest are illustrated in their free spellings and in the rhymes.

(Thomson 1960: 116–7)

In this thesis details of non-standard manuscript spellings will be discussed where relevant details have come to my attention, but a full consideration of the information contained in these texts awaits a future treatment.

1.6.8 Dictionaries

Manx scholarship is fortunate in having two principal Manx–English dictionaries compiled by native speakers during the period when Manx remained widely spoken, those of John Kelly (1750–1809), compiled towards the end of the eighteenth century, and Archibald Cregeen (1774–1841), a generation later in the 1830s. Although both works have deficiencies and omissions, they nevertheless provide us with a more complete knowledge of the language's lexis than would be the case from the corpus of

texts alone (cf. Thomson 1990: 444), and are therefore crucial sources in establishing the distribution of phonological developments across the lexicon.

1.6.8.1 Kelly (1866)

John Kelly, who as a young man assisted in copying, editing and proof-reading the Manx Bible (Thomson 1969: 185–6), began his grammar and two dictionaries in 1766 ‘for the instruction of [...] the Rev. Dr. Hildesley, Lord Bishop of Sodor and Mann; and [...] to assist and direct my fellow labourers and myself in that arduous and important work, the translation of the Manks Bible’ (Kelly 1804: iv). Early drafts of these works survive in Manx National Heritage Library MS 1477, with a later draft of the Manx–English dictionary in MS 1045–7A. The grammar was printed in 1804, but the Manx–English dictionary did not appear until it was published posthumously in 1869, edited by William Gill. Kelly also authored a ‘triglott’ dictionary of English to Manx, Scottish Gaelic and Irish (Thomson 1969: 205–6). Printing of this began in 1809 but came to nothing in a fire in the printing shop. The manuscripts survive (Manx National Heritage Library MSS 2045, 51), and the English and Manx columns of this were utilised by the Manx Society to form the English–Manx half of the 1866 publication (Wheeler 2020).

Thomson (1990: 447) estimates that ‘in round figures Cregeen presents the reader with a little more than 6000 words; Kelly has most though not quite all of these and adds rather more than another 4000, making a total of about 10,500 in all’. The reasons for the greater number of entries in Kelly, according to Thomson, are that he gives a large number of derivatives, mostly ones which are logically possible but which may not have been in use. Furthermore, many items are taken from previous Gaelic dictionaries, often showing an incomplete understanding of Gaelic orthography; and ‘[t]here are a few cases of etymological guesswork giving rise to supposedly independent words’ (Thomson 1990: 450).

Of the latter two categories, many are easy to spot. For example Kelly has items *rane* ‘stanza’ and *raneyder* ‘poet’, allegedly from G. *rann*³⁵ but also linked by him with *arrane* ‘song’ (G. *amhrán*); G. *ruaig* is claimed to have given *rueg*, but the word is not attested elsewhere, the spelling <ue> is unusual, and G. *ua* more commonly gives a fronted vowel in Manx (which, as Thomson suggests, might be spelled **reayg* or **reaig*);³⁶ *taishbyn* ‘reveal’ is shown to be a borrowing by the retention of from Shaw’s *taisbeun* and the lack of *-ey* for G. *-adh*; G. *ughdar* ‘author’ is given by Kelly as *ughtar*, which in Manx orthography would be interpreted as **/uxtər/*, whereas this word, if it existed in Manx, would be expected to give **oodyr* /u:dər/.

Other probable borrowings have more plausible orthographic forms, such as *doghys* ‘hope’ and *dooill* ‘desire’, corresponding to G. *dóchas* and *dúil* respectively (Thomson 1990: 452), and their status can only be surmised by their absence from the corpus, and/or by similarities with definitions and cognates in Shaw. In some cases it may not be possible to be entirely sure whether an item in question was in use in Manx or not. For this reason Kelly’s dictionaries have been approached with caution, and Cregeen has been taken as the basic source for lexical information. Data from Kelly is given where it backs up or complements Cregeen, or otherwise seems likely to be genuine. Despite the problems illustrated above, further research into Kelly’s work remains a desideratum, as it certainly contains much valuable material not found elsewhere.

1.6.8.2 Cregeen (1835)

The title page of Cregeen’s dictionary states that it was printed in 1835, although it may not in fact have appeared until 1837 (Wheeler 2018: x). The dictionary was reprinted by Yn Cheshaght Ghailckagh three times in the twentieth century, and has more recently been edited by Wheeler (2018) in a digital format with the headwords reordered to group cognate, derivative and inflected forms, together with an

³⁵ G. *rann* would give **/ro:n/* or **/raʉn/* in Manx (§4.6.1), not **/re:ɲ/*; cf. att[st]d *ronney* /ronə/ ‘portion’ (G. *rannadh*) and *ronneeaght* /roni.axt/ ‘foolish song, raving’ (G. *rannaigheacht*).

³⁶ As Thomson also notes, however, part of the definition differs somewhat from Shaw, so we cannot exclude entirely the possibility that this is a genuine Manx word, even if the spelling and sense given by Kelly have been influenced by the external source.

introduction and notes. Wheeler's edition forms the basis for the use made of the dictionary in this thesis.

Cregeen is overall much more reliable than Kelly as a source of linguistic data, his main weakness being his own spellings of items not found in the religious literature (§1.6.5), and the evident frequent inaccuracy of the stress placement which is marked on almost every polysyllabic headword (§5.1.1), as well as the sometimes obscure definitions (Wheeler 2018: iii–iv). Thomson (1990: 447) summarizes the virtues of Cregeen's dictionary as follows:

Cregeen has a reputation for being a reliable witness in linguistic matters. He collected his material from written sources and from the spoken language, and within the limits of his time and resources he can be described as a scientific lexicographer. If he offers a few popular etymologies he does not usually let them dictate his spelling, which is fully traditional even when, as he occasionally observes, he disagrees with it and thinks it could be improved. [...] So on the whole Cregeen gives an impression of sobriety and reliability.

(Thomson 1990: 447)

1.6.8.3 Revival era English–Manx dictionaries

Finally, in the twentieth century two English–Manx dictionaries were published by prominent figures in the revival movement, Kneen (1938) and Fargher (1979). The weaknesses of Kneen's pronunciation guidance have been discussed above (§1.5.5). Fargher's is a self-consciously prescriptive work incorporating large numbers of unacknowledged neologisms, many of them borrowings from Irish and Scottish Gaelic, frequently adapted in a way which lacks philological rigour and consistency (see Lewin 2017b). It is also a fairly unselective compendium of the material in Cregeen and Kelly (including uncritical inclusion of the latter's spurious borrowings and inventions of the type illustrated above §1.6.8.1). Fargher's dictionary is thus of little use for scholarship of the traditional language, although it does incorporate some lexical items noted by the author from the last native speakers, rendered into Manx orthography.

1.6.8.4 Pitfalls in the use of Manx dictionaries

Reliance on the dictionaries, in the absence of a detailed study of the primary sources, has sometimes led scholars astray.

For example, Ó Baoill (1978: 281) reports a Manx form *dooill* ‘desire’ corresponding to G. *dúil* on the strength of Kelly, but this item is likely a borrowing as noted above. Similarly, Grand (2000: 16) claims, referencing Kneen (1970: 66), that G. *spéir* ‘sky’ (ScG. *speur*) ‘seems to be the word used in Manx’ (*speyr*). However, this appears to be unknown outside dictionaries,³⁷ the normal word being *aer* (also ‘air’) (Bible; *HLSM* II: 4), agreeing in fact with the most common term in Scotland according to Grand (*adhar*).

Ó Maolalaigh (2013: 65) quotes Fargher (1979: 287) that *dy-chooilley* is an ‘archaic spelling’ for *dagh ooilley* ‘every’ (G. *gach uile*, ‘*chuile* etc.) when in fact the former is the standard Classical Manx spelling, and the latter an example of revivalist antiquarian spelling. Ó Maolalaigh discusses two examples from Fargher *dagh ooilley cor hiaghtin* and *[er] dagh vod*, the former of which appears to be Fargher’s own invention³⁸ and the latter is an obscure form from Kelly.³⁹ Such data (certainly the former) cannot be taken to have a bearing on linguistic features of the traditional language.

These examples show that all of the dictionaries are to varying extents unreliable as reference works. Kelly and Cregeen, however, are highly important as primary sources.

³⁷ The word *speyr* is in Cregeen, glossed ‘the sky’, so is likely to be genuine, but nevertheless does not seem to have been the most usual word for ‘sky’. It is absent in Kelly, who gives only *aer* and *niau* (‘heaven’, G. *néamh*) for ‘sky’ in his English–Manx dictionary.

³⁸ Prefixed G. *corr-* ‘(the) odd, occasional’ does not seem to occur productively in Manx, although as an element meaning ‘rounded, pointed; remote’ it is found in place-names (*PNIM* VII: 427–8) and there is a derived adjective *corragh* ‘tottering, weak; touchy, capricious’ (G. *corrach*). Kelly gives *derrey-laa* as ‘every other day’, cf. *indara la* ‘every other day’ (*eDIL* s.v. 1 *dara*), but this is not given by Fargher, who does however have *gagh derrey Doonaght* ‘every other Sunday’. **Gach uile c(h)orr-* is not found in other Gaelic varieties for ‘every other...’.

³⁹ In Kelly’s manuscript (MS 1045–57), but not the printed work (s.v. *er-dagh-vod*), the note ‘Ir. Ar gach mhead’ is given.

1.6.9 Native speech: recordings and transcriptions

Details of the recordings and transcriptions made in the twentieth century of native speech by fieldworkers, both professional and amateur, are provided by Broderick (*HLSM* I: xv–xxiii, III: xi–xxxiii; 1999: 54–75; 2017; 2018b; 2018d). All of these data were collected from elderly informants, most of whom lived largely in isolation from other Manx speakers and had not used the language for many years, and who had grown up in communities already experiencing rapid language shift to English. For biographical information on the speakers see Broderick (2017; 2018a).

In this thesis two main sources of native speech data are used: the transcriptions given in Broderick’s *Handbook of Late Spoken Manx* (1984–86), especially the dictionary (vol. 2), and the audio recordings made by the Irish Folklore Commission, published on CD in 2003 (Manx National Heritage). The latter were investigated instrumentally using Praat (Boersma and Weenink 2015), the first use of such a methodology with Manx audio data (§§2.2.3, 3.7, 4.5).

Further recordings exist, notably those made by the Linguistic Survey of Scotland, and by the local language organization Yn Cheshaght Ghailckagh and other amateur language enthusiasts, with copies held in the Manx National Museum and the School of Scottish Studies. Some of these are transcribed by Broderick in *HLSM*, but it is desirable that the original audio material should be investigated instrumentally in future research. The transcriptions made by Marstrander of texts read aloud by terminal speakers also deserve further attention (see Thomson 1976; Broderick 2018d). There are also some very early recordings from the first decade of the twentieth century (Broderick 1999: 54; Trebitsch and Remmer 2003; Manx National Heritage 2017), which are occasionally referred to in the present work, although the material is limited, mostly read or recited, and the sound quality poor.

1.6.9.1 The Manx of the ‘last native speakers’

Although conventionally referred to without qualification as ‘the last native speakers’ of Manx (e.g. Broderick 2017), the individuals recorded in the twentieth century all

show signs of varying degrees and types of incomplete proficiency in the language, at least at the point in time when they were recorded, including phonetic variability, gaps in lexis and idiom, and lack of control of complex morphosyntactic phenomena such as initial consonant mutation and grammatical gender. Broderick (1999: 77–158) catalogues these features extensively, but does not come to an altogether clear conclusion as to how the speakers should be classified (*ibid.*: 5–6). He ascribes the observed features primarily to rustiness and lack of practice in the language, using Menn’s (1989) term ‘rusty’ speaker, as well as to discomfort caused by ‘the presence of the microphone and recording machine’ rather than ‘any short-comings on their part’ (Broderick 1999: 6). In Broderick (2017: 54) this position is restated more forcefully and the same factors are given as explaining apparent linguistic weaknesses:

I am of the opinion that *all* fifteen of our speakers are to be regarded as ‘full’ (i.e. ‘formerly fluent’) speakers of Manx. That is to say, they had gone through the gamut of the language during their formative years (their pronunciation is consistent with what is to be expected), but that there is clearly some loss to be seen is due, in my view, not to imperfect learning when young, but to lack of use in later life.

(Broderick 2017: 54, original emphasis)

However, I have argued (Lewin 2014b; 2017a: 191–3; 2019a: 81–2) that rustiness or language attrition during the lifetime of the speaker are insufficient to explain some of the features observed. The terminology is not entirely settled in this field (‘semi-speaker’, ‘terminal speaker’, ‘younger fluent speaker’, ‘weaker speaker’, ‘reduced speaker’ or ‘post-traditional speaker’ etc.),⁴⁰ but it is clear that incomplete acquisition of certain linguistic features by upcoming generations is a pervasive feature of language shift and minoritization situations (Dressler 1985: 12; Sasse 1992b: 62–63; Montrul 2008)⁴¹ — as also in other situations with suboptimal levels of linguistic exposure and peer-group socialization, such as the case of second-generation bilingual immigrants and heritage speakers (Carroll 1989; Polinsky 2006; Unsworth et al. 2014;

⁴⁰ For discussion in the Manx context see Broderick (1999: 4–11; 2017) and Lewin (2017: 143), and for the development of the terminology in wider scholarship see e.g. Dorian (1977, 1981, 2010), Dressler (1981), Schmidt (1985), Campbell and Muntzel (1989), Sasse (1992a; 1992b), Grinevald and Bert (2011), Lenoach (2012: 21–25), Ó Curnáin (2012).

⁴¹ See for example Ó Curnáin (2007; 2012) for detailed data from a contemporary Irish-speaking community currently experiencing language shift.

Montrul 2008; 2015). A strong argument can be made that incomplete acquisition is required to explain the absence or lack of control of features such as initial mutations and grammatical gender concord with inanimate nouns among the last speakers of Manx. The latter in particular is well maintained in written Manx of the seventeenth to nineteenth centuries, including in the stories and reminiscences of Edward Faragher (1831–1908), and is also found in some but not all of Rhÿs’s informants,⁴² but is absent in the speech recorded from terminal speakers such as Ned Maddrell.⁴³

Although the difficulties of comparing speech and writing should always be borne in mind, I have argued (Lewin 2017a: 191–3) that it is implausible either that gender could have been maintained by the earlier generations in writing only — presumably by conscious learning — or that the complete loss of these features should have occurred owing to rustiness in otherwise ‘full’⁴⁴ native speakers.

It is much more plausible, and agrees better with our cross-linguistic understanding of the processes of language shift, that grammatical gender, initial consonant mutations etc. were normal parts of the linguistic competence of earlier generations of ‘full’ native speakers, albeit complex, opaque, late-acquired features particularly dependent on rich input and socialization in the language for complete acquisition (cf. Nic Fhlannchadha and Hickey 2017), and that an insufficiency of such input and peer-group socialization is responsible for the gaps in the competences of terminal speakers such as Maddrell, despite high levels of conversational fluency and confidence, and complete or near-complete acquisition of other components of the language. Indeed, it

⁴² Rhÿs notes maintenance of historical gender concord with inanimate feminine nouns in speakers from poorer socioeconomic backgrounds and more remote communities which remained strongly Manx-speaking longer than others, but there may be failure to observe gender concord in individuals from less isolated communities or higher social strata, that is, members of social networks within which language shift had occurred earlier and more extensively by the time of Rhÿs’s fieldwork (Lewin 2019a: 79–82).

⁴³ It also appears that Maddrell, usually regarded as ‘the last native speaker’ of Manx, was a sequential bilingual who acquired English first and only later acquired Manx from an elderly relative, starting between the ages of two and a half and five (*HLSM* I: 463, 467–8; Broderick 1999: 75; 2017: 44–5; Lewin 2014b: 17–8). See e.g. Meisel (2009) and Unsworth et al. (2014) for major differences between simultaneous and sequential bilinguals, even when the age of onset of acquisition of the L2 is relatively young.

⁴⁴ In Menn’s (1989) sense.

would be much more remarkable if speakers from this stage in the language shift process did *not* display symptoms of incomplete acquisition.

It is curious that Broderick (2017) does not examine the incomplete acquisition scenario further, nor reference the voluminous empirical literature on bilingualism and language acquisition under conditions of minoritization and language shift, and that he is so keen to foreclose the possibility that incomplete acquisition is part of the explanation for the linguistic features of ‘Late Spoken Manx’. Indeed, comments such as the following, which assume that a speaker will automatically have a competence in a language equivalent to that of the source of input, show a lack of consideration of cognitive and social aspects of acquisition in a situation of language shift, and indeed for intergenerational language change in general:

Although English was, according to himself, Maddrell’s home language for the first five years of his life, he was then (c. 1882) allocated to live with a great-aunt who apparently had little or no English [...] because he was brought up with a great-aunt born in the first decade (1809) of the 19th century, his Manx, unlike that of his peers, would be of that vintage.

(Broderick 2017: 45)

This is not to say that the ‘vintage’ of the great-aunt’s Manx would make no difference to Maddrell’s acquisition. She was clearly Manx-dominant or monolingual, and herself acquired Manx when there was little English in the community (cf. Miller 2007), and so Maddrell may well have acquired features from her more successfully than he would have done if his own parents had spoken Manx in his presence, as they would likely have been weaker ‘post-traditional’⁴⁵ speakers to some degree. As Broderick (2017: 45) observes, Maddrell ‘is the only one of the last fifteen speakers who makes use of the inflected synthetic tenses of the verb [...] and distinguishes between the imperfect and conditional forms of the verb ‘be’.’⁴⁶ It is to be expected in cases of reduced acquisition that some features may be acquired much more fully than others,

⁴⁵ Cf. Ó Curnáin (2007: 59–60) for the decline in proficiency of Iorras Aithneach Irish speakers since 1960, with moderate effects initially in the first generation of ‘post-traditional speakers’ giving way to more severe impacts of ‘reduced’ acquisition in younger speakers.

⁴⁶ For the latter feature, see Broderick 2011.

and it is often unpredictable which features will be better acquired and by which speakers (cf. Dorian 2010: 107, 269).

Broderick's (2017) discussion of the biographical details and census data of the terminal speakers (while otherwise highly useful), also reveals the limits of his sociolinguistic analysis, notably when he rather mechanically dates the switch from Manx to English in a particular relationship or household from the introduction of a non-Manx-speaking member, or a presumed decision by parents not to speak Manx to a new child. While such junctures are indeed likely to represent *termini post quem* by which point use of Manx in a given situation had ceased, or at least significantly reduced, we cannot assume that Manx was used with any regularity between any given two bilingual Manx speakers at an earlier stage.

Rather, the available information on the Manx situation, with rapid language shift accompanied by widespread stigmatization (Broderick 1999), and parallel examples from other language communities, would suggest that many younger bilinguals used English as their normal language of peer-group social interaction, even if Manx had been their home language during childhood and adolescence, and continued to be used (actively or passively) with older members of the community. For example, Maddrell's parents apparently habitually spoke English together despite being able to speak Manx (*HLSM* I: 463; Broderick 2017: 43–45). Indeed, the already-established status of English as the normal language of interaction between a young couple may well be a significant part of the reason they failed to transmit the language to the next generation.

1.6.9.2 Features of Terminal Manx phonology

In the phonology, features such as apparent confusion of palatalized and non-palatalized consonants (Broderick 1999: 85–90), loss of coda /r/ (*HLSM* III: 113) and intrusive /r/ (*HLSM* II: 267; §4.2.3), lack of vowel nasalization (Jackson: 63–4; *HLSM* III: 147; §5.6) and perhaps increased variability in vowel realization and tendencies towards merger (Broderick 1999: 81–83; but see §2.2.3, 3.5.5.1, 3.7) are likely to reflect incomplete acquisition under conditions of language shift. In contrast, Rhÿs

(31–48) provides evidence that vowel nasalization, for example, was widely maintained among his informants.

There are also some spelling pronunciations, e.g. *feoh* ‘hate’ (G. *fuath*), expected /fiə/, where <eo> is one of the orthographic representations of the fronted reflex of the G. diphthong *ua* (§3.6.2); this is attested as expected **fi:ə** from TT, but with an evident spelling pronunciation **fɛ:ɔ** (TC, HK) and **fjɔ:** (JW) (*HLSM* II: 165), and *aigh* ‘luck’ (G. *ádh*), expected /ɛ:i/, realized as **ɛ:x** (TC) with misinterpretation of orthographic <gh> as a representation of /x/.

These attest to the persistence of a degree of literacy (in a religious context) during the period of language shift, as well as lexical contraction as less frequent or higher-register items were partially forgotten.

Nevertheless, it is clear that the speech of the terminal speakers preserves a great deal of the patterns of the Manx of earlier generations, including features such as preocclusion which are scarcely attested in written sources (§4.5). If approached judiciously, with quantitative methods, and with an eye to the comparative data provided by earlier written material, the recordings of the terminal speakers remain a rich and important source of linguistic data.

1.7 Outline of synchronic phonology of Classical Manx

Throughout the thesis, and especially in the tables of lexical data, phonological reconstructions are provided which aim to represent the likely pronunciation of the language in the middle of the eighteenth century (i.e. the spoken language which forms the basis of the standardized Bible orthography). The purpose of these reconstructions is primarily to assist readers in orientating themselves with regard to the complex and possibly unfamiliar orthographies and other sources of data presented, including the ‘mass of raw phonetic [...] data’ (Ó Maolalaigh 1997: 5) of the fieldwork sources. They should not be taken as primary data for further analysis without careful consideration of the original sources and scholarly assumptions on which they are based.

Individual transcriptions represent varying degrees of confidence on the part of the author (the most doubtful forms are flagged with a question mark). They also may rest on assumptions and research outwith the topic areas covered explicitly in this thesis (especially with regard to the consonants).

It should be noted that the broad phonemic transcriptions are in some instances quite far removed from possible Late Manx phonetic realizations, especially with regard to medial consonants (cf. Thomson 1984: 314–5), e.g. *cassyn* ‘feet’ (ScG. *casan*) is represented phonemically as /kasən/ but could be realized [kasən], [kazən] or [kaðən] (HLSM II: 60–1), also with optional lengthening of the stressed vowel [ka:zən] etc. (§5.5.2).⁴⁷

1.7.1 Stressed vowels

Figure 2. Stressed vowels in Classical Manx

	Front	Central	Back
High	i i:	(?i) (i:)	u u:
Mid-high	e e:	(?ə) ə:	o o:
Mid-low	ɛ:		
Low		a a:	

Notes

- (a) /i:/ apparently occurs in Late Manx, arising from the monophthongization of the diphthong /iə/ (§2.2.6).
- (b) /a:/ has a restricted distribution (§2.2.4).
- (c) All vowels can apparently be phonemically nasalized (§§1.7.8, 5.6).
- (d) It is unclear whether short /ə, i/ exist as shortened reflexes of G. *ao(i)*, *ua(i)* (§3.9.11).

⁴⁷ Only the earliest stages of this development are shown in the CM orthography and represented accordingly in the phonological transcription. Thus it is assumed that *cassyn* remained underlyingly /kasən/, but that CM *cabyl* ‘horse’ (G. *capall*) had become underlyingly /kabəl/ (> [ka(:)bəl], [ka(:)βəl], [ka(:)vəl]), for older EM /kapəL/ (> [kapəL], [kabəL]), Ph. *kapył* (2), *kabył* (2).

1.7.2 Unstressed vowels in pretonic position

Figure 3. Unstressed pretonic vowels in Classical Manx

	Front	Central	Back
High	i (i:)		u (u:)
Mid	e (e:)	(ə ə:)	o (o:)
Mid-low	(ɛ:)		
Low		a	

Notes

(a) The original quality of pretonic vowels seems generally to be preserved judging by the orthography, although it is not always represented consistently (§5.1.3).

(b) Original pretonic schwa in words such as G. *amuigh* ‘out’ (G. /əˈmuy̯i/ > Manx /muj̯/) is generally lost (but see əˈni:s *neese*, G. *aníos* [HLSM II: 321]), except in proclitics, as in *my hie* ‘my house’ /məˈhəi/ (ScG. *mo thaigh*).

(c) In proclitics only /ə/ and /a/ occur, the latter in some cases representing historical */a:/. Long vowels may be preserved in Early Manx based on Phillips spellings *ma*, *mý*, *má* alongside *my* for G. *má* ‘if’, and *dâ*, *dá*, *da*, occasionally *dy* for contraction of G. *do* and *ag* with the third person possessives, G. *dá*, *agá* etc. (Lewin 2016a: 174; Ó Maolalaigh 2019). Gaelic *má* is written *my* in the Classical Manx orthography, but seems to have been pronounced /ma/ (HLSM II: 311–2; Cregeen s.v. *mannagh*), or confused with *myr* ‘as’, as shown the pronunciations given in HLSM and Edward Faragher’s spelling *mor* (Broderick 1982a: 180). Examples: with /ə/ *dy*, *y* ‘of’, ‘to’, verbal noun particle (G. prepositions *do*, *de* > *a*); *my* ‘my’ (G. *mo*); *dty* ‘your’ (G. *do*); *e* ‘his, her, its’ (G. *a*); *nyn* ‘our, your, their’ (G. *ár*, *bhur*, *a*); *dy* ‘that’ (subordinator) (G. *go*), *dy*, *gy* ‘to’ (G. *go*). With /a/ *cha* ‘not’ (Ulster and ScG. *cha(n)* < G. *nocha(n)* < OIr. *nícon*); *nagh* ‘not’ (G. *nach*); *my* ‘if’ (see above) (G. *má*); *mannagh* ‘if not, or not’ (G. *má* + *nach*).

1.7.3 Unstressed vowels in post-tonic preconsonantal position

Figure 4. Unstressed post-tonic vowels in closed syllables

	Front	Central
Mid	(e)	ə
Low		a

Minimal pairs:

/slatən/ *slattyn* ‘rods’, ScG. *slatan*

/slatan/ *slattan* ‘small rod’, G. *slatán*

/elʲən/ *ellyn* ‘manners, behaviour’, G. *aileamhain* (§5.1.4.1)

/elʲan/ *ellan* ‘island’, G. *oileán*, ScG. *eilean*, earlier *ailén*

Note:

(a) Post-tonic /a/ represents original long vowels, such as /a:/ in e.g. *arran* ‘bread’ /aran/ < /ara:n/ (G. *arán*), and original short *a* before /x/ in the endings *-agh* /ax/ and *-aght* /axt/.

(b) There may be unstressed /e/ in *-er* (G. < *-óir*) (§5.1.6).

1.7.4 Unstressed vowels in post-tonic final position

Figure 5. Unstressed word-final post-tonic vowels

	Front	Central	Back
High	i		u
Mid		ə	

Minimal triplets:

/mari/ *marree* ‘will kill’, G. *marbhaidh*

/maru/ *marroo* ‘dead; to kill’, G. *marbh*, *marbhadh*

/marə/ *marrey* ‘sea’ (genitive), G. *mara*

/erʲi/ *erree* ‘fate’, G. *airidh* (Thomson 1981: 148)

/erʲu/ *erreo* ‘ploughman’, G. *aireamh*

/erʲə/ *errey* ‘burden’, G. *eire*, OIr. *aire*

1.7.5 Diphthongs and triphthongs

In principle all of these can be nasalized, e.g. *laue* /l̥ɛ:ũ/ ‘hand’ (G. *lámh*), *feer vie* /,fi:r 'vãĩ/ ‘very good’ (G. *fíor mhaith*) (§§1.7.8, 5.6).

Figure 6. ə-diphthongs

	Front	Central	Back
High	iə	ɪə	uə

Notes:

(a) The split of *ua* into /iə/ and /uə/ is discussed in §§3.3, 3.4.3–6, 3.8.

(b) In Late Manx these usually become long monophthongs /i: i: u:/ except in final position and before /x/ (§2.2.6).

Figure 7. *i*-diphthongs

	Front	Central	Back
High	(iə̃)	(iə̃)	ũ u:̃ uə̃
Mid-high	ẽ e:̃	ə̃ ə:̃	o:̃
Mid-low	ɛ:̃		
Low		ã	

Notes:

(b) These primarily arise from vocalization of fricatives to /ĩ/, e.g. G. *maith* ‘good’ /maθi/ > /mah/ > /maj/ Manx *mie*; ScG. *lagh* ‘law’ /Ləy/ > /lə̃/ Manx *leigh*; G. *cloiche* ‘stone’ (gen.) /kloçə/ > /klojə/ > /klo:ĩ/ Manx *cloaie*;⁴⁸ G. *tráigh* ‘shore’ /tra:ɣi/ > /trɛ:ĩ/ Manx *traie*.

(b) Earlier */iə̃/ usually gives /e:̃/ (as in *jeigh* /dʒe:ĩ/ ‘close’, G. *iadh*) or /e:/ (e.g. *blein* /blie:n/ ‘year’, G. *bliadhain*) but is possibly retained in *feaih* ‘deer’ (G. *fiadh*).

(c) /iə̃/ (> [u:ĩ]?) may have been distinctive for some speakers in items such as *creoi* ‘hard’, G. *cruaidh*; *leoie* ‘ashes’ (G. *luaith*), but otherwise merges with /ə:̃/ (§3.9.1).

(d) Earlier */oĩ/ has apparently merged with /ã/, as in *cry* /krã/ ‘gallows’ (G. *croich*), *lhiy* ‘colt’ /lã/ (ScG. *loth* > **loith*).

Figure 8. *u*-diphthongs

	Front	Central	Back
High	ĩ u:̃ iə̃		
Mid-high	ẽ u:̃	ʔə:̃	ʔo:̃
Mid-low	ɛ:̃		
Low		ã	

(a) These primarily arise from vocalization of fricatives to /ũ/, e.g. G. *gabh* ‘take’ /gav/ > /gaũ/ Manx *gow*; G. *scríobh* ‘write’ /skri:v/ > CM /skri:ũ/ > LM /skru:/ Manx *screeu*; G. *snámh* ‘swim’ /sNa:ʃ/ > /snɛ:ũ̃/ Manx *snaue*; G. *rabhadh* ‘warning’ /Ravəy/ > /rawə/ > /ra:w(ə)/ > /rɛ:ũ/ Manx *raaue*.⁴⁹

(b) One would expect a contrast between /ɛ:̃/ and /e:̃/, but there is little evidence of this in the CM orthography, e.g. *laue*, *raaue*, *snaue* etc. = /ɛ:̃/, /ɛ̃:ũ̃/, but also *fraue* ‘root’ (G. *fréamh*), *A(a)ue* ‘Eve’ (G. *Éabha*).

⁴⁸ Compensatory lengthening, cf. Donegal Irish: ‘In several instances *a:i* arises by the contraction of two syllables caused by the quiescence of intervocalic th, bh, gh, dh, e.g. *bra:i*, ‘hostage, prisoner’, M.Ir. *brage* (this word is also used to mean unfilled ears of corn)’ (Quiggin 1906: 58).

⁴⁹ Compensatory lengthening, cf. Donegal Irish *rabhadh* **ro:wə**, **ro:uw** ‘warning’ (Quiggin 1906: 18).

(c) /ə:ʉ/ would be expected from *ao(i)bh/mh*, but the evidence is unclear as to whether this was kept distinct from /aʉ/, e.g. *crouw* ‘shrub’ (G. *craobh*), but note monosyllable in *noo* /nu:/ ‘sai□; h□□□’ (G. *naomh*). Similarly ?/o:ʉ/ might be expected in *loau* ‘rot, rotten’ (G. *lobhadh, lobhtha*) (via compensatory lengthening, as in *raaue* above), and the spelling may indicated a contrast with *low* ‘allow’.

(d) Earlier */ou/ has merged with /aʉ/, as in *bouyr* /baʉr/ ‘deaf’ (G. *bodhar*), *towse* /tãũs/ ‘measure’ (G. *tomhas*).

(e) /uv/ may give monophthongal /u:/ as in the southern pronunciation of *doo* /du:/ ‘black’ (G. *dubh*), diphthongal in northern Manx /daʉ/ (§4.6.1.34).

1.7.6 Consonants

Figure 9. Consonants in Classical Manx

	Labial	Dental / alveolar	Retroflex	Post-alveolar	Palatal	Velar	Glottal
Stop / affricate	p b	t̪ d̪ t̪ʲ d̪ʲ		tʃ dʒ		k g kʲ gʲ	
Nasal	m	(n) ɲ nʲ				ŋ ŋʲ	
Fricative	f v	s	(ʂ)	ʃ	ç	x ɣ	h
Lateral		(l) ɭ lʲ					
Rhotic		r rʲ					
Semivowel	w				j		

Notes

(a) Manx agrees with Scottish Gaelic in lacking synchronic palatal labials (Oftedal 1963; Ó Maolalaigh 1997: 27, 44, 65–72; Ternes 2006: 27–43), which is particularly evident in items such as *bannaght* /banaxt/ ‘blessing’ (G. *beannacht*, Ir. /bʲaɲˠəxt/), where Manx lacks the glide found in Scottish Gaelic varieties with /e/ > /a/ in *beannachd* /ˈbjaɲˠəxk/. Glides (assumed here to be segmental /j/) are found in a few items with original G. *eó*, *eabh*, *iú* (e.g. *bio* ‘alive’ /bjo:/ G. *beó*; *mioyr* ‘mental faculties’ /mjo:rʲ/ G. *meabhair*; *feeu* ‘worth’ /fju:/ G. *fiú*). But cf. *foays* ‘benefit’ /faʉəs, fo:s/ (HLSM II: 171), Phillips *fiâuys* /fjaʉəs/. There is sometimes /j/ > [lʲ] in *bio* in Late Manx > **bl’o**: (HLSM II: 31). That there was a palatalization contrast in the past, at least in medial and final position, is suggested by examples such as *kemmyrk* /ˈkəmərki/ ‘refuge’ (G. *coimirce*), where the change /o/ > /e/ in the first syllable is difficult to account for without assuming earlier */mi/ (§2.1.6.1). Similarly, a residue of a contrast /v ~ vʲ, ʋ ~ ʋʲ/ is retained in Early Manx pairs such as Phillips *dou*, *dexf* /dãʉ, dẽv/ ‘ox, oxen’, Classical Manx *dow*, *dew* /dãʉ, dẽʉ/ (G. *damh, daimh*).

(b) Gaelic /t̪ʲ/ and /d̪ʲ/ seem to have been realized as affricates [tʃ dʒ] initially and medially and as palatalized stops [tʲ] and [dʲ] finally. In final position these seem to be contrastive with /tʃ/ and /dʒ/, the latter occurring in loanwords, e.g. native *aitt* ‘funny’ (G. *ait*) and probably borrowed (?Eng. ‘botch’) *spotch* ‘joke’ (cf. de Bhaldraithe 1945: 36). Following the native intuition that apparently underlies the orthographic

distinction, initial [tʃ, dʒ] from Gaelic /tʰ/ and /dʰ/ are synchronically grouped with final [tʃ, dʒ] (< English /tʃ, dʒ/) as phonemes /tʃ, dʒ/, contrastive with /tʰ/ and /dʰ/ from Gaelic /tʰ/ and /dʰ/ in final position.

(c) The distinction between /d̪/ and /d/ is given on the strength of Cregeen (vi, §7–8), and the existence of similar contrasts between dentals in native words and alveolars in borrowings in other Gaelic dialects.

(d) In most of the reconstructions given throughout the thesis only a two-way contrast in the coronal nasals and laterals is assumed, but this is probably an oversimplification: there is evidence of a three-way lateral contrast in some Late Manx speakers, and possibly the same for the coronal nasals. However, the distribution of these is not entirely clear. See Chapter 4 for discussion.

(e) The retroflex sibilant /ʃ/ is posited on the strength of Jackson's (1955: 125–6) claim to have heard it as a reflex of historic /rs, rʃ/ clusters where the /r/ is deleted and not written in the orthography (except in *ersooyl* 'away', G. *air siubhal*). If this [ʃ] did exist, it was apparently not analysed as /rs/ because it is consistently written <s(s)>, rather than <rs>, in items such as *claasagh* 'harp' (G. *cláirseach*), *essyn* 'doorjamb' (G. *ursann*), *as* 'says, said' (ScG. *arsa*), *fesst* 'spindle' (G. *fearsaid*), Phillips *kuys*, *kus* 'course' (later doublet *coorse*) (§4.2.2).

(f) [v] and [w] may be allophones. There is apparently free (?) variation between [v] and [w] in forms of the preposition *veih / voish* (*weih / woish*) /vei wei vuf wuf/ (G. *ó* > 3sg.m. *uidh*, *voish* < cf. *rish*, *lesh* etc.). However, there are a few lexical items with apparently fixed [v] or [w] (see under 'v' and 'w' in Cregeen). There is evidence of apparent substitution of [v] for [w] in nineteenth-century Manx English in a satirical article (*Mona's Herald*, 20.06.1834), e.g. *vell*, *vife*, *velfare*, *vondering*.

(g) Preoccluded or prestopped nasals and laterals are regarded as free variants of their non-preoccluded versions (§4.5).

(h) The process of secondary lenition whereby e.g. *peccagh* 'sinner' /pekax/ can be realized [pegax, peɣax, pejax, pejax] is analysed here as allophonic (see above).

1.7.7 Stress

Stress usually occurs on the first syllable (§5.1). In the transcriptions it is ordinarily only marked if it occurs on a non-initial syllable. A synchronic long vowel in a non-initial syllable is always stressed.

1.7.8 Vowel nasalization

Where it is considered that phonemic vowel nasality was likely present in Classical and Late Manx, or when there is positive evidence that it was so (e.g. from Rhÿs's descriptions), stressed⁵⁰ vowels are marked with a tilde in reconstructed phonological forms throughout this thesis. Both elements of a diphthong are marked as nasal.

However, given the incompleteness of our knowledge of nasalization in Manx (Lewin 2019a: 82–9), no indication of the presence or absence of nasalization is to be taken as a claim that this was the case, unless explicitly stated. In most cases, vowel nasality will have no bearing on the question at hand. The marking of nasalization is primarily for the purpose of alerting the reader that vowel nasalization was a more substantial part of the Manx phonological system than has previously been assumed (Jackson 63–4; *HLSM* III: 147; Ó Maolalaigh 2003a: 129), at least in the language of pre-terminal speakers.

Nasalization is assumed to be present on stressed vowels adjacent to synchronic nasal vowels (cf. Rhÿs: 31), but is not indicated in the transcriptions. This is probably strictly inaccurate, since detailed studies of other Gaelic dialects show the existence of exceptions in which phonemic vowel nasalization is absent despite an adjacent neighbour consonant (cf. Ó Curnáin 2007: 324–33), e.g. Applecross Gaelic *muir* /mur/ 'sea', but *muc* /mũxk/ 'pig' (Ternes 2006: 104). This entails that vowel nasalization in such environments cannot simply be a phonetic consequence of the neighbouring nasal consonant. There is no clear data on this point for Manx.⁵¹

⁵⁰ Phonemic nasalization is rarely attested on unstressed vowels according to Ó Curnáin (2007: 292–3); see also Ternes (2006: 111). According to Rhÿs (33), 'wherever Manx has an unaccented *u* for a Goidelic *ǎmh*, I can find no trace of nasality attaching to the Manx vowel of the present day'.

⁵¹ '*M* in accented syllables beginning with it (or with *v* as its continuator) induces nasality. [...] What exceptions there may be to it I could not say in a comprehensive or decided fashion' (Rhÿs: 31). This tantalizing comment suggests that Rhÿs may have suspected that there were indeed such exceptions. Rhÿs (31–4) is much more definite about the existence of nasalization in items such as *laue* /l̥ē:ũ/ 'hand' (G. *lámh*), *troo* /tr̥ũ:/ 'envy' (G. *tnúth*), lenited *vooar* /v̥ũãr/ 'big' (G. *mhór*).

1.7.9 Presentation of data

In tables of lexical data throughout the thesis items are presented as follows:

- (a) The lemma in standard eighteenth-century orthography (Bible and/or Kelly's, Cregeen's dictionaries), together with variant spellings (with sources) where these add additional information.
- (b) A comprehensive list of spellings from the Phillips manuscript, as given in Thomson's (1953) glossary.
- (c) Reconstructed Classical Manx (eighteenth-century) phonological transcription (§1.7).
- (d) The closest Gaelic cognate(s) (§0.3), i.e. Early Modern Irish forms, with other Irish, Scottish Gaelic, and Early Irish forms where relevant.
- (e) English translation or explanation.
- (f) A comprehensive list of occurrences in Broderick's dictionary of terminal speech (*HLSM* II), with speaker initials (§0.7).

For reasons of space, (f) *HLSM* data are omitted where the other evidence is sufficiently clear, and where the transcription data are not felt to add any additional or unexpected information.

Only the relevant orthographic or transcription segment(s) are given in (b) and (f), except where it is felt desirable to give the whole word.

In-text citations of data follow similar presentational practices.

Chapter 2 The Manx vowel system

According to Ó Maolalaigh (1997: 2–3), long vowels have been more stable in Gaelic dialects than their short counterparts, which have a greater ‘susceptibility to change’ ‘[b]ecause of their relatively short duration [...] and their tendency to assimilate in quality to the consonantal environment’. This may be the case; but, as we shall see, there have also been significant changes in the Manx long vowels (§2.2), often with similar links to consonant environment to those seen in the short vowels (§2.1).

Nevertheless, the bulk of the present chapter deals with the short vowels. The most complex developments concerning the long vowels and diphthongs involve reflexes of G. *ao(i)* and *ua(i)*, to which a separate chapter (3) is devoted. New vowels and diphthongs arising from the vocalization of historical fricatives are also omitted for reasons of space, but are mentioned at §§1.7.5, 3.9.1.

2.1 Short vowels

2.1.1 *a* /a/ > /a/, /e/, /o/

G. *a* is mostly retained as /a/, e.g. *annym* /anəm/ ‘soul’ (G. *anam*), *gastey* /gastə/ ‘nimble’ (G. *gasta*), *marroo* /maru/ ‘dead’ (G. *marbh*), *saggyrt* /sagərt/ ‘priest’ (G. *sagart*). In some items there is raising to /e/ or backing and rounding to /o/.

2.1.1.1 *a* /a/ > /e/

Several items have variant spellings indicating a realization with /e/ alongside /a/; categorical raising is rarer.

Table 2. a /a/ > /e/

	Phillips	CM pronunciation	etymology	English
braddagh (Bible, Cr.), bred(d)agh (Cr.)	a	/bradax/, /bredax/	bradach	thievish
derrey	a (12)	/derə/	dara	the one
derrey	e (13), é	/derə/	nó go dtara	until
ennal	a (6), á	/enal/	aná(i)l	breath
glen	a (4)	/glen/	glan	clean
kayt (Cr.), cat, caht (K.) ⁵²		/ket/, /kat/	cat	cat
keck (Cr., K.), cac, cackey (K.)		/kek/, /kak/	cac	excrement
kesmad	a (3)	/kesmad/	coiscéim	footstep
scell, skell; skellal		/skel/, /skelal/	scal	beam, ray; disappear
skeddan, scaddan (Cr.)		/skadan/, /skedan/	scadán	herring
tessen		/teʃən/	tarsainn	across

The motivation for the raising in these items is not clear, although it may be observed that all except one have a following coronal consonant. In the case of *glen* and *ennal* the following nasal consonant may be responsible; raising in items such as these is also found in some south-western Scottish dialects (Holmer 1938: 40; 1957: 48; 1962a: 5–6, 74; Jones 2010: 85–90; Scouller 2017: 50–1). In several items only <a> is found in Phillips, which suggests that the change is not very old.

There are also a number of loans from English with /e/ for English /æ/, such as *blest* ‘blast’, *clesp* ‘clasp’, *edd* ‘hat’, *gless* ‘glass’. Apparently this vowel was perceived by

⁵² *HLSM* (II: 242): **kat'** TC, **k'et** EK_h, **ket'** JW, **k'et**, **k'et** NM, **k'et**, **ket** HK. The forms of the singular and plural seem to be confused in the Manx of the terminal speakers, with apparently free variation of palatalized and non-palatalized consonants both initially and finally. Forms in /e/ seem to predominate in the singular, but TC has /a/, in accordance with Kelly's spelling and Lhuyd's form **Chat** (Ifans and Thomson 1980: 135). Cregeen's spelling *kayt* could be interpreted as reflecting variant forms /kat/ and /ket/, since <ay> may represent /e/ in *aym* 'at me' (G. *agam*), *ayd* 'at you' (G. *agat*, *agad*) but /a(:)/ in *ayrn* 'part' (G. *earrann*) etc. (§1.6.4.4). The reflexes of G. *cat* are irregular in a number of Ir. and ScG. dialects.

Manx speakers as being closer to Manx /e/ than /a/ in the English varieties with which they were in contact (as also in Welsh; cf. Parry-Williams 1923: 24–7).

2.1.1.2 a /a/ > /o(:)/, /u(:)/

In the following items the change /a/ > /o(:)/ (or occasionally /u(:)/) seems to be complete in Classical Manx, as shown by standard spellings with <o>, <oa> etc. in the Bible. Unrounded /a/ is often indicated by Phillips in these items,⁵³ so the change must have been in progress in the seventeenth and eighteenth centuries.

Table 3. a /a/ > /o(:)/ (/u(:)/)

	Phillips	CM pronunciation	etymology	English
aunlyn, oanlyn, oalyn (Cr.)		/o:nlən/, /õ:lən/ /aunlən/	annlann	gravy, soup, relish
ayns, ayn, aynym, aynyd, aynje, aynin, ayndoo		/o:n/, /u:n/, /o(n)s/, /onəm/ etc.	ann	in, in him / it, in me, in you, in her, in us, in you (pl.), in them
boal, boalley, voalley		/bo:l/, /bo:lə/, /vo:lə/	balla	wall
boandey	oy ('bond- servant')	/bo:ndə/	Ir. banda, ScG. bannd	band (of iron etc.)
boandyrey, boandyrys	baintri	/bo:ndərə/	banaltra	nurse
boayl	a, o	/bo:l/	ball	place
bollag	o, a (2)	/bolag/	ballóg, ScG. ballag	skull
bollan		/bolan/	ballán	rockfish
cloan	au (3), áu (4), aú	/klo:n/, /klaun/	clann	children
coayl	a (6), á, à (2), ia	/ko:l/	call	lose
croan; cronney; kranghyr (Ph.)	(<i>croan</i>) a (2), ó; (<i>kranghyr</i>) ai, a (7), ay, á	/kro:n/, /kraun/; /kronə/; /kronxər/	crann; crannadh; crannchor	mast, tree; lot, fate, portion

⁵³ However, <all> in e.g. *dall*, CM *doal* 'blind' (G. *dall*) or *fallsy*, CM *foalsey* 'false' (G. *fallsa*) could possibly represent /o(:)l/ (cf. English *all*, *ball*). In Ph. *fallaghy* etc. 'hide', CM *follaghey*, the /o/ is etymological, and it is unclear whether Phillips' <all> represents /ol/, or a form equivalent to ScG. *falach*. On the basis of English orthography, however, <all> = /ol/ is perhaps less likely in polysyllables.

doal, pl. doaley; dalley, dallagh, dolley, doalley,	a (3), (<i>dall(agh)ey</i>) a (2), á	/do:l/, /do:lə/, /dalə/, /dalax/, /dolə/, /d□□/	dall, dalla; dalladh	blind
dollan	o	/dolan/	dallán	winnowing-fan
doltey, doltanys	a (3)	/doltə/, /doltanəs/	dalta	ward, adopted child; adoption
doo-oallee		/du: 'oli/	damh allaidh	spider
drunt	au	/drunt/	drannt, dranndal	gums
foaddey	a (6)	/fodə/	(f)adódh, (f)adughadh, ScG. fadadh	kindle, light
foalsey	a (8)	/fo:lsə/	fallsa	false
folder, foldyr; yiarn foldyragh	a	/foldər ^(j) /; /ja:rn foldərax/	ScG. fàladair	mower; scythe
follyd, follick		/foləd/, /folək/	ScG. fallaid	'dry meal put on a cake to bake or clap it out' (Cr.)
goan, goaun		S /go:n/, N /gaun/	gann	scarce
goll-twoaie	a	/gol'tuəj/	gal + tuaith	rainbow
gorley		/go:rlə/	galar	disease
loaghtyn (Bible, Cr.), loghtan (K.)		/loxtən/	ScG. lachdann, Ir. lachna, lacharnach	tawny brown grey
lossey	o (6)	/losə/	lasadh	blaze, flame
lossyr (Ph., PC)	o (3), ó	/losər/	lasair	flame
moal		/mo:l/	mall	slow, poorly, bad
moandagh		/mo:ndax/	manntach	blunt, stammering
moddey	o (3), ða, a (8)	/modə/	madadh	dog
molkey		/molkə/	ScG. malcadh	macerate, rot
mollaght, mollaghey	o (6), a (1), (<i>mollaghtoil</i>) o (2)	/molaxt/	mallacht; mallaghadh	curse
mollee		/moli/	mala, malaidh, malaigh	eyebrow
noal, hoal	á, a	/no:l/, /ho:l/	anall, thall	over (adv.)
oaldey		/o:ldə/	allta	wild
oalsum (Cr.), ousym (K.)		/o:lsəm/, /o:səm/, /aʊsəm/	Norse halsband > *allsam	tie on cattle
oanluckey	a (6)	/o:nləkə/	annlacadh, adhllacadh	bury
oghsan	a (12), á	/oxsan/	ach(mh)asán etc.	rebuke
ollish	a (2)	/oləʃ/	allas	sweat

ollym (Cr.)		/oləm/		alum
olt, oltey	ay (2), a (5)	/olt/, /oltə/	alt	member, organ
oltaghey	a (2)	/oltaxə/	altaghadh	salute, greet
ommidan, ommijagh, ommijys	a (11)	/omədan/	amadán, amaideach, amaideas	fool
ronneeaght		/roni.axt/	rannaigheacht	foolish song
ronney		/ronə/	rannadh	portion, share, division
ronsaghey	a 3	/ronsaxə/	rannsaghadh	search
sollagh, sollaghey, sollaghys	a (9)	/solax/, /solaxə/	salach, salaghadh	dirty
sollan		/solan/	salann	salt
sondagh		/sondax/	sanntach	greedy
Sostyn (Cr.), Sausin, Sacsin (K.), Socsyn (FRC, Trad. Ballad etc.)		/sostən/, /soksən/, /sosən/	Sacsa etc.	England
sporan		/sporan/	sparán, ScG. sporan	purse
stholley		/stolə/	stalla	stall, station (Cr.)
stoandey		/sto:ndə/	ScG. stannd	standish
stronnagh, stronnal		/stronax/, /stronal/	srann	snort
toghtey, toaghtey (K.)	a (2)	/toxtə/	tachtadh	choke

In the following items spellings are variable in the eighteenth- and nineteenth-century texts and dictionaries, suggesting a continuing change in progress. In all of these items the vowel precedes original lenis /l/ or /n/ (possibly /N/ in *Onnee*, cf. ScG. *Anna* /aNə/).

Table 4. a /a/ > /a/, /o/

	CM pronunciation	etymology	English	HLSM
Albin, Nalbin, Nolbin (Cr.), Alpin, alban, olban, alpan, olpan (K.); ⁵⁴ Albinagh (Cr.), Alpinagh (K.)	//(n)albəni/ //(n)olbəni/, /albənax/, /olbənax/	Alba, Albain; Albanach	Scotland; Scottish, Scot	a , ɔ̣ NM, ə, ɔ̣ JK, nø TC nɔ̣ , nɔ̣ ⁱ HB, na JW, na NM, TK, nɔ̣ TK, (adj.) a JW, ɹ JK

⁵⁴ Kelly's spellings with <p> derive from etymological fancy, but the variation between /a/ and /o/ forms is probably genuine.

boannoo, bainniu (Cr.), bannoo (K.)	/banu/, /bonu/, /ban'u/	banbh, bainbh	half-grown pig	
Colloo (Cr.), Calloo (K.)	/kalu/, /kolu/		Calf of Man	ɑ, a TK, ɑ:, ɔ, ɑ NM
maynagh, monnagh, monnaghan (all K.)	/manax/, /monax/, /monaxan/	manach	monk; (<i>monnaghan</i>) 'fat greasy fellow' (K.)	
Olister, Alister (Cr.), Allastar (K.); Callister (surname)	/(k)oləstər/	(Mac) Alastair		ɔ NM, TK
Onnee (Cr.)	/oni/		Ann	
sannish, sonnish (Cr., K.)	/sanəʃ/, /sonəʃ/	sanas, sanais	whisper	
tallagh (Cr., Bible), tollagh (K.)	/talax/, /tolax/	ScG. talach	murmur, grumble, complain	

Further items may belong here, such as *thalloo* 'land', G. *talamh*, found with back realizations of the vowel from most of terminal speakers (ɑ, ɑ TK, a HB, ɑ, a JK, ɑ, ɔ NM, a J:EK, J:CW, ɑ W:NS, *HLSM* II: 446). In such cases we may have an as yet incomplete near-merger /a/ > /o/.

Backing and rounding of /a/ occurs mainly before the velarized sonorants /L, l, N/, the velar fricative /x/ and after labials /b, m, f, p/. In a couple of cases there is possibly influence from semantically and phonetically similar items, i.e. *Socsyn*, *Sostyn*, *Sausin* 'England' (G. *Sacsá*), cf. *Nalbin*, *Nolbin*, *Albin*, *Olbin* 'Scotland' (G. *Alba*), *Loghlyn* 'Norway', (G. *Lochlainn*); *lossey* 'blaze, flame' (G. *lasadh*), *lossyr* 'flame' (G. *lasair*), cf. *lostey* 'burn' (G. *loscadh*). The change is almost categorical before historical intervocalic /L/ and /N/ (see also §§4.6.1.13, 4.6.1.14) but only incipient before /l/ and /n/ which may reflect the fact that the fortis and lenis sonorants were kept separately until at least the Early Manx period. Before coda /L, N/ the development to /o:/ (or /u:/) may be via diphthong /aɥ/ rather than via /a/ > /o/.

2.1.2 *ai* /a/ > /a/, /e/

Elr. *ai* (often > G. orthographic *oi* [Ó Maolalaigh 1997: 156–63; Ó Baoill 2012]) gives Manx /a/ and a raised reflex /e/ in roughly equal proportions. There are also some non-standard spellings which suggest the existence of a further raised reflex /i/ in some lects, such as *mirriu* ‘dead’ (pl.) for usual *merriu*.⁵⁵

2.1.2.1 *ai* /a/ > /a/

Table 5. *ai* /a/ > /a/

	Phillips	CM	etymology	English
aggindagh	a (8)	/aɣʲəndax/	aigeantach	eager, willing
aigney	a (25)	/aɣʲnʲə/	aigne	mind, will
aile	angil (3), ángil, angill (2), angyl, aínill	/āil/	aingeal	fire
ainjys	ay (4), áy, a (2)	/anʲdʒəs/	aitheantas, aithint	acquaintance
ainle	a (11), ái (2), ai, á	/āil/	aingeal	angel
aitt		/atʲ/	ait	funny
annev (§4.4.3)	a (7)	/anə/	aithne	commandment
ard	(pl. <i>ardjyn</i>) a, á	/a:rd/	ScG. aird	area
argid	a (9)	/arʲgʲədʲ/	airgead	silver, money
arkys	a	/arʲkʲəs/	airc	misfortune
arn		/a:rnʲ/	airne	sloe
arrey	a (15), āỹ, ay, á (2), aỹ	/arʲə/	aire	watch
arrish		/arʲəʃ/	aithris	jeering
arrys	a (7)	/arʲəs/	aithreas	repentance
ashlish	a (2)	/aʃlʲəʃ/	aisling	dream, vision
atchim	a (7)	/atʃəm/	eitim, OIr. e(i)tim, aitim ⁵⁶	fear
bainney	a	/banʲə/	bainne	milk
bainniu		/banʲu/	bainbh	young pig

⁵⁵ Noted in MS of 1 Thessalonians.

⁵⁶ Thomson (1953: 153) and Broderick (*HLSM* II: 14) derive this tentatively from an unattested compound of *time* ‘tepidity, warmth, softness, weakness, cowardice, fear’ (Dinneen), ScG. *tioma*, Manx *chymmey* ‘pity’. However, as suggested by Williams (1994: 734), it seems more likely that it is a semantic development of OIr. *etim*, *etaim*, *aitim* ‘spring, leap (?); thrust... chance, opportunity; breach (?)... in Laws applied to a species of pledge’ (*eDIL*) which in later periods may have senses ‘danger, hazard; a hazardous effort; chance, opportunity; a sudden spring’ (Dinneen s.v. *etim*), ‘danger, hazard’ (Dwelly s.v. *eiteam*).

balley	a (8)	/balʲə/	baile	town
bashlagh		/baʃlʲax/	baisleach	douse, splash
bashtey	a (13)	/baʃtʲə/	baisteadh	baptize
blashtyn	a ⁵⁷	/blaʃtʲən/	blaiseadh	taste
caillagh (K.), keyllagh, keyhlagh (Cr.) ⁵⁸		/kaʲlʲax/, ?/keʲlʲax/	cailleach	hag, old woman, nun, dryad (Cr.)
cashtal	a (2)	/kaʃtʲal/	ScG. caisteal	castle
clash		/klaʃ/	clas, clais	furrow
dash	a	/daʃ/	dais	heap
er ash	a (5)	/erʲ ʲaʃ/	ar ais	coming to light, blossoming etc. (cf. Lewin 2016c: 96–7)
fakin, (fut.) vaik, naik, (cond.) vaikagh, naikagh	a (26), á, aî, âi, ai (4)	/fakʲəni/, /vakʲ/, /nakʲ/	faicsin, ScG. faicinn	see
farikiagh	a (8), á (2)	/farʲkʲax/	faircsin	wait
gailley		/galʲə/	gaile	stomach
glashtin		/glaʃtʲəni/	ScG. glaisteag	goblin
madjyn (Ph.)	a	*/madʒən/	maidean	morning
maidjey		/madʒə/	maide	stick
nasht	a (2)	/naʃtʲi/	naiscthe	betrothed
paitt	a (5)	/patʲi/	pait	plague
palchey	a (7), ai	/palʲtʲə/	pailte	plenty
prash	prass (4)	/praʃ/	ScG. prais	brass
saynt	ai (12), ái (3), âi (2), (<i>sayntoil</i>) ai (3)	/sanʲtʲi/	sain(n)t	lust, covetousness
tarrish, tarrishagh (Ph.)	a (4)	/tarʲiʃ(ax)/	tairise	tender
tash (Cr.), taaish (K.)	(<i>tashey</i> ‘compassion’) a (5), (<i>tashlys</i> ‘moistness’) a	/taʃ/	tais; taise; taisleach	damp
tashtey	a (6), á	/taʃtʲə/	taisceadh	treasure

⁵⁷ Only one occurrence of *blastchyn* (=CM *blashtyn*), other forms appear to show *blas-* rather than *blais-*, i.e. *blassyght*, *blasghy*, *blasaghtyn*, although /s/ and /ʃ/ are not always distinguished in the Phillips orthography.

⁵⁸ Cregeen appears to assume a derivation from *keyll* ‘forest’ (G. *caill*, *coill*).

2.1.2.2 *ai /a/ > /e/*Table 6. *ai /a/ > /e/*

	Phillips	CM pronunciation	etymology	English
brellish		/brɛlʲəʃ/	brailis, braichlis	wort
ec; echey; eck	(<i>ec</i>) a (27), (<i>echey</i>) a (5), (<i>eck</i>) e (3), ē (2), æ, a	/ekʲi/; /egʲə/; /ekʲi/	aig; aige; aici	at; at him; at her
eggey		/egʲə/	oige, EIr. aicde, aice	web
eirin(n)agh	ié	/erʲənʲax/	aireamh	farmer
ellag		/elʲag/	faileog	hiccup
ellan	e (2)	/elʲan/, ?/alʲan/	oileán, EIr. ailén, , ScG. eilean	island
elley	e (6)	/elʲə/	eile, EIr. aile	other
ellyn	ellyn, elúyn ⁵⁹	/elʲən/	oileamhain, EIr. ailemain	behaviour
emshyr, emshir	a (5)	/emʃərʲi/	aimsir	weather
enney, enn; ennaghtyn	(<i>enn</i>) e (7), (<i>ennaghtyn</i>) e (3), ea, a (3), æ, iêa	/en ⁽⁰⁾ (ə)/; /en ⁽⁰⁾ axtən/	aithne	recognition; perceive, feel
ennym	e (5), æ (3), æ, é, ey, (<i>enmys</i>) e (9), æ	/enəm/	ainm	name
er	e (9), (3sg.m.) e (3)	/erʲ/	air	on
erree		/erʲi/	airidhe ⁶⁰	fate
errey		/erʲə/	eire, EIr. aire	burden
erroot	(pl.) érynyn	/erʲu/	aireamh	ploughman
gedjey	e, ei (2)	/gedʒə/	oide, EIr. aite	foster father
geid	ey (4), e (2), eỹ	/gedʲi/	goid, EIr. gait	steal
geinnagh	æ, e	/genʲax/	gainmheach	sand
genney, gennid	e (4), eà, ea, æ	/genʲə/, /genʲədʲi/	gainne	scarcity
(er-)gerrey; gerrid	(<i>er-gerrey</i>) e (9), (<i>gerrid</i>) a (2), e (7), æ	/gerʲə/, /gerʲədʲi/	gaire	near; short, soon
gerryim	æ, e (11), é, ey, æy	/gerʲəm/	gairm	crowing

⁵⁹ For the latter form with final stress /e' lju:n/, see §5.1.4.⁶⁰ See O'Rahilly (1927: 13–4).

keiyt, kiyt (Cr. pl.), chett (K. gen.) ⁶¹		/ketʲ/, /kitʲ/	cait	cats, cat (gen.)
kelk		/kelʲkʲ/	caile	chalk
kellagh	e (6)	/kelʲax/	coileach, EIr. caileach	cock
kennip		/kenʲəp/	cainb	hemp
kerraghey	e (13), ey, o (?e), æ (4), é (2)	/kerʲaxə/	coireaghadh, EIr. cair-	punish
kerriu		/kerʲu/	cairbh	carp (pl.)
keyll	ái, é, e (2)	/kelʲ/	coill, EIr. caill	forest, wood
merriu	êi, e (3), ei (3), ě, ěi, æ	/merʲu/	mairbh	dead (noun pl.)
resh		/reʃ/	rais	seed (gen.)
rhennagh	(<i>kellagh rhennee</i>) e (3)	/renʲax/	raithneach	fern
saick, seick		/sekʲ/	saic	sacks
skerin		/skerʲinʲ/	scair	splice, scarf (Cr.)
s'melley, meillid		/s melʲə/, /melʲədi/	is maille	slower, worse; meanness
smerg	a (6), á	/s merʲgi/	is mairg	woe
s'theinney		/s tenʲə/	ScG. as taine	thinner
terriu, teirroo (both Bible)	e (2)	/terʲu/	tairbh	bulls
theinniu		/tenʲu/	ScG. taineamh	thaw
treiney, also Cr. treinney, treinnit	ei	/trenʲə/	tairnge; tairngeadh, ScG. tàirng, tarra(n)g	nail, to nail

Manx agrees with Scottish Gaelic and Ulster Irish in keeping original *ai* /aCʲ/ (often spelled *oi* in Ir. and ScG.) and original EIr. *oi* /oCʲ/ distinct (Ó Maolalaigh 1997: 153–63, 202–9), with the former being generally found as /e/ in Manx in those items where raised forms occur in the other dialects.

Ó Maolalaigh (1997: 202–4) shows that raising of /a/ to /ɛ/ in Scottish Gaelic occurs mostly ‘before palatalised apical consonants’ and ‘most commonly in the vicinity of nasals’ or ‘when the vowel is nasalised’. Raising to /ɛ/ ‘occurs mostly in absolute initial position and is particularly common before the palatalised apical //lʲ//. The development //a// > /ɛ/ is also attested following the velars /g k/ in the prepalatal

⁶¹ **ke:t'**, **kə:it'** TC, **k'et**, **k'et**, EK_h, **kīt**, **kīt** HK (*HLSM* II: 242). These forms and the spelling variants may imply two variants /ketʲ/ and /kitʲ/. Speakers' uncertainty about these forms may be reflected in the development of a regular plural **kaytyn* **keṭən** JW, **k'et:ən** NM; see also the singular (fn. 52).

position, particularly in Arran and Kintyre dialects' (Ó Maolalaigh 1997: 204), while 'the raising of //a// to /ɤ/ (/o/?)' occurs mostly in words of the shape C __ C' where C = /k g/ and C' = /d' l' r'/ (Ó Maolalaigh 1997: 212).

In Irish the development /a/ > /e/ C_Cⁱ occurs in the following environments (Ó Maolalaigh 1997: 152):

(1) # __ C' C' = [+coronal] for most examples, e.g. *air, aige, (aileán), aile, aileamhain, aideachas*

(2) C __ C' C = [-velarised] (i.e. /t d s r/ [...]), C' = [+coronal] mostly e.g. *sair, saidhbhir, traigh* (Connacht dialects especially)

(3) C __ C' mostly C = [+velar] , C' = [+coronal] but also following certain velarised consonants, e.g. *caileach, cair, gairm, gaid, gaile, gairid; traigh, laigh*

It has not previously been noted that C' in almost all words which illustrate the development //a// > /e/ share the features [+coronal] [+voice] and include /l' r' d'/ but apparently not /L' N'/. It is also significant that the development is common throughout Irish dialects in words containing absolute initial //a//.

(Ó Maolalaigh 1997: 152)

The environments in which the change /a/ > /e/ occur appear to be similar in Manx to those where raising is found in Scottish Gaelic and Irish: absolute initial position, preceding slender coronals, especially sonorants /Lⁱ, lⁱ, Nⁱ, nⁱ, rⁱ/, following /g, k/, and in nasal environments. Spellings with <a> in Phillips in *echey* (G. *aige*), *emshyr* (*aimsir*), *s'merg*, (*is mairg*) and *gerrid* (*gairid*) suggest that this development was still in progress in the seventeenth century.⁶² The consistent spelling of G. *a(i)g* 'at' as *ag* in Phillips may represent unraised /aqⁱ/, or possibly maintenance of the historical simple preposition *ag* (OIr. *oc*), which has otherwise been replaced by *aig* (from the 3sg.m.) throughout Gaelic dialects (Williams 1994a: 462), and in Classical Manx (where *ec* shows the same devoicing of final /qⁱ/ found in *aspick* 'bishop', G. *easpaig* etc.).

⁶² Although Thomson (1953: 7) suggests that Phillips' representation of *emshyr* with initial <a> reflects Welsh *amser*.

NM's form **al'an** (*HLSM* II: 145)⁶³ for *ellan* 'island', Lh. **alyn**, and also some [a] spellings and pronunciations in place-names (*PNIM*),⁶⁴ may represent survival of original /a/ in EIr. *ailén*, otherwise universally raised (Ir. *oileán*, ScG. *eilean*), and otherwise with **ɛ**, **ɛ**, **ə**, **e** in Manx terminal speech.

2.1.2.3 *ai* /a/ > /o/

Three cases of rounding of *ai* /a/ to /o/ have been identified (cf. the much more widespread development /a/ > /o/ before broad consonants, §2.1.1.2), all of which may be ascribed to the preceding labial consonant (cf. Ó Maolalaigh 1997: 205–6, 223). In the case of OIr. *Maire* 'Mary', rounding is universal in Gaelic dialects, and *boireann* 'female' is well-established in Scottish Gaelic.

Table 7. *ai* /a/ > /o/

	Phillips	CM pronunciation	etymology	English
bodjal	o (9)	/bodʒal/	ScG. baideal, Eng. battlement	cloud
bwoirryn		/borʲən/	baineann, ScG. boireann	female
Moirrey		/morʲə/	ScG. Moire, Ir. Muire, EIr. Maire	Mary

2.1.3 *ea* /e/ > /e/, /a/, /o/

G. /e/ before broad consonants may retain⁶⁵ its original mid height or be lowered to /a/, sometimes with subsequent backing and rounding to /o/. In a few cases raising to /i/ is found. Some items show variation between reflexes, especially between /a/ and /e/, sometimes reflected in variant spellings. In the following tables, and the calculations based on them, items are categorized according to the most common variant or the variant reflected by the standard spelling.

⁶³ Also **al'an** (JTK), unless this is influenced by the English word.

⁶⁴ *PNIM* I: 175, III: 160, 162, 239, 269–70, 381, 384 (north); VI: 59, 329–30 (south).

⁶⁵ I follow Ó Maolalaigh (1997: 289) in assuming, as the most parsimonious account, retention of original /e/, rather than lowering to /a/ with subsequent raising.

Table 8. *ea /e/ > /e/*

	Phillips	CM pronunciation	etymology	English
beg; beggan	e (14)	/bɛg/, /bɛgan/	beag	small
ben	e (8)	/bɛn/	bean	woman
benn, bentyn bennalt	e (12), ey	/bɛntən/, /bɛnəlt/	bean	touch. belong; flap
bher		/bɛr/	bior, bear	spit
breb; breban	a	/brɛb/; /brɛban/ ⁶⁶	breab, breabán	kick; (<i>breban</i>) dried snot
breck, brack (Cr.), breac (K.) ⁶⁷		/brɛk/, /brak/	breac	speckled; trout, mackerel
creg	e (5), è	/krɛg/	creag	rock
dress		/drɛs/	dreas	bramble, briar
edd	æ	/ɛd/	nead	nest
eddyr, edyr	e (5)	/ɛdər/	eadar	between, whether
edyr	e (4)	/ɛdər/	eadar	at all
fed, feddan		/fɛd(an)/	fead, feadán	pant, whistle
fer	e (59), é, ie (2), y (3)	/fɛr/	fear	man, one
fess, fesst		/fɛʃt/	fearsaid	spindle
freggyrt	a (19), e	/frɛgərt/	freagairt	answer
gennish	e (2), ea	/gʲɛnəʃ/	geanas ⁶⁸	barren, infertile
gien, gennal	a (14), ia	/gʲɛn/	gean	cheer
gleck	e	/glʲɛk/	gleac	wrestle, struggle
greddey		/grɛdə/	gread	grill, roast, toast
guess		/gʲɛs/	geas	spell, charm
kerroo	æy, æ	/kʲɛru/	ceathramha	quarter
kiebbey		/kʲɛbə/	ScG. ceaba	spade
kied	a	/kʲɛd/	cead	permission
lieckan	ie	/lʲɛkan/	EIr. leccan, lecond	cheek
lhieggey; lhieggal	ie, ia	/lʲɛgə/; /lʲɛgal/	leag	fall; fell, overthrow
meddyr, mheddyr		/mɛdər/	meadar	pail, wooden vessel
mennee		/mɛni/	meana(i)dh	awl
mess	ea (8), éa	/mɛs/	meas	fruit
smessey	a (5)	/smɛsə/	is measa	worse, worst
mestey, mastey	a (2), á	/mɛstə/, /mastə/	meascadh	mix, churn

⁶⁶ ɛ HK, a NM (*breban*).⁶⁷ Bible mostly *breck*, one instance of *brack*.⁶⁸ See fn. 85.

mettey, meddey (K.)		/metə/	meata	tender, delicate, soft, cowardly
sniessey	a (2)	/sn̩'esə/	is neasa	nearer, nearest
pecca	e (25), é	/pekə/	peacadh	sin
preban (K.)		/preban/	preabán	patch of land, cloth
prest		/prest/	preas	cupboard
screb		/skreb/	screab	scab
scred		/skred/	scread	gasp
shelg, sheilg ⁶⁹	e (2), á	/ʃelg/	sealg	hunt
shelg (K.), chiolg (Cr.)		/ʃelg/, /ʃolg/	sealg	milt; stomach, guts
shelloo	e (7)	/ʃelʊ/	sealbh	herd
shen	e (4), a (13), é, ey, ia (5), iæ, æ	S /ʃen/, N /ʃan/ (HLSM II: 398)	sean	old
snieng (fn. 82)		/sn̩'eŋ/	sneadh	nit
sniengan (fn. 82)		/sn̩'eŋan/	seangán	ant
streng		/stren/	sreang	string
strepey, strebin (Cr.)		/strepə/	ScG. streap, Ir. dreap	struggle, wrestle

Table 9. *ea /e/ > /a/*

	Phillips	CM pronunciation	etymology	English
aggle	a (22)	/agəl/	eagal	fear
agglish	a (9), á (2), æa, ea, e (4)	/aglɛʃ/	eaglais	church
agh		/ax/	each	horse
arragh		/arax/	earrach	spring
asbyrt	a (2)	/aspərt/	easpart(a)	vespers, evening prayer
askaid		/askədi/	neascóid	boil
asney		/asnə/	easna, also E.Ir. asna	rib
aspick	a, yn ia (2)	/aspəki/	easpag	bishop
assag		/asaɡ/	easóg	weasel
assee	a	/asi/	easbhaidh	harm
astan		/astan/	eascann	eel
astyrt		/astərt/	eascairt	uproot
ayrn	ay (3), áy (2), a (4), á, æa	/a:rn/	earrann	part

⁶⁹ The spelling *sheilg* (Bible and Cregeen) may indicate G. *seilg*.

baght		/baxt/	beacht	observation, discernment
bangan		/baŋan/	beangán	branch
bannaght; bannaghey, bannee	a (26)	/banaxt/; /banaxə/, /bani/	beannacht, beannaghadh, beannaighthe	blessing, bless, blessed
brackey (Cr.)		/brakə/	breacadh	sharpen
braghtan		/braxtan/	breachtán	bread with butter etc.
chagh		/tʃax/	teach	hiding place
chaghter; chagheraght	ia (2), a, iá	/tʃaxtəri/; /tʃaxtəriːaxt/	teachtaire; teachtaireacht	messenger; message
chaglym	a (12), ia (7)	/tʃagləm/	teaglaim	gather
chiamble	ia (6), a	/tʃambəl/	teampall	temple
chiarrey		/tʃarə/	tearadh, turadh	dry spell
chiass; chiassaghey	a (5)	/tʃas/; /tʃasaxə/	teas	heat; fever
cliaghtey	a (6), á (2), ia	/kliːaxtə/	cleachtadh	custom
cliass (Cr.)		/kliːas/	cleas	'the same fate' (Cr.)
cragh	éa, e, a (3), á, æ	/krax/	creach	spoils, prey
drappal		/drapal/	dreap	climb
fam; famlagh, famyragh		/fam/; /famlax/, /famərax/	feam; feamnach	stem of seaweed; seaweed
fannag		/fanag/	feannóg	crow
fanney		/fanə/	feannadh	flay
farbaghey		/farbaxə/	fearb	inflamm
farbyl		/farbəl/	earball	tail
farg (Bible, K., Cr.), ferg (Cr.)	ay (2), a, (fargoil) e, a	/farg/, /ferg/	fearg	anger
farney		/farnə/	fearn	black alder
farrys-thie		/,farəs'tai/	fearas tigh	housekeeping
fastyr	a (5), (len.) ia, iâ	/fastər/	feascar	evening, afternoon
gial	a	/gʲal/	geal	bright
giare, (pl.) giarrey; giar(r)ey	(giare) ia (3), (viare) iar, (giarraghey) ia, (giarey) (v.) iá (2), ia (2), a, á, ay, iâ, (pret viare) gáre, jarr, iár (n.) ia, a (6), (participle) a (3), á	/gʲe:r/, /gʲarə/; /gʲe:rə/, /gʲarə/	gearr; gearradh	short; cut
giarran		/gʲaran/	gearrán	worthless horse
giastyllagh	a (7), (len.) ia	/gʲastəlax/	geastal	charitable; charity

giat	ia (4), a	/gʲat/	geata	gate
hannah	a (4)	/hanə/	cheana	already
hiar, har, shiar, niar	ia (6), a, ià, iǎ	/h(j)ar/, /ʃar/, /nʲar/	ear	east
jagh	ea, a (5)	/dʒax/	deach-	went
jaghee	ia	/dʒaxi/	deachmha	tithe
jaghin (Cr.), joghan (K)		?/dʒaxən/	EIr. dechon (<i>later</i> deoch-)	deacon
jalloo	a (11) ⁷¹ , iǎ	/dʒalu/	dealbh	picture
jarg		/dʒarg/	dearg	be able
jarroo	a (16), ia (4), ía, iâ, <i>but</i> jeru 'affirm, certify, prove' ⁷²	/dʒaru/	dearbh	very, indeed, even
jasdil, jasdyl		/dʒastəlʲ/	deasgabháil	Ascension
jastan		/dʒastan/	deascán	'a course or row of ling or heather laid on the ground from the hand of the puller' (Cr.)
jastee		/dʒasti/	deasca(idh)	yeast
jjalg, jolg	a	/dʒalg/, /dʒolg/	dealg	thorn, knitting needle
jiarg	a (5), á, ia	/dʒarg/	dearg	red
jiass, yiass, ass	a (3)	/dʒas/, /jas/, /as/	deas	south
kialg	a (4), á, (<i>kialgoil</i>) a	/kʲalg/	cealg	deceit
kialter		/kʲaltər/	cealtair, -ar	unmilled woollen cloth
kiangley	ia (3), a (8), á	/kʲaŋlə/, /kʲö:lə/	ceangladh	tie, connect
kiap		/kʲap/	ceap	block
kiare		/kʲe:r/	cearr	left
kiark	ia	/kʲark/	cearc	hen
kiarkyl		/kʲarkəl/	ScG. cearcall	circle
kiarroo	ia, a (3)	/kʲaru/	ceathramhadh	fourth
kiart	ay (2), iâ, ia (6)	/kʲart/	ceart	right, correct
lhiabbee	ia (3), a, iǎ	/lʲabi/	leaba(idh)	bed
lhiaght		/lʲaxt/	leacht	tomb, couch
lhiannan		/lʲanan/	leannán	lover

⁷¹ Instances of *jallunyn*, *jallúnyn* probably = *jalloonyn* /dʒa'lu:nən/ 'idols' (G. *dealbhán*).

⁷² Further *ta jeru aymys* 'I am certified', *ry-ieru* 'instantly', *ry ieru* 'earnestly', *ry ieru* 'seriously', *rǎ ieru* 'earnest'. If *jeru* does not simply represent *dearbh(adh)* with /e/ rather than /a/, with the phonological distinction perhaps serving to distinguish the functions (cf. *mastey* 'among' and *mestey* 'mix'), we may have a by-form **deirbh(eadh)* or abstract noun *deirbhe*. *Ry-ieru* etc. could perhaps be linked with G. *dáiríre* etc. (cf. eDIL s.v. *darírib*).

lhiannoo	ia (10), iá (3)	/li̯anu/	leanbh	child
lhiantyn	ia (6), iá, ie (2), iæ	/li̯antən/	lean	cleave, adhere, stick
lhiargagh		/li̯argax/	leargach	slope
s'lhias; lhiasaghey	ia (2), îâ	/li̯ias/, /li̯iasaxə/	leas(aghadh)	need; atone, improve
lhiaastyn	ia (3), a (2)	/li̯astən/	dleastanas	owe, debt
lhiattee	ia (2), iea	/li̯ati/	leataobh	side
mannan		/manan/	meannán	kid, young goat
marran		/maran/	ScG. mearan ⁷³	mistake, mistaken
mastey	a (26)	/mastə/	i measc	among
niart	iá (2), ía (3), ia (5), (<i>gniartoil</i> etc.) (47) ⁷⁴	/ni̯art/	neart	might, strength
pannys (Cr.), pennys (K.)	pena̯ys, peynans ⁷⁵	/panəs/, /penəs/	peanas	penance
raght		/raxt/	reacht	stubbornness
rastagh		/rastax/	ScG. reasgach	blustery; hoarse
shaghey	a (15), ia	/ʃaxə/	seachad	past
shaghney	a (6)	/ʃaxnə/	seachnadh	avoid, spare
(er-)shaghryn	a (7), iâ	/ʃax(ə)rən/	seachrán	astray
shallid	a	/ʃaləd/	sealad	moment
shang		/ʃaŋ/	seang	lank, lean
shanstyr	ia (4)	/ʃanstər/	cf. sinnsear	elder, elders
share	áy (4), ay (3), niarr, ây	/ʃe:r/	is fearr	better, best
sharragh	a	/ʃarax/	searrach	foal
sharroo	ia (3)	/ʃaru/	searbh	bitter
shassoo	a (21)	/ʃasu/	seasamh	stand
shaslagh		/ʃaslax/	seasclach	bentgrass
shayll (Bible, Cr, K.), shall (K.)	(<i>shaliygh</i>) a	/ʃal/	seal, sealaigheacht	turn; (<i>shaliygh</i>) reason (Ph.)
shiaght	ay, ia (5), a (3)	/ʃaxt/	seacht	seven
shiaghtin	ia, a (4)	/ʃaxtənʲ/	seachtmhain	week
shiaast	a	/ʃast/	seasc	dry, barren
smarrey		/smarə/	smearadh	grease
sniaghtey	a	/snʲaxtə/	sneachta	snow

⁷³ Cf. Thomson 1998: 132; Ó Maolalaigh 2014a.

⁷⁴ Forms of *ooilley-niartal* ‘almighty’ not given in full by Thomson (1953).

⁷⁵ This may represent a late borrowing of English *penance*, or remodelling under its influence, rather than retention of G. *peanas*.

stiagh	ia (10), ía, ya	/stʰax/	isteach	in
trass, tress (Cr.)	é, e (9)	/tras/, /tres/	treas	third
vaght (K., PC)		/vaxt/	i bhfeacht	ever
yiarragh	ia	/jarax/	dear-	would say

Table 10. ea /e/ > /o/

	Phillips	CM pronunciation	etymology	English
Boaldyn		/bo:ldən/	Beal(1)taine	May Day
chiollagh		/tʃolax/	teallach	hearth
chionn; chionney	ia (6), ià, ìã, a (4), ay	/tʃon/, /tʃonə/	teann(adh)	tight; press
foall (K., PC)		/fo:l/	feall	deceit
gioal; giall, gialdyn	ia (7), a (12), á; (<i>yiall</i>) iall (2), iáll, jall	/gʲiɔ̃/, /gʲiɔ̃d̪ə/	geall	pledge; promise
glione	(pl.) glantínyn	/glio:n/	gleann	valley
joan	a (2), à	/dʒo:n/	deann	dust
jollys		/dʒoləs/	dealas	greed
kione	ia (12)	/kio:n/	ceann	head
kionnaghey	ia (10), a (6)	/kionaxə/	ceannacht	buy
lhionney		/lʲonə/	leanna	beer (gen.)
molg, mylg		/molg/, /milg/	mealg	milt
mollag	a	/molag/	meallóg, ScG. mealag	buoy; satchel (K.)
molley	a	/molə/	meala	honey (gen.)
molley	a (5), à, o, áy, á	/molə/	mealladh	deceive
mongey		/moŋə/	meangadh	smile; shear
lhuss-ny- moal-moirrey (B.), lus ny moyl Moirrey (Cr.), luss-ny- moal-moirree (K.) ⁷⁶		/lus nə mo:l morʲə/	ScG. lus nam meall móra	mallows
ollagh	a (5), nan ialagh	/olax/	eallach	cattle
ollaghan		/oləxan/	(e)alchaing, ScG. ealachainn	treadle of spade
ollay		/olə/	eala	swan
polley; pollan		/polə/	pealladh; peallán	mat, stick together; saddle-cloth

⁷⁶ Apparently with reanalysis / folk etymology involving *Moirrey* ‘Mary’ (G. *Moire*).

shoggyl		/ʃogəl/ ⁷⁷	seagal, ScG. var. seogal, Ir. var. siogal	rye
spollag		/spolag/	spealóg	chip

2.1.3.1 Analysis

Ó Maolalaigh (1997: 277–89) investigates the development *ea* > /a/ in terms of following consonantal environment in Scottish dialects. Although his study looks at the prevalence of the development across dialects, rather than within the lexicon of a single variety, similar results obtain for Manx. Excluding /m/, for which there was only one token, the development to /a, o/ (and subsequent developments)⁷⁸ occurred in 100% of items where the vowel is followed by the sonorants /L/, /N/, /R/ and the fricative /x/ — all (historically) velarized or velar consonants. The percentage of items exhibiting this development was also above 80% preceding the alveolar sonorants /r/ and /l/ (Table 11). There was also a very high percentage (77.4%) for /e/ > /a/ preceding the sibilant /s/, but, as argued below, this may reflect the fact that a large proportion of these items are vowel-initial. For the other consonants the picture is more mixed and there is no obvious pattern, and for /b/, /k/, /t/, /p/ and /m/ there are 5 or fewer items.

According to Ó Maolalaigh (1997: 283), the reflex /a/ is most prevalent in Scottish dialects in the environments __ /N, l, x, L, R, rt/, ‘thus implying that the most conducive environment for the lowering of original //e// to /a/ in ScG has been before velarised consonants and the velar fricative /x/’ (Ó Maolalaigh 1997: 283). In view of the results in Table 11, this would appear to be also the case in Manx.

Table 11. Incidence of *ea* /e/ > /e/ and /e/ > /a/, /o/ in the lexicon by following consonant

	e	a, o	total	% e	% a, o
L	0	8	8	0.0%	100.0%
m	0	2	2	0.0%	100.0%
N	0	11	11	0.0%	100.0%
R	0	8	8	0.0%	100.0%
x	0	20	20	0.0%	100.0%
r	4	19	23	17.4%	82.6%

⁷⁷ Also /u/ in some place-names with spellings *shuggle*, *shugil* etc. (e.g. *PNIM* II: 180, III: 38, 235).

⁷⁸ Including further developments to /o/, /o:/, /au/ before /L, N/ (§§4.6.1.9, 4.6.1.13) and to /ε:/ before /R/ (§4.6.1.10).

l	3	14	17	17.6%	82.4%
s	7	24	31	22.6%	77.4%
p	1	2	3	33.3%	66.7%
t	1	2	3	33.3%	66.7%
ŋ	3	4	7	42.9%	57.1%
g	4	4	8	50.0%	50.0%
n	7	5	12	58.3%	41.7%
k	3	1	4	75.0%	25.0%
b	4	1	5	80.0%	20.0%
d	8	0	8	100.0%	0.0%

In certain Ulster dialects *ea* may be realized as /e/ (Ó Baoill 1978: 303–5; Ó Dochartaigh 1987: 75–82; Ó Maolalaigh 1997: 244–5) before /g, d, s, h/. Ó Dochartaigh suggests this gives a clue as to the conditioning factors of the lowering /e/ > /a/ which is the rule in other Irish dialects:

One may presume that the historical change of /e/ to /a/ has come about through the increasing prominence of what must have been an *a*-like on-glide to the following neutral consonant. We might reasonably expect this glide to be most prominent in those circumstances where a sonorant consonant follows, that is consonants such as /l n r/ where the secondary articulation is of considerable auditory prominence and hence more capable of influencing the preceding vocalic element. This means that in the case of /d/ and /s/, these segments, with their fairly neutral secondary articulation, have preserved the low-mid front articulation of the vowel where it has been modified in the more sonorant environments.

(Ó Dochartaigh 1987: 77)

This is a reasonable hypothesis and would agree with the Manx data, where the sonorants /L l N R r/ have been noted as especially favouring lowering of preceding /e/ to /a/, /o/, and /d/ and /g/ especially are among the following consonants favouring /e/. Although not a sonorant, /x/ likely also had a prominent on-glide, or rather formant transition, as seen also in diphthongization of /i:/ in *keeagh* /kʲiəx/ ‘breast’ (G. *cíoch*) and preservation of original diphthongs *ia*, *ua* before /x/ (§2.2.6).

Ó Maolalaigh and Ó Dochartaigh do not examine preceding consonant (cf. Ó Dochartaigh 1987: 80), but for Manx at least this seems also to be relevant (Table 12).

Table 12. Incidence of *ea* /e/ > /e/ and > /a/, /o/ in the lexicon by preceding consonant

	e	a, o	total	% e	% a, o
dʒ	0	13	13	0.0%	100.0%
h	0	2	2	0.0%	100.0%
R	0	2	2	0.0%	100.0%
tʃ	0	9	9	0.0%	100.0%
v	0	1	1	0.0%	100.0%
f	2	11	13	15.4%	84.6%
<i>vowel</i>	3	16	19	15.8%	84.2%
L^j	2	10	12	16.7%	83.3%
ʃ	4	15	19	21.1%	78.9%
k^j	3	11	14	21.4%	78.6%
g^j	2	6	8	25.0%	75.0%
lⁱ	1	3	4	25.0%	75.0%
p	1	3	4	25.0%	75.0%
m	6	10	16	37.5%	62.5%
b	5	4	9	55.6%	44.4%
Nⁱ	3	2	5	60.0%	40.0%
r	12	5	17	70.6%	29.4%

There is less of an obvious pattern when it comes to conditioning by preceding consonant. If categories with 5 or fewer items are excluded the following hierarchical ordering is in evidence for incidence of *ea* > /a, o/ by preceding consonant:

- 100% dʒ, tʃ
- >80% f, vowel, L^j
- >70% k^j, g^j, ʃ
- >60% m
- >40% b
- >20% r

Most of the consonants in the top three percentage bands are palatalized or palatal. The consonants /m/, /b/ and /r/ (as well as /f/) are assumed to be non-palatalized in Manx⁸⁰ It may be that the development /e/ to /a/ after /dʒ, tʃ, L^j, k^j, g^j, ʃ/ represents dissimilation

⁸⁰ I.e. there is no palatalization contrast in labials (Jackson: 66) and /r/ was not palatalized in initial clusters (§4.2.1.2).

between the palatal quality of the consonant and the height and backness of the following vowel, which can be explained as hypercorrection (e.g. Ohala 1981; 1993).

The apparently anomalous position of initial vowels and /f/ can be explained by the presence of /Nⁱ/ in the proclitic definite article (e.g. *ayns yn arragh* ‘in the spring’,⁸¹ *ayns yn astyr* ‘in the evening’, cf. ScG. *anns an earrach*, *anns an fheasgar*). The majority of items with preceding /Nⁱ/ as part of the same morpheme (*snieng*, *sniengan*, *sniessey*) have /e/ (although *sniessey* has /a/ variants in Phillips and in Late Manx speech, *HLSM* II: 332), as against two (*niart*, *sniaghtey*) with /a/.⁸² This is too small a sample to come to any conclusions about /Nⁱ/ . It is likely, however, that all things being equal /Nⁱ/ would favour lowering to /a/ as with other palatal(ized) consonants. It is perhaps significant that of the three items which have initial /e/ rather than /a/, two of them are the preposition *eddyr* ‘between’ (Ir. *idir*, ScG. *eadar*) and the adverb *edyr* ‘at all’ (ScG. *idir*, OIr. *etir*),⁸³ which of course cannot be preceded by the article. The third item is the noun *edd* ‘nest’ (G. *neadh*), which has misdivision of the initial /Nⁱ/ . The /e/ quality here may be due to the final /d/, which is the only following consonant which categorically conditions /e/ (in eight items). In addition, as far as preceding /f/ is concerned, 9 out of 11 of the items have a following consonant which is one of those which strongly favour /a/ (/L N R r/).

Table 13 shows the combined effect of preceding consonant (slender or broad, with vowel and /f/ included under slender in accordance with the conclusions of the preceding paragraph) and following consonant (belonging to the set /L I N R r x/ or not). As can be seen, the combination of slender preceding consonant and following /L I N R r x/ strongly favours /a, o/, with almost 90% of items in this category showing this development. The only category with a majority of /e/ reflexes (74.2%) consists of those items in which both the preceding and following consonant favour

⁸¹ The palatalized /nⁱ/ is sometimes shown orthographically by prefixed *ni-* in e.g. *yn niarragh* (Exodus 34:21).

⁸² The development of *snieng* (G. *sníodh*, *sneadh*) and *sniengan* (G. *seangán*) is irregular and the two items seem to have influenced one another. The highly nasal environment (nasal consonants on either side of the vowel) may furthermore have served to maintain (or restore) the mid height – compare raising of *ea* /e/ to /i/ below. *Niart* and *sniaghtey* both have following consonants /r/ and /x/ which categorically favour lowering to /a/.

⁸³ Originally the preposition ‘between’ with 3sg. neuter pronoun (*eDIL* s.v. *etir*).

retention of /e/. For the two other combinations /a, o/ is favoured in 85.7% and 76.6% of items respectively, although in the category /b, h, m, p, R, r, v/_/L l N R r x/ there are only seven items. We may tentatively conclude that the conditioning factors for the development /e/ > /a, o/ are stronger than those conditioning retention of /e/. Moreover, several of the conditioning factors for /a, o/ appear to be categorical (/L, l, N, R, r, x/_/, _/tʃ, dʒ/, and #_ with the exception of *eddyr, edyr, edd*), whereas none of the conditioning environments for /e/ have /e/ in 100% of cases, except _/d/ (eight items, one of which, *kied*, G. *cead*, has <a> in Phillips).

Table 13. Combined conditioning effect of preceding and following consonant on G. *ea* /e/ in Manx

preceding consonant		following consonant				
		L l N R r x			b, d, g, k, m, n, ŋ, p, s, t	
dʒ, f, gʲ, j, kʲ, Lʲ, lʲ, Nʲ, tʃ, ʃ, vowel	a, o	56	88.9%	a, o	36	76.6%
	e	7	11.1%	e	11	23.4%
	total	63			47	
b, h, m, p, R, r, v	a, o	6	85.7%	a, o	8	25.8%
	e	1	14.3%	e	23	74.2%
	total	7			31	

That the development *ea* /e/ > /a/ is of considerable antiquity, at least in some environments, is shown by the development *-earr* /eR:/ > /aR:/ > /a:r/ > /ε:r/, where the development to /a/ must precede the lengthening before /R/ which is found in all modern Gaelic dialects (O’Rahilly: 50), as well as the Manx development /a:/ > /ε:/ (§4.6.1). Orthographic evidence in the form of the appearance of the spelling <ea> in Gaelic, as well as evidence from Anglo-Norman spellings of Irish names, suggest that this development goes back to the thirteenth century or earlier (McManus 1994: 346–7; McCone 1996: 141).

2.1.3.2 *ea* /e/ > /o/

All cases of rounding *ea* /e/ > /a/ > /o/ (or /o:/, /au/) occur before /L, N, l/, apart from *shoggyl* (G. *seagal*), for which the velar /g/ may offer a tentative explanation. Before /L/ rounding is categorical even when /L/ is medial, e.g. *chiollagh* ‘hearth’ (G. *teallach*), *Boaldyn* ‘May’ (G. *Beal(l)taine*), whereas with /N/ it is categorical only in

monosyllables, e.g. *chionn* ‘tight, fast’ (G. *teann*), *kione* ‘head, end’ (G. *kione*), but *bannaght* ‘blessing’ (G. *beannacht*). In Phillips all these items have spellings indicating /a/, apart from one instance of *molley* ‘deceive’ (G. *mealladh*) with <o>. The development of rounding (and lengthening or diphthongization §4.6.1) is therefore a relatively recent development compared with the development /e/ > /a/, which was already the predominant reflex of G. *ea* in Phillips. It is assumed that forms in /o/ developed via /a/, and where there are by-forms, variation is between /a/ and /o/,⁸⁴ except in a handful of cases (see *shelg*, *chiolg*; *mylg*, *molg*; *mingey*, *mongey* above and §2.1.3.3).

2.1.3.3 *ea* /e/ > /i/

A small number of items have /i/ from *ea*, mostly adjacent to a nasal consonant. This nasal conditioning is also found in Irish and Scottish dialects (Ó Maolalaigh 1997: 249, 290). The vocalism of *shyrgaghey* ‘wither’ (G. *seargaghadh*) may reflect the influence of inflected forms of the noun and adjective *searg* (unattested in Manx).⁸⁵

Table 14. *ea* /e/ > /i/

	Phillips	CM pronunciation	etymology	English
ingagh		/iŋax/	eangach	train of nets
mingey; myngyraght (Cr.), mingyraght (K.)	i (2)	/miŋə/	meangadh	pinch; purloin
myghin	y (13), ý (2)	/mixən/	ScG. meachainn, Ir. miochaire	mercy
mylg, molg		/milg/, /molg/	mealg	milt
shyrgaghey, shirkaghey (Cr.), shyrg (adj.) (K.)		/ʃiŋgaxə/	seargaghadh	wither

⁸⁴ Cf. Ó Maolalaigh’s (1997: 291–2) discussion of the similar developments /e/ > /a/ > /o, ə/ in certain eastern Scottish dialects.

⁸⁵ I.e. from a fossilized dative *i siorg* (*hi seurc*, *i siurc*, *eDIL* s.v. 1 *serg*) (or *i seirg*, *i sirg* if feminine as in Dinneen) or from genitive *sirg* as in Cf. *fear sirg* ‘consumptive’ (Ó Dónaill s.v. *searg*), *ben sirg*, *fer siric* etc. (*eDIL*). The *eDIL* entry includes an apparent example of reanalysis of *sirg* as an attributive adjective or noun, *dia rob dall na bodar . . . no sirg* (Trinity College Dublin MS 1336, 658c). A similar reanalysis of a genitive probably explains the Manx adjective *gennish* ‘barren, childless’ < *bean gheanais* ‘woman of chastity’. The simple form *shyrg* is only attested in Kelly (as an adjective).

2.1.3.4 Lexical diffusion

As noted above, a number of items show variation between /e/ and /a, o/, especially in Early Manx. In some cases Phillips' spellings are at variance with later evidence, or there is spelling variation in the dictionaries and Classical Manx texts, or variation is securely attested in spoken data (including at least one clear dialect isogloss in *shenn* 'old'). Most of the items showing variation in the later language (*breb* 'kick', G. *breab*; *breck* 'speckled; trout', G. *breac*; *mestey* 'mix', G. *meascadh*; *trass* 'third', G. *treas*) belong to the set of items with two conditioning factors for /e/, and except in the case of *trass*, <e> is the standard or most frequent spelling. The fact that these items have variants with /a/ is further evidence that the development to /a/ is the dominant reflex of G. *ea*, and that there has been ongoing lexical diffusion in this direction, even in the environments most resistant to the development.

The occurrence of forms in Phillips apparently showing /e/ after /Lj/, and in the case of the initial vowel in *agglish* 'church' (G. *eaglais*), may show that the change was not as well established in these environments at this period, while *freggyrt* 'answer' (G. *freagairt*), *gien* 'cheer' (G. *gean*) and *kied* 'permission' (G. *cead*) with /a/ show more progressive forms not found in the later standard language (cf. *ooashley*, §3.4.6).

2.1.3.5 Semantic splits between /e/ and /a/ variants

In a few cases the different reflexes of G. *ea* in the same or related etymological items have developed differing meanings,⁸⁶ e.g. *mastey*, *maskey* 'among' (G. *i measc*), but *mestey* 'mix' (G. *meascadh*). *Mastey* is also found in Cregeen and the Bible (Proverbs 27:22) for the verb, apparently with the specialized meaning of 'churn' (perhaps influenced by G. *maistreadh*, although this is unattested in Manx). Cregeen apparently attests to a split between *breck* 'speckled' and *brack* 'trout' (G. *breac*). *Kerroo* 'quarter' has /e/ but *kiarroo* 'fourth' has /a/ (both G. *ceathramhadh*). It is likely that both *mingey* 'pinch' and *mongey* 'smirk' are reflexes of G. *meangadh*. If Ph. *jeru*

⁸⁶ For this phenomenon, cf. Dillon (1953).

represents *dearbhadh* ‘confirm’ (§2.1.3, fn. 72), this would be a split with *jarroo* ‘very, indeed’, G. *dearbh*. Such semantic splits are consistent with lexical diffusion.

2.1.4 *ei* /e/ > /e/, (/i/)

This is mainly retained as /e/, including notably in certain items where raising to /i/ is widespread in Irish and Scottish dialects (Ó Maolalaigh 1997: 249–52, 292–3), such as:

mec ‘sons’, OIr. *maicc*, G. *meic*, Ir., ScG. *mic*
mennick ‘often’, G. *meinic* Ir. *minic*, ScG. *minig*
meshtey ‘drunkenness’, G. *meisce*, Ir. *meisce*, *misce*, ScG. *misg* (raising to /i/
 apart from in Munster [Ó Maolalaigh 1997: 249])
gennee ‘germ’, *gientyn* ‘conceive’, G. *gein*, Ir, ScG. *gin*

For Manx *meinn* ‘meal’, Early Irish already shows variation between *men* and *min* (apparently under the influence of *mi(o)n* ‘small’, *eDIL* s.v. *men*, *min*), with the latter becoming the general Irish and Scottish Gaelic form.

Cregeen’s form *merre* in *merre-cheilley* ‘s. f. deadness of wit or sense’ may represent an abstract form **meire* rather than usual G. *mire* ‘madness’ (abstract noun from adj. *meir*), although this could also be G. *meirbhe* ‘dullness, weakness, folly’ or *mairbhe* ‘deadness’.⁸⁷

Manx has /i/ for usual G. *ei* /e/ in *jir* ‘will say’, Ph. *jirr* (Ir. *deir*); forms with *-dir-* are sometimes found in Early Modern Irish, confirmed by rhyme (*eDIL* s.v. *as-beir*; Bergin 1946: 175–6). *Bink* ‘bench’ may represent Eng. dialectal *bink* (*EDD*), rather than being a raising of the ScG. form *being*. The spelling *chingey-jee* ‘ringworm’ (Cregeen; *chenney-jee* Kelly) (Ir. *t(e)ine dhia(dh)*, ScG. *teine-dé*) may represent raising as in Ir. *tine* (from *teine* ‘fire’), or is perhaps a result of the destressed position. The vowel /e/ is maintained in other derivatives of *teine*, such as *chen(n)ey taarnee* ‘lightning flash’ (*PC* l. 456; Kelly s.v. *chenney*, *tienney*) (G. *teine toirnighe*), *chentyn*

⁸⁷ It is unclear whether the final <e> is an exceptional representation of /ə/, or whether we have a form /merⁱ/ with apocope.

‘flash(es)’ (Ezekiel 1:14; Cregeen s.v. *chent*), *cheinjean* ‘bonfire’ (Cregeen) (G. *teinteán*).

2.1.5 *o* /o/ > /o/, /a/, (/u/)

G. *o* most commonly gives Manx /o/, but there is also lowering to /a/ in many items, as also found especially in Scottish and northern Irish dialects (Ó Maolalaigh 1997: 329).

Table 15. *o* /o/ > /o/

	Phillips	CM pronunciation	etymology	English
boayrd	oy (3), óy, oÿ, oa, o (2)	/bo:rd/	bord	table, board
boyn	öy	/bo:n/	bonn	heel
coayr		/ko:r/	corr	odd
coayr		/ko:r/	corr	heron, bittern, crane
coggyl		/kogəl/	cogal	tares
coghal (Cr.), coghyl (K.)		/koxəl/	cochall	caul
colbagh		/kolbax/	colpach	heifer
colbey		/kolbə/	colpa, calpa	calf, body, trunk
couyl (Bible), coll, cohll (Cr.), coull (K.)		/ko:l/, /kaʊl/	coll	hazel
collagh	o	/kolax/	collach	stallion, boar
commee		/komi/	comaidh	common participation
connagh-ny- giark		/ˌkonax nə ˈgʲark/	conach	henbane
conney		/konə/	connadh	gorse as fuel
cor (er chor erbee)		/erˠ ˌxor erˠ biː/	cor	at all
corkey		/korkə/	corca, coirce	oats
corp		/korp/	corp	body
corrag		/korag/	ScG. corrag	crook of hand, forefinger
corragh		/korax/	corrach	tottering; capricious
corran		/koran/	corrán	sickle
corree	o (9)	/kori/	corraighe	anger, angry
correy; correyder	kurryder	/korə/	cortha	sowing (gen.); sower
cosney	o (7), u	/kosnə/	cosnadh	win, earn
cost, costal	o	/kost/		cost

crockan	o (3), a, á	/krokən/	croacán	crock, pitcher
croghey	o (4)	/kroxə/	crochadh	hang
cron		/kron/	cron	scar, stain
cronnaghey	a, o	/kronaxə/	cro(th)naghadh	discern, perceive
cronk, crongan	o (4)	/kronk/	cnoc	hill
cront		/kront/	Eng.	knot
crossan		/krosən/	crośán	coral
crossey	o (14)	/krosə/	crośadh	crucify
crottag		/krotəg/	ScG. crotag	curlew
croym; croymmey	(<i>croymmey</i>) o (3), ou, ú, óy, u, oy	/kro:m/, /kromə/	crom; cromadh	stooped; stoop
doyn (Bible), dhoan, dhone (both Cr.)		/do:n/	donn	brown
doarn	o (4), o	/do:rn/	dorn	fist
dobberan	o (4)	/dobəran/	dobrón	grief, mourning
doccar	o (9)	/dokər ⁱ /	docair, dochar ⁸⁸	stress of labour
dolley (Bible, Cr.), d(h)ulley (Cr., K.)		/dolə/	dolaidh	lack
donney		/donə/	dona	poor, mean, foolish
dorraghey	o (11)	/dorəxə/	dorcha	dark
dorrays	o (4)	/dorəs/	doras	door
doss		/dos/	dos	bunch, cluster
drogh	o (12)	/drox/	droch	bad
droghad		/droxəd/	drocha(i)d, droichead	bridge
drolloo		/drolu/	drolamh	pot hooks
drommey		/dromə/	droma	back (gen.)
droun, drone, droyn (Cr.); dronnagh		/dro:□/; /dr□ax/	dronn; dronnach	hump; humped
fockle	o (11), ô	/fokəl/	focal	word
foddey; foddeeght	o (8), a (2), ay, (<i>foddeeght</i>) a (2), o (4)	/fodə/	fada, EIr. fota	far, long; longing
follaghey; folliaght	a (23)	/folaxə/; /foli.axt/	folach, folaghadh	hide; secret
follan	a	/folən/	folláin, E.Ir. follán, fallán, ScG. fallain	wholesome

⁸⁸ These two items (*eDIL* s.v. *doccair*, *dochor*) seem to be confused in Phillips, where both medial <k, kk, ck> and <gh> are found without differentiation of sense (Thomson 1953: 195). As far as is known, forms with medial /x/ are later unattested. Note that medial lenition of both /k/ and /x/ could give [y].

follym	a (2)	/foləm/	folamh, Elr. folomm ⁸⁹	empty
folt	óo	/folt/	folt	hair
frogh		/frox/	Eng. frough	dry rotten
gob		/gob/	gob	beak, gob
goggan		/gogən/	gogán	noggin, piggin
goll, doll (Ph.)	o (8), ó, óy, oy (2)	/gol/	dol	go
gonnagh	(gonnit) o (3)	/gonax/	gonach	sore
gorrym		/gorəm/	gorm	blue
gortey; gortaghey	o (4), ó	/gortə, gortaxə/	gorta; gortaghadh	famine; hurt
hoght	o (2), oy, ó, oi (2)	/hoxt/	ocht	eight
kurn (Cr.), curn (K.)		/ko:rn/, ?/ku:rn/	corn	can
lhome	oy	/lo:m/	lom	bare
lhon		/lon/	lon	blackbird
lhong	o (8)	/loŋ/	long	ship
lhongey		/loŋə/	longadh	meal
lhott	o (6), io, oy	/lot/	lot	wound
logh		/lox/	loch	lake
loght	o (2), oy (5)	/loxt/	locht	crime
(ny) lomarcán	y (10), o (3) ⁹⁰	/lomərkan/	(ina) lomracán	alone
lomman		/loman/	lomán	scorching wind
lommyrt; loamrey	o	/lomərt/	lomairt; lomradh	shear; fleece
lorg	y (2), oy, a, u (2), ú	/lorg/	lorg	staff
lostey	o (5)	/lostə/	loscadh	burn
moggyl		/mogəl/	mogall	mesh
moghey	o (3)	/moxə/	moch, Elr. i mocha ⁹¹	early
moghrey	o (2)	/mox(ə)rə/, /moxəri/	mochthráth, mochéirghe ⁹²	morning
mohlt		/molt/	molt	mutton
mol		/mol/	mol	nave, hub of wheel
mollagh		/molax/	moth(al)lach, ScG. molach	hairy, rough
monney	ó, o (3), ô, é, è	/monə/	monadh	much, any, nothing; kind, sort, manner
moylley	o (26), ò, oa	/molə/	moladh	praise

⁸⁹ O’Rahilly 1942b: 191–2.

⁹⁰ Phillips’ spellings with <y> perhaps represent a variant form with *loim-*, *luim-*, or simply *o > /u/?*

⁹¹ *eDIL* s.v. *mocha*, *mucha*.

⁹² These two forms are possibly blended in Manx (Lewin and Wheeler 2019: 92).

noght	o (2)	/noxt/	anocht	tonight
Nollick (Cr.), Nodlick (SW), Ollick (Cr.); Ullick, Ullig (K.)	o (4)	/no(d)læk/	Nodlaig, Nollaig	Christmas
oard	o	/o:rd/	ord	hammer
oardaghey	o (14), ó	/o:rdaxə/	ordaghadh	order
oarlagh		/o:rlax/	ordlach	inch
obbal	o (11)	/obal/	ob	refuse, deny
obbee	o	/obi/	ubaidh	charm, enchantment
obbyr	o (10)	/obəri/	obair	work
oghlish		/oxlɔʃ/	ScG. achlais, EIr. ochsal	armpit
ogh(y)rish	o (6)	/ox(ə)rɔʃ/	fochras	bosom
olk	o (7), ó	/olk/	olc	bad, evil
ollan	o (2), ó	/olan/	olann	wool
orrym, ort, orrin, orroo	o 16, ôy (2), oy	/orəm/, /ort/, /orəni/, /oru/	orm etc.	on me etc.
osney	o (3), ó	/osnə/	osna	sigh
pobble	o (10), ó (2)	/pobəl/	pobal	people
pott	o	/pot/	Eng.	pot
poyll		/po:l/	poll	pool
rockey		/rokə/	rocahdh	bulge, pucker, cockle
roddan		/rodan/	ScG. rodan	rat
rolley		/rolə/	rolla	roll, roller
scoarnagh	o (4)	/sko:rɒx/	scornach	throat
scobbey		/skobə/	ScG. sgobadh	snack, repast
scolbey		/skolbə/	scolb	chip, break shell
scollag	a	/skolag/	scológ	boy, stripling
scoltey		/skoltə/	scoltadh	split, burst
scrobbaghyn		/skrobaxən/	scrobán, Sc sgrob, sgròban, Eng. crop	crop of bird
soccar, socker		/sokər/	socair	ease, leisure
sock		/sok/	soc	ploughshare
soddag		/sodag/	sodóg	cake, bannock
sollys	o (3)	/soləs/	solas	bright
(er) son	o (43), ò, oy, oÿ	/((er) 'son/	ar son	for
sonney	ou	/sonə/	sona	happy
soylley		/solə/	soladh	enjoyment
sponk		/sponk/	sponc	tinder
spot		/spot/	spot	spot
sproght	o	/sproxt/	sprocht ⁹³	vexation, sulks
sthock	o	/stok/	stoc	stock
surm, sorn		/so:rn/	sorn	fire-place in kiln

⁹³ See O'Rahilly 1927: 22–3.

tholtan (Cr., Bible), tultan (K.)		/toltan/, /tultan/	*tolltán	ruin
thorran	(<i>torr</i>) toìr, (<i>torradh</i>) torry, ghorey	/toran/	torr; torrán	heap
tobbyr (Bible, Cr.), tubbyr, tubbir (Cr.), tobbar, tubbar, tubbyr (K.)	o (3)	/tobər/, /tubər/	tobar	laver, baptismal font
toghyr		/toxər/	ScG. tocha(i)r, Ir. tachar, tochar	dowry
tonn, toayn, touyn (Hymns)	óy, (pl.) onnyn (3)	/ton/, /to:n/, /taʉn/	tonn	wave
torragh	o (2)	/torax/	torrach	pregnant
tost	o (2), óy, oy	/tost/	tost	silence
towl; thoylley	o, óy, óu	/to:l/, /tolə/	toll; tolladh	hole; pierce
troggal	o (22), ó	/trogal/	ScG. togail, trogail	lift, raise
trome	oy (6), ôy (2), oÿ, ó, ou, u, ú, o, o	/tro:m/	trom	heavy
trostey	o (9)	/trostə/	troscadh	fast

Table 16. o /o/ > /a/

	Phillips	CM pronunciation	etymology	English
bass		/bas/	bos, bas	palm
brasnag		/brasnag/	brosna	faggot, firebrand
brasnaghey	o (6)	/brasnaxə/	ScG. brosnachadh, G. brostaghadh	provoke
cabbag		/kabag/	copóg, capóg, ScG. capag	dock, bloodwort
caggey	a (13)	/kagə/	cogadh	war, fight
callin	a (17)	/kalən ⁱ /	colainn	body
cappan	a (10)	/kapan/	copán	cup
Cargys	karús, karus (2), karryús (3), karryús	/kargəs/	Carghas, Elr. Corgus ⁹⁴	Lent

⁹⁴ This item is pronounced with unlenited /g/ in northern Irish dialects (Dinneen s.v. *carghas*; Quiggin 1906: 138–9; Ó Súilleabháin 1953: 104). The CM form is presumably equivalent to this Ulster form *Cargas*, whereas Phillips' form represents *Carghas*, with vocalized */əyə/ > /u:/ and stress shift as in Munster Irish (represented by Dinneen as *carraigheas*, i.e. with /'i:/ rather than /'u:/). See similar by-

casley, co-chaslys ⁹⁵	a (9), á	/kaslə/	cosmhail	like
cass	a (3), o	/kas/	cos, ScG. cas	foot
cassid	a (7)	/kasəd ⁱ /	Elr. cosaít, G. casaoid	
castey	a	/kastə/	cosc(adh), ScG. casg	quell, defeat
cayrn	a (2)	/ka:rn/	corn	horn, trumpet
clag	klaggyryght	/klag/	clog, ScG. clag	bell, clock
clagh	a (12)	N /klax/, S /klox/	cloch, ScG. clach	stone
coar-crattagh		/ko:r kratax/	crotach	snipe
cronk, crank		/kraŋk/, /kroŋk/ ⁹⁶	cnag	knock
darrag		/darag/	*dorhóg	fishing line
darreyder (Cr.)		/darəder ⁱ /	OIr. dor, doraid + adóir	doorkeeper, porter
faggys	a (5)	/fagəs/	fogas, ScG. fagas	near
faghid	a (3)	/faxəd ⁱ /	fochaid	disdain, mockery, contempt
farennym ⁹⁷		/farenəm/	for-, ScG. far- + ainm	nickname
farrar(ey)		/farər ^{iə} /	foraire, ScG. faraire	wake, vigil
fasney		/fasnə/	foscnamh, ScG. fasnadh	winnow
fastee	a (2)	/fasti/	foscadh, ScG. fasnadh	shelter
fasscadagh (Cr.)		?/faskədax/ ⁹⁸	cf. G. foscadán, ScG. fasnadan, < OIr. foscatae	umbrella
fast, fastagh		/fastax/	fosc	quiet, pensive, modest
sap		/sap/	sop	wisp

forms with *pargys* ‘paradise’, G. *parrdhas* (§5.1.4). Another example of non-initial /ɣ/ > /g/ in Manx is *cleigh* ‘hedge’ (G. *cladh*), pronounced with a final stop by some speakers, e.g. **klɛg** HK, TC, **kleG** JK, JTK, but **klɔi** JW, **klei** EK_h, HK, **kla:i** NM (*HLSM* II: 84).

⁹⁵ But cf. *cosyllagh* ‘middling’ (G. *cosamhlach*), and other cases of G. *comh-* (except *chammah* ‘as well’, G. *chomh maith*, and unstressed *cha* ‘so’, G. *chomh*, also *cho*, Cregeen).

⁹⁶ ‘written in the Manks Scriptures *cronk*; but as *crank* is the sound used, and as *cronk* rather confounds it with *cronk* (hill), this is inserted’ (Cregeen). The only instance in *HLSM* (II: 100, s.v. *crankal*) has **e** from **TT**, presumably representing the form with /a/, /ã/. The Manx forms may represent conflation of G. *cnag* (itself likely borrowed from Eng. *knack*, *knock* or related Scandinavian forms, cf. *LEIA* s.v. *cnag*) with a later doublet borrowing of Eng. *knock*.

⁹⁷ And other instances of this prefix (Cregeen s.v. *far-chail*).

⁹⁸ Cregeen indicates stress on the second syllable (i.e. ?/faˈske:dax/), possibly erroneously (§5.1), since the cognate forms would lead us to expect initial stress. However, the word may have been altered under the influence of *scaa* ‘shade, shadow’ (G. *scáth*), cf. *scaa-liaghee* ‘umbrella’ (Cregeen).

skabbag (Cr.)		/skabag/	scobóg, giobóg	'a lock or handful of green flax' (Cr.)
thammag	u	/tamaɡ/	tomóg	bush, thicket
tramman		/traman/	tromán	elder tree
wass		/was/	abhus, a-bhos	below, down

2.1.5.1 Conditioning environments for /o/ > /a/

According to Ó Maolalaigh (1997: 330–1), the change /o/ > /a/ in Irish is particularly prevalent following initial /f/, following velar consonants, and in initial position. In Scottish Gaelic the most frequent preceding consonantal environments are /f/, /k/ and /kr, kL/, in that order (ibid.: 350). The situation is similar in Manx. Of the items which show the development, 11 out of 32 (34.4%) have a preceding velar stop /k/, with a further 4 items showing /k/-initial clusters. 8 out of 32 items (25.0%) have initial /f/,⁹⁹ making this the second-most important environment. The same pattern is apparent if we count all lexical items with either /o/ > /o/ or /o/ > /a/ by preceding consonant (or cluster), as shown in Table 17. Only sets with at least five items are shown. Again preceding /f/ and /k/ are shown to be the most conducive environments for the development /o/ > /a/. All other sets have zero items, or only one or two, with /a/.

Table 17. Incidence of o /o/ > /o/, /a/ in the lexicon by preceding consonant (cluster)

	o	a	total	% o	% a
f	6	8	14	42.9%	57.1%
k	21	10	31	67.7%	32.3%
d	9	2	11	81.8%	18.2%
sk	5	1	6	83.3%	16.7%
(s)kr	11	2	13	84.6%	15.4%
s	8	1	9	88.9%	11.1%
t	8	1	9	88.9%	11.1%
dr	5	0	5	100.0%	0.0%
g	6	0	6	100.0%	0.0%
l	12	0	12	100.0%	0.0%
m	8	0	8	100.0%	0.0%
#	12	0	12	100.0%	0.0%

⁹⁹ Although three of these items, *fastee*, *fast(agh)*, *fasscadagh* are etymologically related and may or may not have been synchronically semantically associated.

The conditioning environments likely represent (a) dissimilation between labial /f/ and round /o/ and (b) dissimilation between velar /k/ and back /o/ (the latter assuming a non-back realization of /a/ as attested in Late Manx and in Scottish Gaelic and Ulster Irish) (cf. Ó Maolalaigh 1997: 331).

With regard to following consonantal environment, Ó Maolalaigh (1997: 331, 350) finds that the most favourable environments are ‘r >> l, s >> L’ in Irish and ‘l >> r >> s, g’ in Scottish Gaelic. The most favourable environment is $_ /s/$ in Manx (12 out of 32 items, 27.5%), followed by $_ /r/$ (5 out of 32, 15.6%).

2.1.5.2 Diachronic development of /o/ > /a/ and Gaelic dialectological context

The evidence of Phillips shows that for most items which are spelt with <a> in Classical Manx, the /a/ realization was already stable in Early Manx. Orthographic evidence from Middle and Early Modern Irish shows that the change /o/ > /a/ was established or underway by the end of the twelfth century (Ó Maolalaigh 1997: 376–7), with orthographic variation being most frequent after /f/ and /k/:

The similarity of environments for this change in Irish and ScG is striking and suggests that the change //o// > /a/ may be an old one, perhaps dating back to the so-called period of Common Gaelic. [...] The geographical distribution of the change //o// > /a/ establishes an important isogloss which separates Munster from other Irish dialects and also from those of ScG: [...] the lowering of //o// > /a/ is all but unknown in Munster dialects. This suggests clearly that the development had a northern locus. This provides us with yet another early phonological development separating northern from southern Gaelic dialects.

(Ó Maolalaigh 1997: 364–5)

The evidence presented above shows that Manx clearly fits in this northern dialect group with regard to this development.

Brasnaghey ‘provoke’ (ScG. *brosnachadh*) consistently has <o> in Phillips, so the development to /a/ is presumably recent, and also lacks the obvious conditioning environments. *Brasnag* ‘firebrand’ (G. *broсна*) seems to show the same

development.¹⁰⁰ The development to /a/ may be the result of analogy, perhaps with G. *bras* ‘boastful, great, forceful’, although this item is not attested in Manx so far as is known.

Cass ‘foot’ (G. *cos*) and *thammag* ‘bush’ (G. *tomóg*) have one instance each in Phillips¹⁰¹ with <o> and <u> respectively. These may represent alternative developments, although palaeographical uncertainties concerning the copying of the vowels preclude firm conclusions from individual examples (cf. Thomson 1953: 11–2). The appearance of <a> in *follaghey*, *folliaght*, *follan* and *follym* may simply be cases of the use of <al(l)> to represent /ol/, noted elsewhere in Phillips. *Cayrn* ‘horn, trumpet’, and *curn* ‘can’ may show a semantic split between realization of G. *corn*. The realization of *clagh* ‘stone’ (G. *cloch*, ScG. *clach*) with /o/ in southern Manx and /a/ in the north is recognized as a dialect shibboleth by Rhÿs (161) (cf. *HLSM* II: 80).

2.1.5.3 *foddey* ‘far, long’, G. *fada*, OIr. *fota*

G. *foda*, *fada* ‘far, long’, OIr. *fota*, is the only item where the development /o/ > /a/ has occurred in all modern Irish and Scottish dialects (Ó Maolalaigh 1997: 365). However, Classical and Late Manx unexpectedly has /o/ in this item. Phillips’ spellings suggest variation between /a/ and /o/, however. It is possible that the development to *fada* occurred in Manx as in other Gaelic dialects, and that the occurrence of /o/ is in fact an instance of the secondary raising of /a/ > /o/ found in certain items, including after labials in *foaddey* ‘kindle’ (G. *fadadh*) and *moddey* ‘dog’ (G. *madadh*) (§2.1.1.2). Orthographic variation in these items in Phillips shows that this was a later change still

¹⁰⁰ There may be parallel development of these items with substitution, especially in Scottish Gaelic, of /n/ for /t/ in *brostaghadh*, perhaps through metaphorical association of incitement and kindling of firewood, and/or by association or confusion between *brosna*, a poetic metre (*eDIL* s.v. *brosna*, *brosnach*), and *brostaghadh* ‘a (poetic) incitement’? The two may be etymologically related (MacBain s.v. *brosdaich*), although *LEIA* (s.v. *brosnae*, *brostaid*) suggests it is more likely that the latter is a borrowing.

¹⁰¹ In fact both instances of *cass* in Matthew 18:8, f232r in the Phillips MS, appear to have *o*, with the second instance emended to *a* in a superscript interpolation. Owing to inconsistency in marking the /s ~ ʃ/ contrast (Wheeler 2019: 4–5), Ph. *dáa chos* could potentially represent the historical dual *dá chois*, rather than *dá chos* / *dá chas*; however, the parallel *dá láu* shows no sign of slenderized *láimh* (evident in dative *er léf stei* ‘within’, G. *ar láimh istigh*).

in progress in the seventeenth century, whereas the evidence discussed here shows that /o/ to /a/ is in general a much earlier development. The comparative *sodjey* (G. *is foide*) and the abstract noun *fodjeeaght* (G. **foididheacht*) (with parallel *foddeeght*, G. *fadaidheacht*) may have also had an effect in preserving or restoring /o/ in *foddey*.

2.1.5.4 /o/ > /u/

Spellings of certain items show raising of /o/ to /u/, but this development is variable; most such items have spellings with both <u> and <o>.

Table 18. *o* /o/ > /u/

	Phillips	CM pronunciation	etymology	English
cumir (Cr.)		/kuməɾi/	comair, ScG. cuimir	close, concise, tidy, compact
(Ph.) muyne	uy (2), u	*/munə/	monadh	mountain
(N)ollick (Cr.), Ullick (K.)	o (4)	/(n)o(d)ləkɪ/, /uləkɪ/	Nodlaig	Christmas
thammag (Bible, Cr., <i>NBHR</i>), thummag (<i>NBHR</i>)	u	/tamag/; /tomag/, /tumag/ ¹⁰²	tomóg	bush, thicket; shoal of fish (<i>NBHR</i>)
thummid (Cr.), thummyd (K.)		/tuməd/	ScG. tomadach	bulk, size
tobbyr (Bible, Cr.), tubbyr, tubbir (Cr.), tobbar, tubbar, tubbyr (K.) ¹⁰³	o (3)	/toβər/, /tubər/	tobar	laver, baptismal font
tooran, thurran (Cr.) ¹⁰⁴		/turan/	torrán, cf. ScG. turr ‘tomb, large heap’ (Dwelly)	round corn stack
thunnag (Cr.), tonnag (K.)		/tunag/, /tonag/	tonnóg, ScG. tunnag	duck
tholtan (Cr., Bible), tultan (K)		/tołtan/, /tultan/	*tołłtán	ruin

¹⁰² Both reflexes attested in *HLSM*: /a/ **tāməg**, **tāmag** TC, tamag’ (HB); /ɔ/ **təməg** (HK), (pl.) **təməgən**. There is apparently a dialect split here between N /a/ (TC, HB), and southern /o/, /u/ (HK, TT, *NBHR*).

¹⁰³ Influenced by Eng. ‘tub’, Manx *tubbag*?

¹⁰⁴ A variant of *thorran* ‘heap’ (G. *torrán*), influenced by *toor* ‘tower’ (G. *túr*), as implied by Cregeen?

The favourable environments for the development to /u/ appear to be adjacency to nasal consonants, labials, and after /t/. Note also <u> spellings in Phillips in *cosney* ‘win, gain’ (G. *cosnadh*), *croymmey* ‘stoop’ (G. *cromadh*), *lorg* ‘staff’ (G. *lorg*) and *trome* ‘heavy’ (G. *trom*) (§2.1.5). Spellings with <u> for usual <o> also appear in certain other texts, such as the manuscript of 1 and 2 Thessalonians, where we find *buggey* for *boggey* ‘joy’ (G. *bogadh*), *uddagh* etc. for *oddagh* (G. *féad*), *lummyrkyn* for *lomarcán* ‘alone’ (G. *lomracán*).

2.1.6 *oi* /o/ > /o/, /a/

OIr. *oi* is retained as /o/ in the majority of cases.

Table 19. *oi* /o/ > /o/

	Phillips	CM pronunciation	etymology	English
coirrey		/kor̥iə/	coire	caldron, kettle, furnace
coillar		/kol̥iə/	coiléar	collar
conning	o	/kon̥iən̥i/	coinín	rabbit
coshey	o (2)	/kof̥ə/	coise	foot (gen.)
coyin		/kon̥i/	coin	greyhounds
crosh	o (8)	/kroʃ/	crois	cross
doillee		/dol̥i/	doiligh	difficult
dorrin	o (7), y	/dor̥iən̥i/	doineann	storm
dronney		/dron̥iə/	droinne	hump (gen.)
sodjey		/sod̥ʒə/	is foide	further, furthest
fodjeeaght		/fod̥ʒi.axt/	*foididheacht	‘the distance of the furthest arrow shot in archery, farness’ (Cr.)
losht	o (5), oi (2), oy	/loʃt̥i/	loisc, loiscthe	burn, burnt
pohnnar (Cr.), ponniar (K.)		/pon̥iə/	ScG. ponach, poineach	boy
schoill, schoillar	o (3)	/skol̥i/	scoil	school
(gyn-)tort		/gən̥ ˈtort/	toirt	heed
toilliu, toilchin	o (4), oi (6)	/tol̥i/, /tol̥iʃən̥i/	toill, tuill	deserve
toit (K.) ¹⁰⁵		/tot̥i/	toit	the whole

¹⁰⁵ ‘the whole, as *yn slane toit jéu*’ (Kelly), cf. ScG. ‘Toit. Whole entire’ (Shaw 1780), and figurative use of *ceo* in Irish.

toshiaght	o (13), ó	/toʃax(t)/	toiseach	beginning
toshtal, hoshtal	o (6), oi, oy	/toʃtʰial/	ScG. toisgeal, G. lámh shoiscéala (O’Rahilly 1927: 23)	left
troiddey	ó, o (2)	/trodʲi/	troid	scold, chide, quarrel
trosht		/troʃtʰi/	troisc	fast

There are some cases of lowering and unrounding of *oi* to /a/, all following initial /k/, /kl/, /kr/ (Table 20). The conditioning environments are thus comparable to those for *o* discussed above.

Table 20. *o* /o/ > /a/

	Phillips	CM pronunciation	etymology	English
cadjin	a (5), ia	/kadʒən/	coitcheann	general
cagliagh	a (3)	/kagʲliax/	coigríoch	border
caigney	a	/kagʲnʲə/	cognamh, cognadh, ScG. caigneadh	chew
casherick	a (9)	/kafərʲəkʲi/	coisricthe	holy
casht	ái	/kaʃtʰi/	coisc	quell, defeat
clashtyn	a (21), á (2)	/klaʃtʰən/	Mlr., Ir. clois(t)in etc., ScG. claitinn	hear
claiggin		/klagʲənʲi/	cloigeann	scalp
crackan	kraghyn, kráckyn	?/krakʲan/ ¹⁰⁶	croiceann	skin

There are also a few instances of *oi* > /e/:

Table 21. *oi* /o/ > /e/

	Phillips	CM pronunciation	etymology	English
der ¹⁰⁷		/derʲi/	toir < tabhair	give, put, send (fut.)
erriu	e (5), o (2)	/erʲu/	oirbh	on you
kemmyrk	kemmyrk (3), kymmyrk, kymmirk, kemmirk, kæmmirk (2)	/kemərʲkʲi/	coimirce, OIr. commairge	refuge

¹⁰⁶ Perhaps = variant *crocann*, *cracann* (*eDIL* s.v. *croiccenn*) with broad medial /k/.

¹⁰⁷ Probably influenced by the independent form *ver* (G. *bheir*).

	kómríck, komríck, kæmríck, kommírck, kémmírck			
perkyn (Cr.)		/perˈkʲɪnʲ/	poircín, ScG. poircean	porpoise
skeilt, scelt	éí, áí, aí		scoilte	cloven
sliennoo (see §4.4.6.2)	slonniu, slonniú	/slʲenu/	sloinne, (vn.) sloinneadh, OIr. sloindemain	surname
sterrym	ey, y (3)	/sterˈəɪm/	stoirm	storm

2.1.6.1 *kemmyrk* ‘refuge’, G. *coimirce* etc.

This is found with *com-* in the earliest sources and later *coim-* (*eDIL* s.v. *commairge*), with palatalization of *m* apparently spreading from the cluster /rʲkʲi/ (also /rʲɪʲi/, /rʲɪʲ/). Phillips’ forms with both <o, ó> and <e, é, æ, y> may represent co-existence of both variants. The form with /e/ which survives in Classical Manx is more likely to represent *oi* than *o*, since there are no other cases of *o* > /e/. However, this raises the question of the existence of slender */mʲi/ (cf. Ó Maolalaigh 1997: 65–72) (see §1.7.6 for a brief discussion of slender labials more generally). The spellings with *y* may represent raising to /i/ or /u/, although there are other cases where Phillips apparently uses <y> for short /e/, such as *sterrym* here. We may raise the possibility that Manx had a short vowel /ə/, /ɜ/ analogous to that found in the larger vowel inventories of Scottish dialects, but the overall evidence for this does not seem strong, except perhaps for cases of shortening of original *ao(i)* (§3.9.11).

2.1.7 *i, io* /i/

The Gaelic vowel /i/, like /u/, is mostly stable in Manx. In the prepalatal environment it almost invariably, and before broad consonants (G. *io*) predominantly, remains as /i/. However, *i* and *io* are frequently differentiated in Manx spelling with <i> mostly used for *i* /iCʲ/ and <y> often appearing for *io* /iC/. This may indicate (allophonic) backing of /i/ before broad consonants, or simply be a device to mark the quality of the following consonant.

<y> *brynnerraght* ‘flattery’ (Ir. *brionnal*), *chymmey* ‘compassion, pity’ (ScG. *tioma, time*), *chymmylt* ‘around; foreskin’ (*timcheall*), *chymney* ‘will, testament’ (*tiomna*), *chymsaghey* ‘gather’ (*tiomsaghadh*), *chyndaa* turn (*tiontódh*), *chyrrys* ‘tour, journey’ (*turas*), *cryss* ‘belt’ (*crios*), *fynnican* ‘egg-white’ (**fionnacán*, cf. Ir. *gealacán*, ScG. *fionnagan* ‘crowberry’), *fyn-ruy* ‘brown-haired’ (*fionnruadh*), *fynney* ‘fur’ (*fionnadh*), *fynneraght* ‘cool breeze’ (*fionnuarach*), *fys* ‘knowledge’ (*fios*), *fysseree*, *fyssyree* ‘foreknowledge, prescience’ (*fiosraighe*), *jyst* (K.), *juist* (Cr.) ‘dish’ (ScG. *diosg*), *kimmagh* (Bible), *kymmagh* (Cr.) ‘criminal’ (*ciomach*), *kyndagh* ‘guilty, because of’ (*ciontach*), *kys* ‘how’ (*cionnas*), *kynn* (K.) ‘love, affection’ (*cion*), *myn* ‘fine, small’ (*mion*), *mynlagh* ‘the fine of meal or flour’ (Cr.) (*mionlach*), *mynnagh* ‘guts’ (*mionach*), *mynney* ‘curse’ (*mionnadh*), *mynthey* ‘mint’ (*mionta*), *myskid* (Bible, Cr.), *myskit* (Cr.), *miskid* (K.) ‘malice’ (*mioscais*), *shynney lhiam* ‘I love’ (*is ionmhainn liom*), *shynnagh* ‘fox’ (*sionnach*), *skyrraghtyn* (Bible, Cr., K.), *skirraghtyn* (Cr.) ‘slip, slide’ (*sciorrh*), *slyst* ‘coast, border’ (*slios*), *spyrryd* ‘spirit’ (*spiorad*), *yllagh* (Bible, Cr.), *ullagh* (K.) ‘cry’ (*iolach*), *ymmodee* ‘many’ (*iomad*), *ymree* ‘behave’, *ymmyrch* ‘need’ (ScG. *imir, iomair*, cf. *imirt, iomairt*),¹⁰⁸ *ymmyrkey* ‘bear, carry’ (*iomchor, iompar*), *ymmyrt* ‘row’ (*iomramh*), *yndyr* ‘graze’ (Ir. *inbhear*, ScG. *ionaltair, ionaltradh*), *yngyn* (Bible, K.), *ingin* (Cr.) ‘nail, hoof’ (*ionga, iongain*), *yngyr* (Cr., K.), *ingyr* (Cr.) ‘pus’ (*iongar*), *ynyd* ‘place’ (*ionad*), *ynrick* ‘righteous, upright’ (*ionraic*), *ynsaghey* ‘learn, teach’ (ScG. *ionnsachadh*), *yskid* ‘shank, hough, ham’, (*iosca(i)d*, EIr. *esca(i)t*), *scryss* (Bible, Cr.), *scriss* (Cr.) ‘bark, peel, shaving’ (*scrios*)

<i> *drig* ‘drip’ (*driog*), *gimmagh* ‘lobster’ (*giomach*), *grindeyr* (Bible, Cr.), *grinder* (Cr., K.), *grindeyr* (Bible), *grynder* (Cr.) ‘mocker’ (?*greann*, Ir. *gliondar*, Eng. *grin*), *imbagh* ‘season’ (EIr. *imbocht, imbach*), *pibbyr* (Cr.), *pebbyr* (K.) ‘pepper’ (*piobar*); *shimmey* ‘many’ (*is iomadh*), *skibbylt* ‘nimble, light of foot’ (*sciobalta*), *spinney* (Cr.) ‘elasticity’ (*spionnadh*); *yindys* ‘wonder’ (*iongantas*)

2.1.7.1 *io /i/ > /u/*

In some items, spellings with <u> seem to indicate that backing seems to have led to merger with /u/:

Table 22. *io /i/ > /u/*

	Phillips	CM pronunciation	etymology	English
bluight		/bl ^h uxt/	bliocht	milch
burley		/burlə/	biolar	criss
giucklagh		/g ^h uklax/	giolcach	broom

¹⁰⁸ See O’Rahilly 1931: 57.

kiuttagh (Bible, Cr.), kyttagh (Cr.), kiuttagh, kytagh (K.)		/kʲutax/	ciotach	left-handed
jummal	i	/dʒumal/	diomailt	waste
rught (K.)		/ruxt/	riocht	sprite, spirit
shuilgey (Cr.)		/ʃulqə/	ScG. siolcadh	nibble
shutternee (Bible, Cr.), shussarnee, ¹⁰⁹ shutternee (K.)		/ʃutərni/	seitreach, siotrach	neigh, bray
sluight	u (3), iu	/slʲuxt/	sliocht	progeny, descendants; amount
smuir, smuirr ¹¹⁰	smyrr	/smur/	smior, OIr. smiur	marrow
uhllin (Cr.), yllin (K.) ¹¹¹		/ulənʲ/, /ilənʲ/	iothlainn	stackyard, haggard
urley	y, ý	/urlə/	iolar	eagle

Spellings of *jummal*, *smuir* and *urley* in Phillips suggest these items retained /i/ in Early Manx. Late variation in spelling and attested pronunciations of certain items shows that the change was not settled. Conditioning factors appear to be adjacency to labial /m/ (rounding assimilation), velar or (formerly) velarized consonants /k, kʲ, gʲ, x, l or L, R, r/ (backness assimilation).

2.1.8 *u, ui /u/*

Before broad consonants G. *u* remains as /u/, e.g.

muc ‘pig’, G. *muc*
bun ‘bottom’, G. *bun*

¹⁰⁹ For <ss> representing /t/ > [ð], a realization which can also represent underlying /s/, see §1.6.4, 1.6.5.

¹¹⁰ **smur** (TC), **smör** (JW) (HLSM II: 420). It is unlikely that these /u/ forms represent continuation of OIr. *iu*, and the Phillips spellings suggests the regular development of G. *io*; possibly influenced by *smua(i)s*, *smúsach* (although unattested in Manx), *smooirlagh* ‘broken bits, fragments’ (Cregeen) (G. *smúrlach*).

¹¹¹ Data from HLSM (II: 468) suggests /i/ and /u/ variants: **ɔlin'** (TC), **ɔlín** (JTK), **u.l'm** (JN) (confusion with *uillin* ‘elbow’?), **ɛlin'**, **ilm'** (JK).

lugh ‘mouse’, G. *luch*

The vowels /u/ and /o/ are generally kept distinct, although variant spellings suggest there may have been a tendency towards (?near) merger in some lexical items or lects, especially in the direction /o/ > /u/ (§2.1.5.4). There are a couple of attested variants apparently showing /u/ > /o/, although the /o/ may in fact be original, as in *loaghee* ‘mice’ (G. *luch*, but historical oblique stem *loch*¹¹²) (1 Samuel 6. 4, 5, 11, 18), alongside *lugh(ee)* elsewhere in the Bible, and Edward Faragher’s spelling *coammal* for usual *cummal* ‘dwell, hold’ (ScG. *cumail*, but G. *congbháil*) (Broderick 1981b: 141). Manx appears therefore to lack the more general tendency towards lowering of /u/ to /o/ found in Irish dialects (Ó Maolalaigh 1997: 379–83), and agrees with Scottish Gaelic in this respect (*ibid.*: 400).

Before slender consonants G. *ui* usually remains as /u/, spelled <ui>, <u>, <ooi>, agreeing again with Scottish Gaelic rather than Irish, e.g.

cooid /kudʲ/ ‘part, goods’, G. *cuid*

ooilley /ulʲu/ ‘all’, G. *uile*

fuirraghtyn /furʲaxtən/ ‘wait, stay’, G. *fuireacht*

duillag /dulʲag/ ‘leaf’, G. *duilleóg*

tushtey /tuʃtʲə/ ‘understanding’, G. *tuigse*

Certain items have spellings which may indicate *ui* > /(w)i/, although the interpretation is not always clear:

Table 23. *ui* /u/ > /u/, /(w)i/

	Phillips	CM pronunciation	etymology	English	HLSM
bwinnican		/bwinʲəkən/	cf. G. buidheac(h)án, EIr. buidén, ScG. buidhean, buidheagan, Ir. buinne?	yolk	
cluinn, clynn, clinn	ũy, ũỹ, uỳ, ui (10), uíf, úí, iu, uy (2)	/klinʲ/, /klunʲ/	cluin(n)-	hear	

¹¹² Cf. *goan* /go:n/ ‘words’ (G. *goth-*), singular *goo* /gu:/ ‘word’ (G. *guth*).

dhyt	ui (9), ûi (2)	/d̪iʔ/, /d̪uʔ/	duit	to you	d̪öt EK _h , d̪eʔ HK, d̪oʔ JK, d̪iʔ NM
dreeym	drym, dr̪y̆im, dryim, (pl.) drymmyn, drimmyn	/d̪ri:m/	druim	back	d̪ri:m NM, d̪riʔm JK, d̪rim TC, d̪ri:ʔm J:EK, J:JTK
kip	i	/kip/	ScG. cuip, Ir. fuip < Eng. whip? ¹¹³	whip	k'ip: , k'ip JK, k'ip JW
mimmey ¹¹⁴	i (3)	/mimə/	muime	godmother	
mwing		/mwiŋj/	mong, muing, ScG. muing	mane	wiŋ TC
mwyllin	ui	/mulʲən/	muileann	mill	mul'in' TC, mul'an JK, W:N, mil'jən W:N, mwil'an J:EK, mul'anən JTK, m̪ol'i , mul'i EK _h , m̪ol'an , mul'an NM
mwyllar		/mulʲari/	muilleóir	miller	m̪il'ε , mul'ε: HB
mysh	ymmish (5), immish (3), ymmysh	/miʃ/, /muʃ/?	*muis, ScG. mu	about, about him, it	
quiggal		/kwigʲal/	G. coigeal, coigeál, ScG. cuigeal	distaff	
quing	quing (3), kuing	/kwiiŋj/	cuing	yoke	
sym	i	/sim/	suim	sum	
toiggal	ui (16), ũi	/tiŋʲal/	tuig-	understand	ɪ JK, JTK, HB, NM, W:N, W:S, ʷε , ∅ TC
trimshey, trimshagh	i (7), yi (2), y	/trimʃə/, /trimʃax/	? *truimse < trom	sorrow, sad	ĩ TT, ī JW

In some cases it is not entirely clear whether the reflex should be analysed as /u/ or /wi/, and there may have been synchronic variation. Alongside *bwinnican*, *mwing*,

¹¹³ Possibly from Eng. 'kip' '[t]he hide of a young or small beast [...], as used for leather' (*OED*), rather than 'whip'?

¹¹⁴ But cf. *mummig* 'mother', G. *muime* + -*óg*, Ph. *mummug*.

mwyllin above, we have *buinnagh* ‘diarrhoea’ (G. *buinneach*) (?/bun^hax/, /bwin^hax/), *muickey* ‘pig’ (gen.) (G. *muice*) (?/muk^hə/, /mwik^hə), *muinney* ‘mesentery, entrails’ (G. *muinne*) (?/mun^hə/, /mwin^hə/).

2.1.8.1 *ui* /u/ > /wa/

In certain items *ui* develops to /wa/, which is probably to be interpreted as dissimilation from roundness (/m/) and backness (/k/). In *mwannal* it seems to be associated with depalatalization of /nⁱ/ (§4.4.3).

Table 24. *ui* /u/ > /wa/

	Phillips	CM pronunciation	etymology	English	HLSM
<i>mwannal</i> ¹¹⁵	muínal, muynal	/mwanal/ /munal/	muineál	neck	mənəl, mənəl TC, mənəl EK ^h , mwanəl J:EK, wanal EL, vənəl TC, mwanəl, manəl W:S, wānələn TC
quallian, quailan (both Bible)	quellan	/kwalian/	cuileán	whelp, pup	kwal'ən J:EK, k^uöl'jən W:S, kwal'ənən TC
quailag (Cr.), carchuillag (Cr.), car- whailag (K.), char-chuilag (Bible)		/kwal'ag/ /kar'xul'ag/	cuileóg, ScG. car-chuileag	fly, gnat	kwel'jag, kweləg, kwal'jən W:N

2.1.9 Morphophonological alternations /a/, /o/ > /i/, /u/

Morphophonological alternations involving final palatalization (genitive, plural, comparative forms, abstract nouns) may give /u/ or /i/ from roots with /a/ (Table 25) or /o/ (Table 26) (cf. Ó Baoill 2012). Note that such alternations have spread to some

¹¹⁵ Bible MSS: *mwonnal* (Exodus 13:13), *wonnal* (1 Samuel 4:18), *mionnallyn* (Judges 5:30), *mhonnallyn* (Judges 8:21, 26). The variation of spellings and realizations in *HLSM* may point to two by-forms with /wa/ and /o/.

loanwords (e.g. *block*, *cront*, *pot*, *spot*). The front /i/ is more frequent in forms deriving from stems with /a/ than /o/:

Table 25. Morphophonological alternations /a/ > /i/, /u/

	inflection / derivation	Phillips	etymology	English	HLSM
ard	comp. syrjey, abstr. yrjid		ard	high	(<i>yrjid</i>) ö: TT, ö JW, HK, i JK, jö TC
bart	pl. buirht	(sg.) e	Eng.? G. beart?	burden	
boayl	pl. buill		ball	place	u ⁱ NM, ø ⁱ HK, ø JW, TC
caayr (K.), cayr (Cr.)	pl. khyr ¹¹⁶ (Cr.)		carr	wagon, car	
car	pl. khyr (Cr.)		car	knot, twist	
clag	pl. cluig	(gen.) yi	clag	bell, clock	
croan	pl. cruin		crann	mast	ɛ: NM, HK
edd	pl. idd		ad	hat	ɛd ^r HK
garroo	comp. s'girroo		garbh	rough	
glack	pl. glick		glac	hollow of hand	
glass	pl. glish, gen. gle(i)sh (Cr.)		glas	lock	
kayt	pl. keiyt, kiyt (Cr.), kitt (K.), gen. chett (K.)		cat	cat	see §2.1.2.2
lagg	pl. ligg		lag	hollow	
lhag	abstr. lhuiggid (SW)		lag	weak, feeble	
mart	pl. muirt (K.), muihrt (Cr.)		mart	beef	
stalk	pl. sthilk (Cr.)		stalk	stalk	

¹¹⁶ Apparently khyr = *cairr* /kir/, or /kirⁱ/ if slender rhotic restored by analogy (cf. Ó Curnáin 2007: 222) (see also §4.2.4).

Table 26. Morphophonological alternations /o/ > /u/, /i/

	inflection / derivation	Phillips	etymology	English	HLSM
block	pl. blhick (Cr.)		Eng.; Ir. bloc, ScG. ploc	block	
blod	pl. blhuid (Cr.)			blade	
boayrd	pl. buird		bord	table, board	
bock	pl. buick		boc	gelding, he-goat	*i TC, wī JW
bog	comp. s'buiggey		bog	soft	
bolg	pl. builg	ui	bolg	belly	
bwoid (Cr.), boid (K.)	pl. bwhid (Cr.), buid (K.)		bod	penis	
cronk	pl. croink, crink, cruink (all Bible, Cr.)	ui (4)	cnoc	hill	i HK, i NM, W:N, ü TC
cront	pl. cruint		Eng.	knot	
Colloo	gen. Chylloo, Keylliu (Cr.)		Norse kalfr	Calf of Man	
corp	pl. kirp	y, yi, i	corp	body	i JW
doarn	gen., pl. durn (Bible), duirn (Cr.)		dorn	fist	
gob	gen., pl. gib		gob	mouth, beak, point	
gorrym	abstr. girmid, gormid, gorrymid (Cr.)		gorm	blue	
lorg	luirg	lyrgyn, lurgyn (2), lúrgyn	lorg	staff, stave	
mohlt, molt	pl. muihlt (Cr.), muilt (K.)		molt	wether	
olk	pl. uilk		olc	evil	
pot, pott	pl. pooiyt (Bible, Cr.), gen. phuyt (Cr.)	ui (2)	pota	pot	
poyll	pl. puill	ui	poll	pool	

put		pl. puirt (Cr.), purtyn (Bible)	port	harbour, port	
sock	pl. sick (Cr.)		soc	ploughshare	
spot	pl. spuitt		Eng. spot, cf. G. spota	spot	
stott	pl. sthitt (Cr.)		Eng. stot, Old Norse stútr	bullock, steer	st̪et' HK
stoyll	pl. stuill		Eng. stool, cf. G. stól	stool, chair	
towl	pl. tuill		toll	hole	û: W:N
trome	comp. s'trimmey, abstr. trimmid		trom	heavy	(<i>trimmid</i>) ö TC, ï JW, (<i>s'trimmey</i>) ï TT

2.1.10 OIr. *air-*, *aur-*

As Ó Maolalaigh (2003c: 163) notes, ‘words formed from the preposition / preverb *air* ‘before, for’ are well known for the variation which they exhibit in the vocalic initial from the Old Irish period onwards [...] Variation in such words includes vacillation, to varying degrees in individual cases, between *ai-*, *au-*, *e-*, *i-*, *u-*, *o-*’. See also Pedersen (1909: 339–40), *GOI* (497–9), Greene (1976: 41), Breatnach (1994: 231–2), McManus (1994: 346). In Modern Irish and Scottish Gaelic the reflex of this is usually /u/, or /o/ as a secondary development of /u/ (Ó Maolalaigh 2003c: 164), although there may be also /e/ or /a/, which in some cases may represent survival of earlier *air-* (ibid.: 165). Ó Maolalaigh (2003c: 167) cites ‘slim evidence’ from Manx:

Based on the slim evidence which survives in Manx, a small set of words containing original *air-* yield *a* and *e*, e.g. *aarloo* ‘ready’ (<Old Irish *airlam*), *arryltagh* ‘willing’ (possibly a derivation of Old Irish *erail*), *arrym* ‘respect’ (< **airrim*), *essyn* ‘door-post’ (< Old Irish *airsa*): see [*HLSM* II] s.v. *aarloo*, *essyn*, *arryltagh*). An intermediate development to /u/ in such instances is not generally supported elsewhere in Manx historical phonology.

(Ó Maolalaigh 2003c: 167)

In fact a few more items may be cited, which further confirms that a front realization, apparently usually *ea-* (confirmed by spellings of *arryltagh* and *ayrn* showing slender *n* in proclitics) was usual in Manx, with /u/ or /o/ found only in Phillips’ form

úyrrymagh etc. (perhaps representing a semantic split with *arrym(agh)*), and *orraghey* (Phillips *orghyr*).

Table 27. OIr. *air-*, *aur-*

	Phillips	CM pronunciation	etymology	English
aarlo; aarlaghey	a (17), ern iarlaghy, yn iarlaghey ¹¹⁷	/e:rlu/, /e:rlaxə/	OIr. airlam, aurlam; G. urlamh, earlamh	ready; prepare, cook
arbyl		/arbəl/	OIr. erball, G. eireaball, earball, urball etc. ¹¹⁸	tail
arral (Cr.)		/aral/	OIr. eráil, Ir. foráil, uráil, ScG. earail	offer
arryltagh	a	/arəltax/	? OIr. eráil etc.	willing
arrym	a (9), á, ¹¹⁹ úy, u (5), y (5) ¹²⁰	/arəm/	OIr. *airraim, G. uirim, oirim, urraim, ScG. urram	respect, reverence
ayrn, y Niarn (CS)	ay (3), áy (2), a (4), á, æa	/a:rn/	OIr. airrann, G. urrann, earrann, ScG. earrann	part
earish	ie (5), ié (8), e, iá, êi	/irʲəʃ/ ¹²¹	iris < OIr. airisiu ‘history’, OIr. airis ‘foreknowledge, tryst’ ¹²²	time, weather
essyn		/eʃən/	OIr. airsa, G. ursa(in)	doorjamb
orraghey	orghyr	/orəxə/	OIr. airchor, G. urchar	(arrow) shot

Another item which apparently contains **aur*, **air* is G. *turas* ‘journey’ (*eDIL* s.v. *turus*, var. *teros*, *terus*, *tirus*) (Pedersen 1913: 600; Ó Maolalaigh 1997: 656), which gives two variant forms in Manx: *chyrrys* /tʃirəs/ (Bible, Cr., K., PC), *thurrys* /turəs/ (Cr.), *nan juryssyn*, *my hyrrys* (Phillips), **tʃirəs**, **tʃerəs** NM (*HLSM* II: 80). Again we see a Manx tendency to favour front vowels found in variants in the earlier languages,

¹¹⁷ Ph. <n ia> = /nʲa/ G. *ea*-?

¹¹⁸ ‘Despite its containing original *iar-* / *er-*, it seems fairly clear from synchronic variation and earlier literary sources that *eireaball* joined the class of words with initial *air-* at an early stage’ (Ó Maolalaigh 2003c: 167).

¹¹⁹ <a> forms: ‘reverence, worship, honour, obey, obedient, humble, reverend’.

¹²⁰ <u> forms: ‘great, greater, greatest, chief’.

¹²¹ **i**. EK, **ɪ** NM, **i**: JK (*HLSM* II: 139).

¹²² See Greene 1962: 112.

but usually giving way to /u/ in modern Irish and Scottish dialects. There is also *chiarrey* ‘dry spell’ (G. *tearadh*, *turadh* < OIr. *turad*, *taurad*) (§2.1.3).

2.2 Long vowels

The following sections discuss phones which were long vowels or diphthongs from the Old Irish period onwards, excluding *ao(i)* and *ua(i)* which are discussed in Chapter 3.

2.2.1 Stressed final vowels in monosyllables

Breatnach (2003) argues that Old Irish did not permit final stressed short vowels, and that items such as *seo* ‘this’, *de* ‘of him’ and *te* ‘hot’ which have, or may have, short vowels in Modern Irish (and Scottish Gaelic) had long vowels in the earlier language (see also *GOI*: 32; Green 1997: 71–3). In his discussion Breatnach cites Manx *jeh* ‘of him’ and *j’ee* ‘of her’ with long vowels (*HLSM* I: 62). It appears in fact that all such items have long vowels in Manx. *Chéh* ‘hot’ (G. *te*, ScG. *teth*), is spelled *chéé* (2 instances), *chæ* in Phillips, and all instances of this item in *HLSM* (II: 74) have long [e:]. *Shoh* ‘this’ (G. *seo*) has both long and short realizations (as well as forms which seem to represent /fox/, cf. ScG. dialectal *seothach* etc.) (*HLSM* II: 405), but this was probably determined by the varying degree of stress on this item. Final stressed vowels arising from loss of final fricatives also seem to be compensatorily lengthened, as in the *ath* class discussed below (§2.2.4).

It thus appears that Manx has preserved, or restored, the Old Irish constraint against stressed final short vowels. We might compare the constraint in certain Scottish Gaelic dialects which requires the insertion of an unhistorical [h] after word-final short stressed vowels in pausa, e.g. /du/ *dubh* ‘black’ > [duh] (cf. Ternes 2006: 66–71). These can be regarded as examples of the ‘bimoraic norm’ (cf. Iosad 2016b; §4.5.5.2).

2.2.2 Fronting of /a:, o:/ > /ɛ:/

One of the most striking developments in Manx is that G. /o:/ from ó, ói (not eó) often merges with G. /a:/, both being realized as fronted /ɛ:/¹²³ and spelled in CM <aa>, <a>, <a_e>, <ay>, <ai>, <ae> etc.

There are also items where /o:/ is retained, however, and the conditioning factors for this phonemic split are not immediately obvious. Similar developments are found elsewhere in the Gaelic world, e.g. Gairloch *is dàcha* ‘it is likely’ (*is dòcha*) and *pàg* ‘kiss’ (*pòg*) (Wentworth 2005: 840), and the homophonic semantic splits noted by Dillon (1953: 323) in Lewis: *ba chòire* ‘it would be more generous’, *ba chàra dhuit* ‘it would be more fitting for you, you should’, *fàd* ‘sod of turf’, *fo’n fhòid* ‘in the grave’. Many such items had variants with *á* in Early or Classical Irish (Jackson: 41; Dillon 1953: 324), and where these are recorded in *eDIL* they are noted in the tables below:

In Middle Irish *ō* was apparently an open vowel tending towards *ā*, and the Grammatical Tracts permit varying forms for a number of words in modern bardic poetry

(Dillon 1953: 324)

In the lists below obviously relatively recent loanwords, likely to postdate the change, are excluded. Some of less certain antiquity (e.g. *floag*, *sole*, *fload*) are included which possibly should be excluded; on the other hand that there are some older loanwords such as *braag* (G. *bróg*) and *sharvaant* (G. *searbhónta* etc.) which have undergone the change.

Included below (Table 28) are items having /o:/ in most other Gaelic dialects, but which have /uə/, /u:/, /iə/ in Manx (*mooar*, *deayrtey*, *poosey*), or which may have /o:/ in Manx where other dialects generally have /uə/ (see also §3.4.5). Items which

¹²³ The symbolization /ɛ:/ has been chosen as best reflecting the dominant pronunciation in Late Manx, which may even verge on [e:]. However, some of the terminal speakers show a lower realization of /ɛ:/, more like [æ:, a:], which may be dialectal (*HLSM* I: 160, III: 123–4), and it is unclear how high and fronted this vowel was in earlier periods (see discussion below, §§2.2.3, 2.2.4).

generally have /uə/ or developments thereof in both Manx and other Gaelic varieties are not listed here (see §§3.4.3–6).

Table 28. ó /o:/ > /o:/ etc.

	Phillips	CM pronunciation	etymology	English
bugogue (Cr.), boggoge (K.)		/bu'go:g/	Eng. buck + -óg? cf. ScG. bòcaidh, mucag?	buck-thorn berry, hip
burdoge (K.)		/bur'do:g/	ScG. burdag, cf. Ir. burdán	small fish, minnow
cologe (K.)		/ko'lo:g/	?	'a party, a faction, a league' (K.)
croe, croae		/kro:/	cró, EIr. croa, crao etc.	sheep-pen; eye of needle, notch of arrow
croag		/kro:g/	?crobhóg, ScG. cròg, crobhag (MacBain)	claw
deayrtey	iâ, îy, ie, iy (2), iê, ue, ýa (4), ýy, ya, yá, ýy, ye	/diərtə/	Ir. dórtadh, doirteadh, ScG. dòrtadh, vn. < do- fortai, cf. Ir. duartan	pour, spill
er-fload		/er'flo:d/	Eng. float	afloat
floag		/flo:g/	Eng. flock?	flake
fo		/fo:/	fo	under; under him, it
gamshoge (K.) ¹²⁴		/gam'fo:g/	gaimse, gaimseóg	buffoon, mimic
graynoge (K.) ¹²⁵		/gra'n'o:g/	gráin(n)eóg	hedgehog
mooar	ua (5), úa (10), úy, úay; (<i>mooarid</i> 'greatness') óy, oa	/muər/	mór	big, great
noa	óo (6), oo (2), ó	/no:/	nuadh, nódh	new
oe		/o:/	ó, ua	grandchild

¹²⁴ This item is found only in Kelly's dictionary, which could make it suspect (§1.6.8.1). The item is not found in the earlier manuscript of the dictionary (MNHL MS 1477), but is found in the later MNHL MS 1045–7, with a reference to 'Ir.' *gamal* 'a fool' (cf. Shaw, s.v. *gamal* '[a] fool, stupid person') (this reference is lacking in the published version). Kelly thus does not seem to have been aware of Ir. *gaimse* 'simpleton' or diminutive *gaimseog*, which perhaps makes it more likely that the Manx form *gamshoge* is genuine.

¹²⁵ Possibly from Shaw (1780).

peajeog (Cr.), pitteog (K.)		/piːtʰo:g/ /piːdʰo:g/	piteóg	miser, churl
peeoge		/piːo:g/	Ir. pióg ‘pie’ (Ó Dónaill), ScG. pitheag ‘young girl’ (<i>Faclair Beag</i>)	a puny, petty, tiny thing
poagey	o (2)	/po:gə/	póca	bag
poanrey		/po:nrə/	póna(i)r, pónra	bean(s)
poosey	ú (6), u (3), úy (2), uy	/pu:sə/	pósadh	marry
raun		/ro:n/	rón	seal
scoadey, scoidan		/sko:də/	scód, Norse skaut	sloop, smack
sole		/so:l/	ScG. sòla, Eng. sole	threshold
stoamey, stooamey		/sto:mə/ /stuəmə/	stuamdha	comely
thoree		/to:ri/	tóraidhe, <i>eDIL</i> táir (s.v. tóir)	highwayman (Cr.), ‘overbearing person’, ‘headstrong child’ (Moore et al. 1924, s.v. <i>tory</i>)
trocairyys	o (5), ó, ô	/tro:kærʲəs/	trócaire	pity

Table 29. *ói* /o:/ > /o:/'

	Phillips	CM pronunciation	etymology	English
bwaagh; bwoyid	áa, áy, ay, úoia, (<i>bwoyid</i>) óiy, ói (3), oí (2), óii, oíi, oi, óy	?/bo:ĩ.ax/ /buəĩ.ax/ ¹²⁶	ScG. bòidheach, buaidheach; bòidhchead	beautiful; beauty
coar		/ko:ri/	cóir, <i>eDIL</i> cáir	agreeable, kind
croiaght		?/kro:ĩ.axt/ ?/krəĩ.axt/ ?/kraĩ.axt/	< cró, ¹²⁷ cf. EIr. croaigecht, ScG.	incest

¹²⁶ *HLSM* (II: 51) **bwq:iax** HK, **bqiax** SK, **bə:iax**, JK, **bəiax** J:EK.¹²⁷ There are various semantic developments from the basic meaning ‘blood’ (Greene 1983), but the sense of ‘incest’ appears to be attested only in Manx; cf. EIr. *croöige* ‘heir’ and the abstract noun *croaigecht* (*eDIL*), and ScG. *croidheach* ‘dowry’ (Dwelly). Owing to the fluctuation of vowel length in these forms in other Gaelic varieties (early hiatus, later *ó* and *o*) and the ambiguity of Manx <oi>, the vowel length and quality in the Manx form is uncertain. If short we might expect /ai/ (§§1.7.5, 3.9.1, 3.9.1.4), though the <oi> spelling would suggest otherwise. As far as is known, the word is a *hapax legomenon* found only in Leviticus 18:17 (and thence in Cregeen, Kelly), where it is inserted in the manuscript by the reviser for the translator’s original *olkys* (AV ‘wickedness’). The reviser writes *criaght*, correcting himself with superscript *o* to the spelling in the printed text, which may lend support to the */ai/ interpretation.

			croidheach 'dowry'	
doaie; doaieagh		/do:i/; /do:i.ax/	dóigh; dóigheach; <i>eDIL</i> dáig	state, condition; decent
foaid (Cr., K.), faaid (K.) ¹²⁸		/fo:di/, /fɛ:d/	fó(i)d	sod of turf, clod
froaish		/fro:ʃ/	próis, Fr. / Eng. prouesse, prowess (<i>eDIL</i> , <i>LEIA</i>)	egotism, swagger
gloyr, gloyraghey	óy (9), oy (4), oe, óa, ó (6),	/glo:r/	glóir	glory, glorify
moain		/mo:n/	móin	peat, turf
oainjyr	áy	/o:nʃər/	óinseach	harlot
oaisht		/o:ʃi/	fóisc, E.Ir. óisc, ScG. óthaisg	yearling sheep
snoaid, snooid		/sno:di/, /snu:d/?		snood
stroin	(pl.) stroanyn	/stro:n/	sró(i)n	nose, nostril
thoin		/to:n/	tó(i)n	bottom

Table 30. ó /o:/ > /ɛ:/

orthography	Phillips	CM pronunciation	etymology	English
aeg; saa	áy (7), ay (2), áa, a (2)	/ɛ:g/; /sɛ:/	óg, E.Ir. comp. oa	young; younger, -est
-age, -aig, -eig e.g. caabaig (Cr.), cabbage (K.) faasaag imleig liehbage (Cr.), liabage (K.) sornaig	(<i>faasaag</i>) áy (1)	/ɛ:g/ (?and /e:g/ §4.4.7.4) /ka'be:g/ /fe'se:g/ /im'lɛ:g/, ?/-e:g/ /lɛ'be:g/ /sor'ne:g/	<i>suffix</i> -óg ScG. càbag féasóg imleóg leadhbóg sornóg	<i>diminutive suffix</i> a cheese, slab of tallow etc. beard navel flounder, fluke sewer, drain
airh, oar (Trad. Ballad) ¹²⁹	ay (2), áy (3), áe, au (2) ¹³⁰	/ɛ:r/ (or /ɛ:ri/? §4.2.1.3)	ór	gold
bayr		/bɛ:r/	bóthar, <i>eDIL</i> báthar	road
braag	áy, ay (2)	/brɛ:g/	bróg	shoe
caghlaa	á (7), a, ghyghláym	/ka'xlɛ:/	Ir. claochlódh, ScG. caochladh,	change

¹²⁸ According to Kelly, *faaid* is an 'a[djective]' (i.e. genitive) 'belonging or pertaining to turf or sod; consisting of sods'. All instances in *HLSM* (II: 170) have /o:/ apart from *fɛ:d* (TT).

¹²⁹ Thomson 1960–62 II: 64.

¹³⁰ Thomson (1953: 7) suggests that Phillips' spelling *aur* could reflect Welsh *aur*.

			E.Ir. coímchloud, claechládh etc.	
charbaa	chyrbâýt	/tʃar'be:/	tearbódh, <i>eDIL</i> terba, -úd, -ód	wean, excommunicate
chyndaa	á (7), a (5), (fut.) chyndai, hyndáys, hyndáym, (pp.) tyndáit, tyndait	/tʃin'de:/	tiontódh, <i>eDIL</i> tin(n)tád	turn
da	â (5), á (2), a (4),	/de:/	dó	to him
daah (§2.2.4)		/de:/	dóghadh, ScG. dòthadh, dàthadh, E.Ir. dóüd, dód	singe; <i>daah-cree</i> heartburn
glare	áy (7), ay (5), aa	/gle:r/	glór, <i>eDIL</i> glár	language
paag, paagey	ay (3), a (4), á	/pe:g/	póg	kiss
Parlane	ay	/par'le:n/	Partholón, <i>eDIL</i> Parthalán	Bartholomew
raalish		?/re:ɹəj/	ScG. ròlaist, MacBain cf. rigmarole, or ?rail	loose, empty talk
sharmane	áy, áa, a	/ʃar'me:n/	searmóin, seanmóir	sermon
sharvaant	ay (5), áy (4)	/ʃar've:nt/	searbhónta	servant
sonnaase ¹³¹	áy (2), a, á	/so'ne:s/	saobhnós	arrogance, ambition

Table 31. *ói* /o:/ > /ɛ:/

orthography	Phillips	CM pronunciation	etymology	English
aegid	á (2), a (5)	/ɛ:gʲədʲ/	óige	youth
cair; aggair	áy (12), ay (9), ây, áe, a (2)	/ke:ri/, /a'ge:ri/	cóir, éagóir, EIr. co(a)ir, <i>eDIL</i> cáir	right; wrong
faaid, foaid		/fe:dʲ/, /fo:dʲ/	fód, <i>eDIL</i> fát, fád, fáid	sod
?neaynin (K.)		?/ne:ɹəɹ/	nóinín, ScG. neðinean	daisy
Trinaid	ái (3), ai (17)	/tri'ne:dʲ/	Tríonóid	Trinity

Conditioning factors are not immediately obvious in this fairly small set of lexical items, although as noted by Jackson (41) /o:/ is maintained in a number of items where there is an adjacent nasal vowel, where there may also be raising to /u:/ or /uə/ (e.g. *mooar* 'big', G. *mór*; *moo* 'more, most', G. *mó*). It is likely that the development

¹³¹ Cf. *connaase* 'disdain, contempt' (Cr.)?

originated in a split between mid-high */o:/ (in nasal environments and elsewhere) and mid-low */ɔ:/, with the latter later merging with low /a:/, with both later fronted to /ɛ:/. The development to /ɛ:/ is also more common in items which have *á* variants in *eDIL*.

Other factors which may be implicated in the maintenance of /o:/ rather than /ɛ:/ include preservation of /o:/ in high-register items such as *trocairy*s ‘mercy’, *gloyr* ‘glory’, *oar* ‘gold’ (but later *airh*) (cf. lack of diphthongization in high-register items with /e:/, §2.2.7); analogy with the English or Latin/Romance cognate in the case of *gloyr* ‘glory’; cases where /o:/ varies with /uə/, or may on the basis of other Gaelic dialects have shown such variation in the past, such as *stoamey*, *stooamey* /sto:mə/, /stuəmə/ ‘beautiful, comely’, *noa* ‘new’ (G. *nuadh*, *nódh* etc.), *oe* ‘grandchild’ (G. *ó*, *ua*). There is evidence of lexical diffusion in earlier *oar* ‘gold’ alongside later *airh* and co-existence of variants in *foaid*, *faaid* ‘sod’, and the suffixes *-age*, *-og(u)e*, G. *fó(i)d*, and semantic split between *cair* ‘right’ and *coar* ‘kind, decent’ (both G. *cóir*). Among the items with the G. diminutive *-óg* it is unclear what, if anything, the small group of nouns with /o:/ may have in common (*bugogue*, *burdoge*, *gamshoge*, *graynoge*, *peajoge*, *peeoge*), apart from the presence of a labial consonant in the first syllable of most of them?

2.2.3 /ɛ:/ and /e:/

It is clear that /e:/ (<G. *é* etc.), and /ɛ:/ were generally kept distinct in Early and Classical Manx, since the latter is fairly consistently spelled <aa>, <a>, <a_e> etc. in CM (<a, á, ay, áy> in Phillips), while /e:/ is usually <ea, e, e_e> (Ph. <e, æ> etc.), although some orthographic units are ambiguous, such as <ay> (cf. *mayl* /mɛ:l/ ‘rent’, G. *mál*, but *maynrey* /mɛ:nrə/ ‘happy’, G. *méanar*).

A merger or near-merger /ɛ:/ > [e:] is reported before /r/ (Rhÿs: 6; Marstrander: 64) (§4.2.1.3) as in *nearey* ‘shame’ (G. *náire*), where a grapheme usually representing /e:/ rather than expected /ɛ:/ appears; bŭt xpŭctŭd <aa> is fŭnd iŭ thŭ adjective *naareydagh* ‘shameful’ (also *neareydagh*). For another possible case of interaction between /e:/ and /ɛ:/, see §4.4.7.4.

According to Jackson (24–5), /e:/ and /ɛ:/ are contrastive in his informants, and this is the interpretation of Marstrander (62–4) also with the exception of the environment *_/r/* noted above. Rhys's (3–4, 6) descriptions also support the existence of this contrast. However, Broderick (*HLSM* III: 50) claims there has been a (recent) merger in Late Manx:

some ex[amples] show only allophonic variation indicative of close /e:/, while others have allophonic variants indicative of open /e:/. That is to say, that the pattern suggests a merging of two phonemes, i.e. of /e:/ and /ɛ:/ into one, which I write here as /e:/. There is now no phonemic opposition between /e:/ and /ɛ:/.

(*HLSM* III: 50)

Aside from the continued lexical conditioning noted by Broderick himself, an instrumental analysis of the speakers recorded by the Irish Folklore Commission suggests that there is a clear height difference between reflexes of CM /e:/ and /ɛ:/ (for further details see §3.7).

Impressionistically, the three vowels /i:/, /e:/ and /ɛ:/ seem to the present author's ear to be bunched quite tightly together in the front high area of the vowel space, which may explain the perception of merger.

Broderick's claim that /ɛ:/ (and /ə:/, /i:/) were no longer distinct in Terminal Manx has been accepted uncritically by some subsequent scholars. For example, Green (1997: 45) sketches a system of five long vowels for 'Manx at the time of its extinction', based on Jackson, Broderick (*HLSM* III; 1993) and Williams (1994b), rather than the seven or eight contrastive vowels which should be posited. Williams (1994b: 709) posits a tendency towards merger of /e:/ and /ɛ:/, but nevertheless concludes they remained distinct in Late Manx.

2.2.4 *a(i)th* /ah/ > /a:/

Although historical /a:/ becomes /ɛ:/ in Manx, /a:/ is reintroduced by the vocalization of final /h/ (OIr. /θ/, /θi/) in monosyllables in *-a(i)th* (cf. §2.2.1).

Table 32. *a(i)th* /ah/ > /a:/

	Phillips	CM pronunciation	etymology	English	HLSM
aa, nah	ná (4), na (2), náa (3)	/a:/, /na:/	ath, an ath	re-, second, next	ɑ: TC, na: NM, nɛ: HK
blah		/bla:/	ScG. blàth, G. bláith, E.Ir. mláith	warm	a: J:NM
brah	brá (3), bra, bráh (3), da vrásyn, da vræsyn	/bra:/	brath	betray, reveal	ɛ: JW
cah		/ka:/	cath	battle	
daah	dâ, (daahghey) daghy, daghit	/da:/	dath, dathadh	colour, dye	ɛ: TC, JW
gah	gah, gagh, (pl.) gághyn	/ga:/	gath	sting	a: EK, ɛ: JW
raah	rágh, rá, rāh, rah, ráh (2)	/ra:/	rath	success, prosperity	
scraa (Cr.), scrah (K.)		/skra:/	sraith	scraw, layer of sods on roof	skra: JTK, skrɛ: JW, pl. skrɛ:ɣɔn JW
skah (Bible, Cr.), scah (Cr.), scaaghey (K.)		/ska:/	scathadh, scoitheadh	earmark; strong wind ¹³²	sk'ɛ: W:N

Blah ‘warm’ (G. *mláith*, *bláith*, ScG. *blàth*) is included here since it appears to have assimilated to this set of lexical items (i.e. > **blath*), perhaps to distinguish it from *blaa* ‘flower’ (G. *bláth*), as suggested by Broderick (*HLSM* III: 124).

The example of *blah* and *blaa*, and the similar spellings in Phillips for the *ath* set and for reflexes of *á* (and *ó*), as well as certain items in the CM orthography, and the overlapping pronunciations in some of the terminal speakers, suggest that there may have been no great phonetic contrast between /ɛ:/ and the new /a:/, at least for some speakers. The use of <a(a)> for this vowel in the orthographies presumably reflects the

¹³² ‘a mark in the ear of sheep; a strong wind that sheds or shakes corn or fruit’ (Cregeen).

situation in Early Modern English around the year 1600, when conservative [æ:] and progressive [ɛ:] realizations of Middle English /a:/ (<a>, <a_e> etc.) seem to have co-existed (Lass 2000: 83–4).

The vowel [ɛ:] in *daah* ‘colour’ (G. *dath*) may represent interference from *daah* ‘singe’ (G. *dóghadh*) (§2.2.2).

2.2.5 /o:/ and */ɔ:/

According to Broderick (1999: 83; *HLSM* III: 54), a contrast between high-mid and low-mid back rounded vowels may also have existed in Classical Manx:

As with original /e:/ and /ɛ:/ more close realisations are restricted to some and more open to other items, suggesting two former contrasting phonemes /o:/ and /ɔ:/ that could have given the following near minimal pair:

boayl */bo:l/ ‘place, spot’ G. *ball* : *Boaldyn* */bɔ:ldən/ ‘May’ G. *Bealltuinn*.

now realised as:

boayl /b[o:]l/, /b[ɔ:]l/, /b[ɔ:]l/

Boaldyn /b[ɔ:]ldən/, /b[ɑ:]ldən/, though both orig. /a/ + /l/.

(Broderick 1999: 83)

However, it is not clear why G. (*e*)*all* should be expected to give differing realizations in these items. If anything a contrast might be expected between reflexes of */aN/, */aL/ on the one hand and reflexes of historical /o:/ (and compensatorily lengthened /o/) on the other, but there seems to be no strong orthographic or other evidence for such a contrast.

A comment by Rhÿs (1–2) hints that /ɔ:/ may have been (re)introduced via English borrowings, but no details or examples are given:¹³³

¹³³ Perhaps e.g. *walkal* ‘walk’?

o [...] occurs pretty often both long and open, resembling the pronunciation of *a* or *aw* in the English words ‘all’ and ‘drawl;’ but this sound in Manx is recruited largely from borrowed words.

(Rhÿs: 1–2)¹³⁴

For the purposes of this thesis only one long vowel /o:/ will be assumed.

2.2.6 Monophthongization of /iə, iɔ, uə/ > /i:, i:, u:/

As noted by Jackson (50–1), Thomson (1976: 260–1) and Broderick (*HLSM* III: 139), the G. diphthong *ia* [iə, iɔ], is most commonly realized as monophthongal [i:] in Late Manx (as is secondary /iə/ from G. *éa* /e:/, §2.2.7), thus merging with historical /i:/. Similarly, where the back quality of G. *ua* [ua, uə] is retained, this is smoothed to monophthongal /u:/ (Jacks 1911: 53; Thomson 1963: 67; *HLSM* III: 139). However, in the Phillips and Classical Manx orthographies these are generally clearly distinguished:

G.	Phillips	CM
<i>ia(i)</i>	<ia, ie>	<eea, ia>
<i>í(o)</i>	<i, ii>	<ee, eey, eei>
<i>ua(i)</i>	<ua>	<ooa, ua>
<i>ú(i)</i>	<u, uy>	<oo, ooy, ooi>

By the early nineteenth century, however, monophthongal realizations appear to be indicated in certain spellings in Cregeen’s dictionary, such as *keeir* ‘dark’ (G. *ciar*); *lheegh* ‘ladle’ (G. *liach*), and *hooir* ‘forebode, threatened’ (G. *tuar*) (§1.6.5). Early indication of this development may be evident in the transcriptions for Edward Lhuyd made at the turn of the eighteenth century, such as *phegil* for CM *feeackle*, Ph. *feakylyn*, *fiekylyn* etc, ‘tooth’ (G. *fiacal*) (Thomson 1999: 395).

The development of the fronted reflex of G. *ua* /iə/ is less clear, since both it and monophthongal G. *ao* /ə:/ are represented indiscriminately by spellings such as <eay, ea, eo> etc. in Classical Manx (§3.6.2). However, they are more clearly distinguished

¹³⁴ In the section dedicated to ‘Open *o*, long’, Rhÿs (9–10) gives only *shoh* ‘this’ (G. *seo*), *ro* ‘too’ (G. *ró*), and items with secondary lengthening of native short /o/, such as *boght* ‘poor’ (G. *bocht*) and *boggey* ‘joy’ (G. *bogadh*).

in Phillips (*ua* = <ya> etc., *ao* = <y, yy> etc.) (§3.6.1), and the evidence of Rhÿs and his successors shows that they remained contrastive in Late Manx, with /iə/ tending to be smoothed to [i:] in line with the development of /iə/ and /uə/ (§3.5.1.3).

Diphthongal realizations may be maintained, however, (a) before /x/, as in *creagh* ‘stack’ (G. *cruach*) (**kri:ax**, Jackson: 53), *jeeagh* ‘look’ (G. *déach*) (**dʒi:ax**, Jackson: 32)¹³⁵ and (b) when the diphthong synchronically occurs before a word boundary as a result of loss of final /h/, as in *lheeah* ‘grey’ (G. *liath*); *theay* ‘common people’ (G. *tuath*).

In *jee* ‘god’ (G. *dia*), the historical word-final diphthong has been smoothed to /i:/ even in Phillips’ time (*jih* etc.),¹³⁶ as also in the saint / parish name Malew /mə’lu:/ (G. *MoLua*) (*PNIM* VI: 143); but cf. *booa* /buə/ ‘cow’ (G. *bó*).

In the case of following /x/, the CM orthography appears to indicate the development of a glide in *keeagh* ‘breast’ (G. *cíoch*) although *HLSM* (II: 244) has only **i**: (TT, JW).

2.2.7 Breaking of *éa* /e:/ > /iə/

The ‘breaking’ of long /e:/ preceding historically broad consonants to a diphthong /iə/ is found in a number of items in Classical Manx (with subsequent monophthongization to /i:/ in Late Manx).¹³⁷ A similar development is well-known in Munster Irish (Ua Súilleabháin 1994: 482–3) and northern or central dialects of Scottish Gaelic (Jackson 1968), as well as in certain items in Ulster Irish (O’Rahilly: 194). In Manx it is not usually found in final position, whether original (so *shey* ‘six’ /ʃe:/, cf. northern ScG.

¹³⁵ But cf. *lheeagh* ‘ladle’ above, which appears to show monophthongization of G. *liach*.

¹³⁶ Although the diphthongal realization is apparently preserved in the spelling *Yieeah* (*PC* I. 580) and *Dy bishee jeeah shiu* ‘God prosper you’ (Kelly s.v. *bishaghey*).

¹³⁷ According to Grannd (2000: 55) ‘[i]n Manx, according to Jackson 1955, this diphthongization does not occur and even the vowel in the word *ceud*, which seems to be realized as a diphthong everywhere in Gaelic Scotland, is realized in Manx as a long é’. This is clearly a misreading of Jackson (30–1), who in fact notes the two realizations of G. *éa* in Manx, comparing [i:] to the ‘i(:)a (or iə)’ of Irish and Scottish dialects. As for *kied* ‘first’, notwithstanding Jackson’s **kE:d** (NM), **ki:d** (EK, JK), this seems to be usually reduced to a short vowel (*HLSM* I: 50), as indicated by the CM spelling (§5.5.1).

sia /ʃia/) or via the loss of a final fricative (e.g. *fea* ‘quietness’ /fe:/, cf. northern ScG. *fèath* /fia/).¹³⁸

Table 33. *éa* /e:/ > /e:/

	Phillips	CM pronunciation	etymology	English
Baarle		/be:rl/	Béarla	English language
beasagh (Bible, Cr., K.), beysagh (Cr.)		/be:sax/	béasach	compliant
blakey		/blie:kə/	spléachadh, ScG. spleuchdadh	stare
blean		/blie:n/	ScG. bleun, blian, Ir. bléin	flank, groin
breag, breg	éy, æy, ée, á, é (2), éa (2), æ (2), e, a, áy, á	/bre:g/	bréag	lie
breagey		/bre:gə/	bréagadh	coax
ch eh	éé (2), æ (2)	/tʃe:/	te, té	hot
cray	æ (2)	/kre:/	cré	clay
crea		/kre:/	créadh	creed
eadaghey; eadoil	æ, (<i>eadoil</i>) a (2)	/e:daxə/, /e(:)'do:l/	éad	jealousy
eaddagh	y (12)	/edax/ (§§3.9.2, 5.5.1)	éadach, ScG. aodach	clothes
eayst	íá, ía, ia, ea, áa (2)	/e:st/	éasca	moon
eddin	æ (2), e (4), y (7), é, ey	/edən/ (§§3.9.2, 5.5.1)	éadan, ScG. aodann	face
faiyr	éy (2), æy, ée	/fe:r/	féar	grass
falleays (Cr., K.), failleish (Bible)		/fa'le:s/, /fa'le:j/	EIr. folés, ScG. faileas, faileus	gleam of light
fea; feagh	éé (4), áé ¹³⁹ , e, æ, ee	/fe:/; /fɔx/, /fɔx/	féath; féathach	rest, quietness; quiet
geyre, gyere	áy (2), éy, (<i>yeyre</i>) íá (2)	/gje:r/	géar	sharp
grease; greasee		/gre:s/	gréas	‘industry in making clothing’ (Cr.); shoemaker

¹³⁸ One exception appears to be *skeay*, *skeeah* ‘vomit’ (G. *sceith*) (**ski**: TC, adj. **ski:əx** TC, **ski:x** JW *HL*SM II: 409). A further case may be *meeaylys* ‘fatness’ (Cr., Bible), *meeaynlys* ‘scum, fatness, grease; obtained by boiling flesh’ (K.), probably from G. *méith*, *méath* (itself found as Manx *mea* /me:/), as in *yn joan jeant mea lesh meeaylys* ‘their dust made fat with fatness’ (Isaiah 34:7), i.e. **méith/eamhl/as* > **méal/as* > **mialas* with loss of perception of the first morpheme boundary.

¹³⁹ Acute accent on each vowel character (Thomson 1953: 212).

Jamys	a (3)	/dʒe:məs/	Séamus	James
Jeheiney-Cheays (Cr.), Jy-heiney Cheast (AG)	áy	/dʒi'hə:nə ʧe:st/	Aoine an Chéasta	Good Friday
jeig	ée (3), ee (3), éy, (yeig) iée, ie (4)	/dʒe(:)g/	déag	teen
jinnair	iêê	/dʒi'nîe:r/	dinnéar	dinner
kease		/kie:s/	ScG. ceus, <i>eDIL</i> ces 4, césán	buttock, ham
kied, chid	ie (6), iê, ei (5), êi	/kîed/, /çed/	céad	first
keddin, cheddin	e (3), æ (2), ie (3), ie	/çedən/	céadna	same
Ph. liæs	iâ, iâ, áy, áa, éa, æ	/liæs/	léas < Eng. lease	season (in 'night-season')
laue-my-height		/lî:u mə 'he:xt/	?lámh um a h-éacht	hand-suit ¹⁴⁰
mair	ée, éy (3)	/me:r/	méar	finger
meydlagh		/me:dlax/ (or /mə:dlax/?) (§3.9.2)	méadlach, ScG. maodalach	slow-moving, unwieldy
raipey	ay (3), áy (2), a (4), á (3)	/re:bə/	réabadh	tear, rend
sheayney, sheaynt (Cr.); sheaney, sheeant (K.)		/ʃe:nə/, /ʃiɲnə/	séanadh, séanta	bless; blessed
smeyr (Bible, K.), smair (Cr.)		/sme:r/	sméar	(black)berry, grape
trean	áy, áa, é, á (3), e	/tre:n/	tréan	strong, valiant

Table 34. *éa* /e:/ > /iɲ/

	Phillips	CM pronunciation	etymology	English
beal	ea (4), æa, éa (8), éy (3)	/biɲl/	béal	mouth
eean, eeanlee	é (2), æ (2), áy (5), áy, êy, éy, ey	/jiɲn/	éan, éanlaith	young bird; birds
jeeaghyn	a (4), ea (20), éa (2), á, (yeeagh-) ia (3), iá (4), yia (1), ía, a	/dʒiɲxən/	déachain	look, show

¹⁴⁰ A legal term; see Thomson (1988: 141–2).

keead	ey (4), éy (3), ie (4), iæ, íe, iéy, ei	/kʲi̯əd/	céad	hundred
keeaght		/kʲi̯əxt/	céacht(a)	plough
skeecal	ia	/skʲi̯əl/	scéal	story
lheed	îê, iæ, íæ	/li̯əd/	leithead, ScG. leud	width
lheennee		/li̯əni/	léana	meadow
neecal, neecalloo		/nʲi̯əl/, /nʲi̯əlu/	néal(aibh)	countenance; swoon, faint
screeagh (Bible, Cr., K.), scragh (Cr.)		/skri̯əx/	scréach	screech, scream

Phillips' spelling generally indicates /e:/ in those items where the later orthography consistently has <eea> for /i̯ə/ (later /i:/). In a few cases such as *skial* 'story' (G. *scéal*, CM *skeecal*) it is possible that an early instance of /i̯ə/ is indicated; however <a> may also represent /e:/ and the <i> may indicate the palatalized nature of /kʲ/. Similarly, the spelling *îêsk*, *íask*, *iask* 'moon' (G. *éasca*, CM *eayst*) could possibly represent a form */i̯əsk/ (which would be more progressive than the later attested unbroken /e:st/), but it is likely that /e:/ is intended (especially in view of <â>), with <i> marking the palatalization of the preceding *n* of the article.

The breaking of /e:/ in Manx in those items in which it occurs thus appears to be a development of the seventeenth century, or at least, the conservative forms represented by Phillips' spellings had become obsolete by the eighteenth century. The forms recorded in the data collected for Edward Lhuyd at the beginning of the eighteenth century correspond to the Classical Manx distribution, except that *lèena* seems to suggest /e:/ for later *lheennee* 'meadow' (G. *léana*) (Thomson 1999: 394).¹⁴¹ That the unbroken form survived well into the eighteenth century is probably shown by the spelling *lheantyn* (editorially emended to *lheyntyn*) in the MS of Judges 20:33, which probably means /lʲe:ntən/, which is replaced by *lheantyn* in the printed text.¹⁴² Apart from *lheennee*, the only apparent examples of variation between /i̯ə/ and /e:/ in the same item in Classical and Late Manx are *sheayne* (Cr., Bible), *sheaney* (K.) 'bless'

¹⁴¹ Non-breaking: *breag*, *cheh*, *cray*, *eayst*, *faiyr*, *geyre*, *lheennee*, *mair*. Breaking: *beeal*, *eean*, *jeeagh*, *keeaght*, *neecal* (Thomson 1999: 394).

¹⁴² This item is very common in place-names (*PNIM*), but usually spelled *leany*, *leaney* etc. which could be interpreted either way.

(G. *séanadh*), and possibly *screeagh* ‘screech’ if Cregeen’s variant *scragh* means /skre:x/. In the Late Manx data there are realizations such as **fi:q̄r** (WQ, *HLSM* II: 157) for *faiyr* ‘grass’ /fe:r/ (also **fɛ:ə̄r** JW, **fɛ:ə** NM, **fɛ:ə** JTK, **fɛ:ǎ** DC), and similarly for *geyre* ‘sharp’ (G. *géar*), but the pre-rhotic glide here is likely to be an artefact of English influence on the phonology of the terminal speakers (cf. Jackson: 118; *HLSM* III: 113) (§4.2.3).

Conditioning factors for the breaking are not obvious, although most of the diphthongized items have following /l, n, x/, velar or (formerly) velarized consonants implicated in other vowel changes such as backing of *ea* /e/ > /a, o/ (§2.1.3). Register and/or lexical frequency may also play a role. The diphthongized items are mostly everyday terms of probable high frequency, whereas the two items with unbroken /e:/ followed by /n/, for example, are the probably less frequent *trean* ‘valiant, strong’ and *blean* ‘groin’, cf. non-breaking in ‘a loose group of ‘high register’ words’ in Scottish Gaelic (Bauer 2011: 362; cf. Robertson 1902: 89; Ó Maolalaigh 2001: 31) such as *beus* ‘manners’, *ceusadh* ‘crucify’, *treun* ‘strong’ (see also Dillon 1953: 322–3).

Shortening of the vowel is found in certain of the unbroken items (§5.5.1), *eaddagh* (G. *aodach*), *eddin* (G. *éadan*), *kied* (G. *céad* ‘first’), *keddin* (G. *céadna*), *jeig* (G. *déag*), and may have predated the breaking. *Eaddagh* and *eddin* may additionally have the change *éa* > *ao* (as in Scottish Gaelic), and suggested by Phillips’s spellings with <y> (§3.9.2).

There are also one or two presumably relatively recent (post-Great Vowel Shift) loanwords from English with *eea*, such as *keeak* ‘cake’ (Bible, Cregeen, Kelly)¹⁴³ which may represent either the Manx development, or the similar diphthongization found in northern English dialects (*EDD* s.v. ‘cake’).

¹⁴³ Spellings apparently showing monophthongal /e:/ are found in the Bible translation manuscripts, e.g. *cheakyn* (Leviticus 2: 4), *cakyn* (Leviticus 7: 12, 1 Kings 14: 3), *kheak* (Numbers 6: 19, emendation), *keakyn* (Judges 6: 19, emendation).

Chapter 3 Manx reflexes of Gaelic *ao(i)* and *ua(i)*

3.1 Introduction

The development of the Gaelic diphthong *ua(i)* (/u_a/ or /u_ə/) and the long monophthong *ao(i)* */ə:/ (<OIr. diphthongs /a_i/, /o_i/, /u_i/) is a complex and difficult area in Manx historical phonology.¹⁴⁴ It is clear that Gaelic *ua(i)* in most lexical items has a fronted realization in Manx, that it is retained as back /u_ə/ (> LM /u:/) in others (spelled mostly <ooa> in the Classical Manx system), and is variable in still others (Jackson: 52–3; *HLSM* III: 139–40).

The Classical Manx orthography tends to represent both *ao(i)* and the fronted reflex of *ua(i)* by a number of di- and trigraphs, especially <eay>, <ea>, <ey>, <eo>. Some of these orthographic sequences can also represent front vowels /e:/ (G. *é*), /ɛ:/ (G. *á*). This appears to suggest that (fronted) *ua* and *ao* were pronounced similarly both to each other and to the front vowels. Phillips' orthography tends to distinguish them more clearly, with <yy, y> for monophthongal *ao* and <ya>¹⁴⁵ for diphthongal *ua*, but the use of <y> in both may suggest a degree of similarity between them (§3.6.1).

3.2 Historical development of G. *ao(i)* and *ua(i)*

3.2.1 *ao(i)* /ə:/

G. *ao(i)* goes back to the Old Irish diphthongs *áe*, *aí* /a_i/, *óe*, *óí* /o_i/ and *uí* /u_i/.¹⁴⁶ The diphthongs /a_i/ and /o_i/¹⁴⁷ were in the process of merging already in the Old Irish

¹⁴⁴ For a brief discussion of this topic, drawing on the research presented more fully here, see Lewin (2019a: 89–94).

¹⁴⁵ And variants of the same with a range of optional diacritics.

¹⁴⁶ The standardization of the placement of the diacritics here is an artefact of modern scholarship, intended to distinguish the diphthongs clearly from monophthongal *ái* /a:C_i/ and *óí* /o:C_i/ (Greene 1976: 26). Usage in the manuscripts is varied. The phonetic symbolization of these diphthongs is conjectural; the exact pronunciation is unknown.

¹⁴⁷ /o_i/ itself being a merger of earlier /o_i/ and /u_i/ (Cowgill 1967: 134–137; Greene 1976: 39–40).

period, as shown by orthographic confusion (*GOI*: 42; Ó Máille 1910: 36; McCone 1996: 139), and seem to have become a long monophthong by the Middle Irish period (Pedersen 1909: 8; O’Rahilly: 31; Greene 1976: 40; Ó Murchú 1989b; McCone 1994: 92; Breatnach 1994: 233; Ó Maolalaigh 1997: 192), generally assumed to be some kind of central long vowel, here represented */ə:/. This merged long monophthong comes to be spelt *ao(i)* in Classical Irish from the 15th century onwards (McManus 1994: 349), and in Modern Irish and Scottish Gaelic. There are also important interactions between reflexes of *ao(i)* */ə:/. and *agh, adh* */ay/,¹⁴⁸ especially in northern Irish, Scottish (and apparently Manx) dialects (Shaw 1971; Ó Maolalaigh 1997: 340; 2006; Lewin 2018).

In modern varieties there are three main developments of *ao(i)* and *agh* (inc. *adh* etc.) (Lewin 2018: 159):

(a) In southern Irish (Connacht and Munster) varieties *ao(i)* has merged with /e:/ and/or /i:/,¹⁴⁹ while *agh* is usually a diphthong /əj/.

(b) In southern Scottish dialects, and apparently Manx, *ao(i)* remains a mid central vowel /ə:/, may be fairly fronted and, according to some descriptions, may have weak rounding. Mergers with /e:/ and/or /i:/ are reported from certain speakers in Arran and Kintyre (O’Rahilly: 33; 709 1957: 8–10; 1962: 6–10; *SGDS*), and there is a tendency towards similar mergers in Late Manx, at least in *aoi* > /e:/ (§§3.4.2, 3.4.4, 3.5.1). *Agh* is also realized as /ə:/ and thus merges with *ao(i)* (Dilworth 1996: 44; Ó Maolalaigh 1997: 227–228).

(c) In Ulster and northern Scottish varieties *ao(i)* is realized as a high back unrounded vowel /u:/, which is contrastive with mid back unrounded /ɜ:/ representing *agh*. In Ulster, both of these have tended to front and merge with /i:/ and /e:/ respectively,

¹⁴⁸ Also *eagh, eadh, ogh, odh*.

¹⁴⁹ In Munster generally *ao* > /e:/, *aoi* > /i:/ (Ó Murchú 1989b: 144), while in Connacht both *ao* and *aoi* > /i:/.

apparently fairly recently,¹⁵⁰ but in northern Scotland they remain robustly distinct in most varieties.¹⁵¹

3.2.2 *ua(i) /uə/*

G. *ua(i)* derives from breaking of /o:/ in the Early Old Irish period (*GOI*: 39–41; McCone 1994: 89). There is a certain amount of interchange between *ó* and *ua* at all periods, including in Manx (§3.4.5). This diphthong is spelt *ua(i)* in modern Irish and Scottish and generally remains a diphthong [u̠] or [u̠]. It is, however, sometimes smoothed to [u:], [o:] in certain environments and lexical items in some Irish dialects (O’Rahilly 1932: 193; Quiggin 1906: 21; de Bhaldraithe 1945: 87; de Búrca 1958: 116; Mhac an Fhailigh 1968: 136; Ó Curnáin 2007: 91–2). In Scottish dialects there may be a phonemic split into /u̠/ and /u̠/ (Ofstedal 1956: 97; Ó Maolalaigh 1997: 141).

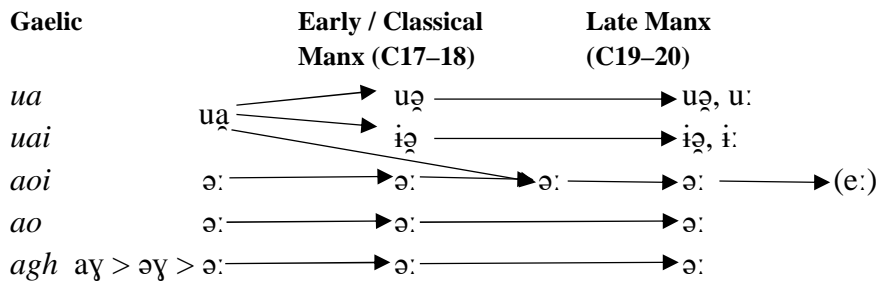
In Ulster *ua(i)* may be unrounded and fronted in certain environments (Quiggin 1906: 28–9; O’Rahilly 1932: 37; Wagner 1959: 77; Ó Dochartaigh 1987: 110–4). The similarity between this development and the fronted and unrounded reflex of *ua(i)* in Manx has been noted by scholars (Quiggin 1906: 29; Jackson: 52; *HLSM* III: 60; Ó Dochartaigh 1987: 112), but the conditioning factors seem to be quite different (§3.8).

3.3 Summary of Manx developments

The main developments of these phones in Manx may be summarized as follows (Figure 10), according to the analysis in the present chapter:

¹⁵⁰ For discussion of Ulster data see Ó Dochartaigh (1987: 114–21, 289–90). See also Ó Maolalaigh (1997: 670, 672), Maps 6, 8a, 8b.

¹⁵¹ For further discussion of the historical developments across Gaelic dialects, see Lewin (2018).

Figure 10. Main developments of G. *ua(i)*, *ao(i)*, *agh* in Manx

Thus it is claimed that a distinct phoneme /ə:/ survived throughout the attested periods of Manx, representing *ao(i)*, *agh* and some reflexes of *uai*, with the proviso that a degree of allophonic variation gave rise to merger of /ə:/, representing *aoi* and *uai*, to /e:/ in some speakers, as described by Rhÿs (25) (§3.5.1.4).

The situation with original G. /uə/ is more complex. Some items retain back /uə/ (with a tendency towards monophthongization to /u:/ in Late Manx), in certain cases with by-forms with /o:/ (§3.4.5), while others show fronting to /iə/ (> /i:/) (§3.4.3) or /ə:/ (> /e:/) (§3.4.4). Further items show both back and front by-forms, although one may be more commonly found than the other (§3.4.6).

The regular development of *uai* with following slender consonant is /ə:/, but there are exceptions where /iə/ is or may be found through paradigmatic analogy (*cleaysh*, G. *clua(i)s*; *geayltyl*, G. *guailne*) (§3.9.5) or other phonological developments (depalatalization of */rʲi/ in *keayrt*, G. *cuairt*) (§3.9.6). Despite orthographical overlap, there seems to be little evidence of merger or confusion between /ə:/ and /iə/, /i:/ (other than the above-mentioned *aoi* and *uai* items showing /ə:/), although the development of a form /giə/ for *geay* ‘wind’ (G. *gaoth*) in certain dialects or idiolects (also expected /gə:/) is a tabxcpti (§3.9.3).

3.4 Lexical items with *ao(i)*, *ua(i)*, *agh* etc.

The following tables (35–41) 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 which are dealt with in §3.9.

3.4.1 *ao* > /ə:/

Table 35. *ao* /ə:/ > /ə:/

	Phillips	CM pronunciation	etymology	English	HLSM
bleayst		/blə:st/	blaosc	husk, egg-shell	i:ə TC, i: TT
ceaghley		/kə:xlə/	claochlódh, ScG. caochladh	change	
cleayn (Bible, Cr.), cleoyn (Cr.); cleayn(agh)ey		/klə:n/, /klə:nə/	claochadh	enticement, propensity, seduction; entice, seduce, tempt	ī: JW, i:ə, iə TC
deyll (K.), tarroo-deyill (Cr.)		/də:l/	daol	beetle	
deyr	ýa (3), ýy (4), ýæ	/də:r/	daor	dear	e:, e: NM, e: JTK
deyrey	uæ, ý (2)	/də:rə/	daoradh	condemn	ei JW
Ph. dysyn, cf. deyrnys (Cr.)	ý (2), y, éy	*/də:ʃən/	ScG. daorsainn	dearth	
eayl		/ə:l/	aol	lime	ø, ø: TC, y:, i:, u:, λ: NM, e: ⁱ SK
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	i: HK, i:ə JW, ø: TC
gaer		/gə:r/	ScG. gaorr	short dung, ordure	
geay; geayagh (§3.9.3)	yei, ýæi, ya (2), ýa (3), ýæ (3), ye, ua, úa	/gə:/, /giə/	gaoth; gaothach	wind; windy	ʷi:, ʷi: i: (TC), i:ə, i: JK, λ:ə, e:, e:ə NM, λ: HK, i: TCr, qi, o-i W:S, r: J:JTK, HB

inney-veyl	éy, ýy (2), yy (2), ée	/in̩ə 'v̩ð:l/	inghean mhaol	handmaid, servant girl	ö TC, i: TT
keirn		/kə:r̩/	caorthann	rowan	
keyl		/kə:l̩/	caol	slender	i: JW, HK, NM, y: JW, u: HK
keyllys		/kə:l̩əs/	caolas	sound	i, y., ũ NM, y:, λ: HK, i JW
keynnagh		/kə:l̩ax/	caonach	moss	i: HK
keyrrey, gen. keyrragh	y (4), e (2)	/kə:r̩ə/, /kə:r̩ax/	caora, caorach	sheep	y: HK, NM, ɪ HK, i: NM, HK, e JK, ε
kirree (§§3.911, 5.5.1)	kirri, kiri	/kiri/, ?/kiri̩/	caoirigh, caoraigh, ScG. caoraich	sheep (pl.)	i, i: NM, i̩ HK, ɪ TC
kyagh (K.) ¹⁵²		/kə:x/	caoch	one-eyed, blind	
leaum (Cr.), lheyam (K.)		/lə:m/	laom	sudden heavy shower of rain	
meayl		/mə:l̩/	maol	bald	ø TC
meayllee		/mə:l̩i/	maolaidhe	hornless cow	ɛ: TC, e: J:NM
meoir		/mə:r̩/	maor	moar, bailiff, government officer	
seihll; seihlt(agh)	ýy (11), yy (5)	/sə:l̩/, /sə:l̩ax/	saoghal; saoghalta	world; worldly	e:ɪ, ɛ:, JTK, ö:, E:ɪ, E:, ɛ: JK, ɸ:, ø: TC, E: NM, ɛ: EK, ε: J:NM, e: JW, ö: W:S
seyr	y, ýy (3), éy (3), ey	/sə:r̩/	saor	free	i: JW
seyir		/sə:r̩/	saor	carpenter	ɛi TC, ɛ: HK, JW, ɛ:, e:, ë:, y: NM
seyrey	ýy (3), ya	/sə:r̩ə/	saoradh	acquit, free	ɛi JW
sleaydey; sleaydagh		/slə:də/, /slə:dax/	slaodadh	drag	ø TC, ö JW

¹⁵² The spelling of this item is unexpected in the Classical Manx orthography (perhaps representing diphthongization before /x/?), and it occurs only in Kelly, but is present in the first draft of the dictionary (MNHL MS 1477) so may be genuine. The derivative *kyaghan* ‘mole’ (G. *caochán*), found only in Kelly’s later manuscript (MNHL MS 1045–47) and the printed dictionary, is more suspect, as stress shift would be expected in a heavy-heavy item.

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	ɛ:, ɛ: HK, ɛ: TT
teaystney		/tə:s□/	taosnadh ScG.	knead	
un (§3.9.11)	y (13), ý, ú (2), u (2)	/un/	aon	one	o: JTK, ɛ:, E: JK, u: TK, ɔ: EKh, ɯ: J:JTK

3.4.2 *aoi* > /ə:/ (>/e:/)

Table 36. *aoi* > /ə:/ (>/e:/)

	Phillips	CM pronunciation	etymology	English	HLSM
aaie eayil, aaie gheayil		/ɛ:i (ɣ)ə:lɪ/	áith aoil	limekiln	
deiney	é (3), e (4)	/dɛ:nɪə/	daoine	men	e: NM, JK, J:EK, ɛ: JK, ö: JK
eash	yá, ýæ, áy, ey (2), êýy, úe, ué	/ə:j/	aois	age	i: TK, HB, ɛ: NM, JK
eoylley	ýy	/ə:lə/	aoileach	dung	ɛ: JW, HK, e: TK
feoilt(agh)	ei (2), êy	/fə:lɪtɪ/	faoilte(ach)	generous	fix (?) NM, fɛ'o:l't', fɛ'o:l't' (sic) TC
feysht	ey, yá (2), úea, uá, eay, úey (2), ýey, æy, áy, úe, uéy, yé, éye, éâ, ua, yey	/fə:ftɪ/	faoiside	examine, question	
geaysh(t)		/gə:ʃ(t)/	gaoisid	animal hair	i: TC, ɛ: JW
Jecrean (Cr.), Jy-curain (K.)		/dʒɛ'krə:nɪ/	Dia Céadaoin	Wednesday	ɛ: WQ, HK, JW, ɛ: NM

Jeheiney (Cr.), Jy-heney (K.)	é (2)	/dʒe'hə:nʲə/	Dia hAoine	Friday	ø: TC, ɸ: HB, JW, WQ, e: NM
Jerdein (Cr.), J'ardain (K.)	ey	/dʒar'də:nʲ/	Diardaoin	Thursday	ø: TC, ei WQ, e: NM, ɸ: HK
keayney	e, é, æ (2), ee, ýe	/kə:nʲə/	caoineadh	weep, cry	ɸ: HK, e. SK, e: JK, ɸ:
keiyn (Bible, Cr.), keayn (Cr.), keain (K.) ¹⁵³	éy	/kə:nʲ/	caoin	kind, delicate	
meaish (Cr.) meays (K.)		/mə:ʃ/	maois	mease, measure of herring	ɸ JK, e: TL, mɸ:s JW
riyr (see §3.9.4)		/rairʲ/	araoir, aréir, EIr. irráir	last night	rɑ:r, rɑiər NM, rɑ:r, rɑ:iər JW, rajə W:N
skeayl(1)ey; skeayltagh	e (6), é, ýa, y (2), ý, ýy, éy (2), îê, æy, ai, ey	/skə:lʲə/	scaoileadh	spread, scatter	ɸ: TC, JW, HK i: JTK, e: TK, ɸ: NM
tarroo-deyill		/, taru 'də:lʲ/	*tarbh daoil	bull-worm	

3.4.3 *ua* > /iə/, /i:/

Table 37. *ua* /uə/ > /iə/ (>/i:/)

	Phillips	CM pronunciation	etymology	English	HLSM
beayn; co- beayn	úa (4), ýâ, ýa (2), ya	/biəni/	buan	eternal, lasting; co- eternal	i SK
beaynee	úa	/biəni/	buanaidhe	reaper	i: TC
beoyñ		/biəni/	buan ?	tendency, drift, instinct (Cr.), 'necessity, fate' (K.)	
cheayll, geayll	ýy (7), yy (2), ý	/xiəl/, /giəl/	chuala	heard	y NM, i, 'i TC, i: HK
creagh		/kriəx/	cruach	rick, stack, heap	i: TC, JW, HK, iə JK, i

¹⁵³ 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.

					DC, NM, y: HK, i:ə JTK
creoghys, creoighys; creoghan (K.)	ye, yey, ýo, úa, iy	/kriəxəs/	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	/diərtə/	dortadh, doirteadh, *duartadh	pour, spill	i: TC, ü:³, λ: NM, i JTK
eaghtyr	iy (3)	/iəxtər/	uachtar	surface	ɛ: TC, i: TT, JW
eayn	ey (2), éy (2), áy (2), æy, eâý, eay, yea, yeä, yêa, yéa, ýea, ýe, êya	/i(ɣ)ɪəɲ/	uan	lamb	e: EK _h , i: JTK, HK, ε J:EK, λ: NM
feaysley, feayshil	ýa (5), ya (8), iâ, ia (2), ýâ, ea, ue, yá	/fiəslə/	fuacladh	untie, release, relieve	fɛ:ɫə TT, fɛ:l'ə HK
feoh	ûý, ua (3), ýa, uá, úa (5), úua	/fiə/	fuath	hate	i:ə TT, ɛ:o TC, HK, jo: JW, ɛo:, e'o: TC ¹⁵⁴
geayl	ýy	/giəɫ/	gual	coal	i EK _h , W:N, W:S, y: NM, EK, HK, u: HK, λ: NM, i: TT, JK, HB, ɛ: JTK, ö: J:EK, r: J:TL, i J:JK
geaylin	ýa	/giəɫəni/	gualainn	shoulder	iə TC, i: EK _h , ɛ: SK, i JK, ö: J:EK, i W:S
keayn	ie, êy, ýa	/kiəɲ/	cuan	sea	i JK, TC, W:N, TK, W:S, ɛ HB, r: J:JTK, J:JK, J:HB, y:, JW λ, λ: HK, ü, y NM, r, i. W:S, ö, ε J:EK

¹⁵⁴ All except TT's are clear spelling pronunciations.

leagh	úa (7), uá	/liəx/	luach	value, reward	i:ə TC, JW, i: TT
leah	ýa, iæ, iǣ, úa (3), ua (3), ýæ	/liə/	luath	early, soon	i:ə JTK, yə NM, i: HK
leaystey		/liəstə/	luascadh	swing, rock, reel, stagger	i: TC, JW, le:ft'ə W:S
leaghyr, laghyr, leoighyr (Cr.), leeaghar (K.)		/liəxər/	luachar	rushes	
leoh (Cr.)		/liə/	luaith, gen. luatha	ash (gen.)	
Lhein, Lheiun (Cr.)		/liən/	Luan	Monday	
skeab	y (2)	/skiəb/	scuab	brush, broom	i: TC, JW, JK, HK, WQ, i TC, HB, i. JK
sleayst		/sliəst/	sluasaid	shovel, fan	
theyy, theo (Cr.)	ua	/tiə/	tuath	common people	

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

Table 38. uai /uə/ > /ə:/ (>/e:/), /iə/, (>/i:/)

	Phillips	CM pronunciation	etymology	English	HLSM
cleaysh	ye, ua (2), úa (6), úa, ya (4), ýa (6)	N /kliəʃ/, S /klə:ʃ/	clua(i)s	ear	i TC, JK, ö: J:JTK, W:S e: HK, ɛ: JW, NM e:ī Ekh, ɪ HB, ɪ, ɪ: HB, J:JTK, e:i SK, ε: J:TL
eayin	iĕ (2), yĕ, yǣ	/(y/j)iəni/, /(y/j)ə:ni/	uain	lambs	ɛ: EKk, NM, HK i NM, ɛ:, e:, i: HK
geayltn	ýy	/giəltʃən/	*guailtean, G. guailne, ScG. guailnean	shoulders	iə TC, i NM, W:S, i: NM
g(h)eayney	ûŷ, iæ	/(y)ə:nə/	uaine	green	ø: TC, ɪ W:S
gleashagh(t)	y, ýa (3), ya, yy	/glə:ʃax(t)/	gluaiseacht	move	ɛ: JW, TT, e: NM, i: TC
Ph. ienchys etc.	ie (2), e, æy	*/ə:ntʃəs/	uain	opportunity, leisure	

Jelhein (Cr.); Jy-luain (K.) Jelune, Jelhuin (Cr.) ¹⁵⁵	í, iy, úey	/dʒeˈlɔːni/	Dia Luain	Monday	i JK, JTK ø TC, iɔ JTK, eː, e: HK, ei JW, WQ, eː, eː NM
keayrt	iy (5), íy, íy (2), ýi, yi, iê, eiy, yy (2), ýy, iý	/kiərt/	cuairt	time, occasion	i HB, JK, i: JW, y NM, ö: HK, i HB
lheihll (Bible, Cr., K.), lheill (Bible), lheil (Cr.)		/lɔːli/	luadhail ¹⁵⁶	motion, power of movement	
mygeayrt	iy (8), îy (2), îy (2), yi (2), iý, i (2), y, éy	/məˈgiərt/	ma gcuairt	around, about	i: TC, JW, TT iɔ HB, i:, iː, i, λ: JK, i.ə, iə W.N, ö:, i: NM, J:EK, J:TL, ü, y, é, i, i, e NM
neayr's		/n ⁰ iərs/	? an uair agus	since	i: JW, i NM, JK
treickney, treicknane (Cr.), tratney, traitney, tratneayn (K.)		/trɛ:k'nə/, /trɛ:t'nə/; /trik'i n'e:n/, /trit'i n'e:n/	tuairgneadh, tuairgnín	beat; beetle, mallet	

3.4.5 *ua(i)* > /uə/, /u:/, /o:/

There are a number of items which categorically retain back /uə/ (>/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 see *deayrtey* (§3.9.8). There are also a number of items with both fronted and unfronted variants (§3.4.5). Included here are those items with G. *uaidh* which retain back /uəi/; for other diphthongs arising from *ua(i)* + vocalized fricatives, see §3.9.1.

¹⁵⁵ Spelling based on supposed etymology.

¹⁵⁶ Apparently treated as > *luail*, or via */lɔːi.əl/, cf. *seihll* (§3.4.1).

Table 39. *ua(i) /uə/ > /uə/ (>/u:/), /o:/*

	Phillips	CM pronunciation	etymology	English	HLSM
booa	uó	/buə/	bó, cf. dat. pl. buaibh; buachaille etc.	cow	bu:ə NM, HB, bua TC, (pl.) bu:əxən , bəuxən , bəuhən TC, bə:rən JTK
druaiaght (Bible), druaight (Cr.), druiagh(t) (Bible, K.), cf. drualtys, driualtys (Cr.) (§3.9.10)		/druəiəxt/, ? /drə:iəxt/	draoidheacht, druadh-	enchantment	
dwoaie; dwoaiagh, dwoaioil	dûôî, duoi; (<i>dwoaioil</i>) duoiyl, duoióyl, duoióel	/duəi/	duadh (Ir. m.), duaidh, ScG. duaidh (f.)	hate, dislike	ui JW, TT
groamagh (Cr., K., Bible), grooamagh (K.)		/gro:məx/, /gruəməx/	gruaimeach	gloomy, sorrowful, sullen	o: JW
gruaie		/gruəi/	gruaidh	cheek; grimace	ui TC
mooar	ua (5), úa (10), úy, úay	/muə/	mór, Munster Ir. muar	big, great	u: TC, TK, TL, W:S, NM u:ə TC, JK, NM, o:ə NM, u: J:TL, J:EK, J:JTK, J:HB, u:ə J:EK, J:JTK, J:HB
smooïnaghtyn (§3.9.9)	ú (11), u (5), úi (2), ui, uy	/smu:nəxtən/	smuain, smaoin	think, thought	u JK, HB, NM, u: TC, ï W:N, W:S, sma:əxin Myl
stoamey, stooamey		/sto:mə/, /stuəmə/	stuamdha	comely	ō: , ū: TC, o: JW
tuarystal (Cr, K., Bible), tooarystal (SW)		/tuəɾəstal/	tuarascbháil	appearance, form, resemblance	

twoaie	uoi (2), ûôi, ûêi	/tuəi/	tuaidh	north	ui, u-i JK, NM, ui J:EK, J:JTK, u:i W:N, û:i W:S
twoaie; twoaiagh	uôi (2), ûôi (2), uói, oi, ôi	/tuəi/, /tuəjax/	tuaith (Dinneen)	beware; wary	

3.4.6 *ua(i)*: items with variable reflexes

Table 40. *ua(i)* /uə/ > /iə/ (>/i:/), /ə:/ or /uə/ (>/u:/), /o:/

	Phillips	CM pronunciation	etymology	English	HLSM
clooiesag (Cr.), ¹⁵⁷ cleayshteig (K.)		? /klu:isag/, /klə'ʃtʰiŋg/	ScG. cluasag	pillow, bolster, cushion	
feayr	úa, iyá	/fiəɾ/, fuəɾ/	fuair	cold	u ^o NM, i:ə TC, TL, DC, HB, i: TT, i:ə HB
feayght, feayraght	ya	/fiəxt/, /fuəxt/, /fiəraxt/, /fuəraxt/	fuacht	cold, coldness	i:ə, i TC, u ^o NM, u: HK
heose, seose, neose	ua (6), úa (14), uá (4), u, ya (2)	/hiəs/, /huəs/, /ho:s/	thuas, suas, anuas	up	ö: JW, EL, DC, J:NM, u HB, TC, ë:s, ëi, ê: , ei: NM, y: EK, HB, o: EL, u: TC, JTK, ɔ: J:EK
hooar, dooar, fooar (PC, Ph.)	éy (12), áey (2), ey (3), æy (4), óy (2), eý, êý, ýy, uóe, ûêy	/huəɾi/, /hə:rɪ/	fuair	got, found	u:ə JTK, HK, u:ə, u: , u: NM, u: , u:ə W:N, ɛ: HK
ooasle; ooashley	ýa (10), yá, ya (5), yæ	/uəsəl/, /wusəl/; /uəʃlʲə/, /wuʃlʲə/	uasal; uaisle	noble, worthy; worship, honour	uʲʃli J:EK, mi: 'wu:ʃl'ə TC

¹⁵⁷ Cregeen's form is apparently influenced by *clooie* 'small feathers, fur' (G. *clúmh*, ScG. *clùimh*, *clòimh*), as further suggested by his definition of *clooiesag* 'a bolster of feathers'.

Fronted reflexes of *ooasle* appear to be restricted to Phillips, (see §3.6.1.2) although *ny seasley* (PC 1796 l. 3424) may represent the comparative (Thomson 1995: 138).

3.4.7 *agh, adh* > /ə:/

The interaction of *adh/gh* (excluding those items which give /V_i-diphthongs) with the *ao(i)* set in Manx is not immediately clear, primarily because few examples of the *adh/gh* set are found in which the development of historic /a/ can be determined. Several items found in other Gaelic varieties, such as *adhradh*, *ladhar* are not attested in Manx, and in other items the realization of *adh/gh* is obscured by later developments, as with *oyr* ‘reason’ (G. *adhbhar*) (§3.4.7.3).

However, if <eo> in *leodaghey* ‘decrease, diminish’ (G. *laghdaghadh*) means /ə:/ as in *feoilt* ‘generous’ (G. *faoilte*), *eoyley* ‘dung’ (G. *aoileadh*), *freoagh* ‘heather’ (G. *fraoch*), *meoir* (Cr.) ‘official’ (G. *maor*), and <eay> in *reayrt* means /ə:/ as in *keayney* ‘crying’ (G. *caoineadh*) etc. (§3.6.2), then it seems likely that *adh/gh* became /ə:/ and merged with *ao(i)* as in southern Scotland (Ó Maolalaigh 2006; Lewin 2018). TC’s **l'ɛ'o:daxə** is clearly a spelling pronunciation (§1.6.9.2). Other items are discussed below.

Table 41. *agh, adh* /ay/ > /əy/ > /ə:/ and other developments

	Phillips	CM pronunciation	etymology	English	HLSM
leodaghey	y (3)	/lə:daxə/	laghdaghadh	decrease, diminish	l'ɛ'o:daxə TC (<i>sic</i>) ¹⁵⁸
eairk	éyrk, erick (3), áerick, (pl.) érikyn, ærikyn, æyrkyn, áerkyn, ærkyn	/ə:rk/	adharc	horn	ɛ:k JW, e:qk , e:ak , iak NM, ö:rk HK, el'k W:N, pl. ɛ:kən JW, erkən TC, ɛ:kən , ɛ:rkən JK, ɛ:akən NM, el'kən W:N
earkan		/ə:rka□/	adharcán	lapwing	
reayrt		/rə:rt/	radharc	view	rɛ:t NM

¹⁵⁸ Spelling pronunciation.

eab		/ə:b/	ScG. aghaib (O’Rahilly 1926: 36)	attempt, effort	
oyr	óer (3), oer, óeyr (2), oeyr (2), oéyr (2), óyr (5)	/o:r/	adhbhar	reason	ɔ:ər NM, ɔ:r TC
yummyd	y, ý	/iməd/	adhmad	use	ɪməd̪ JW, ɛməd̪, eməd̪, eməs, imid
Roonysvie		/,ru(:)nəs'vai/	*Raghnasbhagh	Ronaldsway	'rɪnəs'vɑ:i JW
Crennell		/krenəl/	Mac Raghnaill	(surname)	

Although *adharc* and *radharc* seem to show /aɣə/ > /ə:/, the more common development of *agh*, *adh*, *ogh*, *iodh* in intervocalic or final position is /aɣə/ > /[ə]ɣə/ > /əjə/ > /əj/, as in the following items:

cleigh, *cleiy* /kləj/ ‘hedge; dig’ (G. *cladh*), *eiy* /əj/ ‘foot lock’ (G. *iodh*), *eiystyr* /əjstər/ ‘halter’ (G. *adhastar*), *eiyrt* /əjrt/ ‘chase, follow’ (G. *adhairt*), *feiyr* /fəjɹ/ ‘noise’ (G. *foghar*), *fuygh* /fəj/ ‘wood’ (G. *fiodh*), *leigh* /ləj/ ‘law’ (ScG. *lagh*), *leih* /ləj/ ‘forgive’ (G. *loghadh*), *reih* /rəj/ ‘choose’ (G. *rogha*), *teiy* /təj/ ‘choose’ (G. *togha*), *oaie*, *oi* /əj/ ‘face, front’ (G. *aghaidh*).

3.4.7.1 *eab* ‘attempt’

So far as is known, this item and its derivatives are attested only from Cregeen, who defines *eab* as ‘an attempt, effort, or push; to say or do some thing’, and *eabee* as ‘a person, &c. partly taught, formed or planned to some particular work or use’. He also gives a verb *eabbey* ‘attempt, &c. [...] form or plan’, *eabit* ‘planned, formed, cut out, marked, &c’.

O’Rahilly (1926: 35–6) links this to ScG. *aghaib* ‘attempt, essay, trial’ and compound form *comhaib* ‘contention’, which he derives from < **ad-od-be* (O’Rahilly 1926: 36), and compares with the more frequent ScG. form *oidhirp* ‘effort’, M.Ir. *aidirbe* < **ad-air-ess-be*, and Ir. *fobha*, *fogha* ‘attack, attempt’ < OIr. *fubae*, *fo-ben*. If O’Rahilly’s etymology is correct, *eab* presumably represents /ə:b/.

3.4.7.2 *eairk* ‘horn’, G. *adharc*

There are no <y> or <yy> spellings for this item in Phillips, and forms such as *árick*, *erick* may represent a metathesized form **adhrac*. A form *adhraic* is reported in South Uist and Barra (Campbell 1972: 218) and Tíree (Ó Maolalaigh 2008b: 520); compare also the Sutherland form represented as *earag* by Dwelly. A form /e:rk/ could develop via /ejərɔk/, /eiərɔk/ if *adh* followed the usual development in stressed coda position rather than the preconsonantal development as found in *leodaghey*.

3.4.7.3 *oyr* ‘reason, cause’, G. *adhbhar*

G. *adhbhar* is found as *oyr* in Manx (*oer*, *oeyr* and similar in Phillips), apparently representing /o:r/ (cf. *HLSM* II: 344). It is impossible to tell (cf. Ó Maolalaigh 2006: 58–9) whether this represents merely loss of /ɣ/, followed by vocalization of /v/ (i.e. > *abhar*, cf. Manx *doagh* /do:x/ ‘vat’, G. *dabhach*), or the same with compensatory lengthening (i.e. > *ábhar*, cf. Manx *foayr* /fo:r/, G. *fábhar*, Eng. *favour*), or with modification of the quality of /a/ as found in Scotland, since *faobhar* seems to develop in the same way as items with *a* and *á*, to Manx *foyr* /fo:r/, though also apparently with /u:/ from one speaker (Jackson 1955: 49, *HLSM* II: 176).

3.4.7.4 *abane* ‘ankle’, EIr. *odbrann*, ScG. *adhbrann*

EIr. *odbrann* ‘ankle’ has a peculiar development in Manx to *abane* (Cregeen, Kelly), *abbane* (Bible) /a'be:n/. Ó Maolalaigh (forthcoming b) posits a derivation of the modern forms from an earlier **adhbarn* (< EIr. *odb* ‘knot, lump’, Ir. *fadhb* ‘knotty problem’ + **sperno/ā* ‘heel’). The (presumably early) loss of /r/ in an unstressed cluster in the Manx form would have a parallel in *maggie* ‘testicle’ (G. *magairle*) (§4.2.2.2), with the resulting /ən/ being remodelled under the influence of the diminutive ending *-án* (cf. §4.4.7.3), as in certain Scottish Gaelic dialects (ibid.: 262). It is also possible that the *-án* ending is an early substitution for earlier *-arn* if the latter had been reanalysed as a singulative or diminutive termination, as suggested by the

Scottish variant *adhbairne* (Ó Maolalaigh forthcoming b: 261; cf. O’Rahilly 1931: 66–9) and Ir. *fadhbairne* ‘lumpy object’.

The stress shift obscures the development of the first syllable, but since non-initial stress is strongly correlated with the historical presence of a long vowel or diphthong in the first syllable (§5.1), it is likely that this was earlier */ə:ba:n/ **adhbán*.

3.4.7.5 *yummyd* ‘use’, G. *adhmad*

Manx *yummyd* ‘use’ apparently represents Irish *adhmad* and is attested with initial [ɪ] and [e] (*HLSM* II: 480). For the short vowel in a polysyllable, see §5.5.1; presumably the earlier form was */ə:məd/.

3.4.7.6 G. *Raghnall* (N. *Rognvaldr*) in *Roonysvie* and *Crennell*

The name *Raghnall*, N. *Rognvaldr*, is not attested independently in Manx as far as is known, but is present in the Norse place-name *Roonysvie*, *Runnusvei*, *Runesvie* ‘Ronaldswey’, ‘ru:nəs’vɔ:i (JW, *HLSM* II: 509) (Norse *Rognvalds vað* > G. **Raghnasbhadh*) (*PNIM* VI: 161–4) and the surname *Crennell* (< *Mac Raghnaill*). The first vowel may apparently be long or short, presumably because the stress is on the final syllable. According to Broderick (*PNIM* VI: 164) ‘[t]here is no obvious reason for /u:/. The entry for 1770 [Runnusvei] suggests a short vowel, which would agree with its unstressed position’. However, we might also compare Manx *un* < *aon*, and Manx *red*, G. *rud* < *réad*, *raod*, both of which may represent special developments of /ə:/, /e:/ under light stress. The short vowel in *Crennell* may be explained by the widespread phenomenon of stressed long vowel shortening in polysyllables (§5.5.1).

3.5 Previous accounts of Manx *ao(i)*, *ua(i)*

3.5.1 Rhÿs

Rhÿs (11–28) devotes considerable space to the Manx reflexes of G. *ao(i)* and *ua(i)*, and evidently appreciated the complexity of the topic (Lewin 2019a: 94). His fieldwork notebooks include lengthy tables of realizations of items containing *ao(i)* and *ua(i)* from different informants arranged in parallel columns (Broderick 2018c: 52–6):

The Manx reflexes of G[aelic] *AO(I)*, *UA(I)* [...] seemingly became a fetish with Rhÿs. Practically every speaker he interviews is asked questions on this aspect of Manx phonology.

(Broderick 2018c: 47)

Although Rhÿs's descriptions are not without their ambiguities, they are an extremely important source for this topic, providing evidence of the pronunciation of more conservative, Manx-dominant speakers born in the early nineteenth century.

3.5.1.1 *ao* > \bar{y} [ə:]

According to Rhÿs (17), the regular realization of G. *ao* before a broad consonant in Manx is a phone \bar{y} , with examples given including *keyrrey* 'sheep' (G. *caora*), *meayll* 'bald' (G. *maol*), *seihll* 'world' (G. *saoghal*). This sound is stated to be 'nearly identical with the *eu* in such French words as 'jeune' and 'peur', which suggests [œ:]. However, it is also defined as 'the long vowel corresponding to the short one last discussed'. This short *y* is described as follows:

By short *y* in Manx I mean the sound of North Cardiganshire pronunciation of the words *yn* 'in,' and *yr* 'the:' to my hearing it is identical with that of *u* in the English words 'but' and 'gun.'

(Rhÿs: 14)

The Welsh comparison suggests [ə],¹⁵⁹ but the English presumably refers to RP [ʌ].¹⁶⁰ The vowel in French *jeune* ‘young’ and *peur* ‘fear’ would be expected to be open-mid [œ] rather than close-mid [ø] in *jeûne* ‘fast’ (cf. Fougeron and Smith 1999).¹⁶¹ However, [œ] appears to be the value intended by Rhÿs for his *œ*, which he describes as ‘a rounded *ě* like the *ö* of the German words ‘brödchen’ and ‘hölle’ (Rhÿs: 21). Since Rhÿs clearly intends a distinction between *ȳ* and *œ*, the latter being more clearly defined, perhaps *ȳ* should be understood as a somewhat higher vowel. It is worth noting the following comment by Strachan (1897: 54), casting doubt on the identity of quality of *ȳ* and *y*, which would suggest that *ȳ* does not have quite the same quality as short [ə]:

As to symbols, *ə*, *œ*, *ü*, *y*, and *ȳ* have been used as in Prof. Rhÿs’s *Outlines of Manx Phonology*, though I am not quite sure that *ȳ* is exactly the long sound of *y*.

(Strachan 1897: 54)

Notwithstanding this uncertainty, it will be assumed that *ȳ* = [ə:] for the purposes of the following discussion. More important than the exact value of the vowel Rhÿs heard, or thought he heard, is his testimony that *ao* had a largely consistent realization as this *ȳ*, and showed no signs of falling in with /i:/ or /e:/, unlike *aoi* and *uai* (see below §3.5.1.4).

3.5.1.2 Allophonic realizations of *ao*

Rhÿs (17, 21) notes realizations of *eayl* ‘lime’ (G. *aol*), with *œ*, *œ* [ə(:)] or *ü* [i:] (?), which he surmises represents the genitive *aoil* as in *clagh eayl* ‘limestone’, G. *cloch*

¹⁵⁹ According to Ball and Williams (2001: 35–6), Welsh /ə/ is somewhat fronted [ə̠] in both northern and southern varieties.

¹⁶⁰ It is possible, however, that Rhÿs’s status as an L2 speaker of English, his L1 being North Ceredigion Welsh, may have affected his perception of English, notwithstanding his prominent position in British elite society. In Rhÿs’s lifetime RP /ʌ/ appears to have been predominantly a back vowel, although later twentieth-century accounts describe fronting in the direction of [ə] or [æ] (Bauer 1985: 67).

¹⁶¹ *jeune* [ʒœn], *jeûne* [ʒø̃n], *peur* [pœ̃r] <<https://www.collinsdictionary.com/dictionary/french-english/>> [accessed 26.08.2019].

aoil. Similarly, a realization of *meayll* ‘bald’, G. *maol* as **vœl** is noted ‘as if representing a dative feminine *maoil* in Irish’ (though he does not comment on the quality of the lateral). The short versions of these vowels are noted also in *Gaelg* ‘Manx Gaelic’ (G. *Gaoidhealg*), which Rhÿs (21) states he has ‘heard fluctuate between **Gœlc** and **Gülc**’ (§3.9.1.1). Of short **ü** he writes that ‘[i]t is met with in Manx mostly before *l* in such of the following instances as are monosyllables, but elsewhere it is more commonly long, as will be pointed out under the respective instances’ (§4).¹⁶² These realizations are presumably to be understood as allophones of /ə:/.

3.5.1.3 *ua* > **ũy** [uə], **üy** [iə], **iy** [iə]

According to Rhÿs (19), ‘**ü** represents the Goidelic diphthong *úa*, and the pronunciation fluctuates between **ua**, **ũ**, **ü**, and **i**’. Although **ũ**, **ü**, and **i** are presented here as monophthongs, transcriptions in the subsequent discussion suggest that they were often diphthongal, as in the historical *ua*, with a schwa off-glide. When monophthongal, it was usually long, but short in certain instances:

It [short **ü**] is met with in Manx mostly before *l* in such of the following instances as are monosyllables, but elsewhere it is more commonly long.

(Rhÿs: 19)

Rhÿs describes the phonetic value of **ü** and **ũ** as follows:

By short **ü** is meant that occurring in the German word ‘dünn’ and ‘üppig.’... by **ũ** I mean a sound considerably more rounded than *ü*, and reminding one more clearly of the *u* which is here the starting point.

(Rhÿs: 19)

¹⁶² Cf. Terminal Manx **klax y:l clagh eayl** (JW) (also **i:l**, **u:l**, **λ:l** (NM), **e:l** (SK), **ø:(:l** (TC) (*HLSM* II: 140), and **ky:l keyl**, G. *caol* (JW), **xu:l** (HK), also **ki:l** (JW, HK, HK) (*HLSM* II: 249).

On the face of it, the only difference between **ü** and **û** would seem to be the degree of rounding, i.e. **ü** = [y] and **û** = [ɯ]. However, ‘reminding one more clearly of the *u* which is here the starting point’ may in fact refer to degree of backness. This is further supported by James Murray’s interpretation of Rhÿs’s pronunciation of these sounds which Rhÿs quotes as follows:

He [Murray] describes the *u* of *fuyr* as originally ‘a high-back round vowel,’ which became successively ‘high-back mixed, like the Swedish *u*’; then ‘a high-front round vowel, like the German *ü*,’ and finally, owing to ‘the loss of the rounding,’ an open *i*.

(Rhÿs: 20)¹⁶³

There are reasons to be doubtful about the descriptions of rounding here (§3.5.6), and we shall interpret the descriptions as referring to degrees of back to central unrounded vowels, so **û** = [ɯ], **ü** = [i]. This symbolization should not be understood as precluding a degree of rounding, however. Rhÿs gives the following examples of such realizations of G. *ua*:

feayr ‘cold’, G. *fuar*: **füyr** [fuəɾ], **fûyr** [fɯəɾ], **füyɾ** [fiəɾ], **fiyr** [fiəɾ]
beayn ‘lasting, eternal’, G. *buan* (no transcription given)
keayn ‘sea’, G. *cuan*: **küyn** [kiəɲ], **kÿyn** [kiəɲ]
eayn ‘lamb’, G. *uan*: **ghüŷn** [ɣɯəɲ], **ghÿŷn** [ɣiəɲ], **ghiŷn** [ɣiəɲ]
leagh ‘reward’, G. *luach*: **lüagh** [liəx], **lÿygh** [liəx]
leah ‘early, soon’, G. *luath*: **lÿŷ** [luə], **lüə** [liə]
they ‘common people’, G. *tuath*: **tüə** [tiə], **tiə** [tiə]

According to Rhÿs, (20), historical *ua* was monophthongal, often short, and always **û** and **ü** before [l]:

In the case of *ua* followed by *l*, the only pronunciations which I have heard are **û** and **ü** (never *i*), and the vowel is now mostly cut short

(Rhÿs: 20)

¹⁶³ Rhÿs adds the cryptic comment ‘[h]ad he heard the *u* sound from a Manxman I am not sure that he would not have pronounced it to be simply an open *u*’.

The following examples are given:

geayl ‘coal’, G. *gual*: **gûl** [gʷɪl], **güil** [gɪl]
cheayll, *geayll* ‘heard’, **gûl** [gʷɪl], **güil** [gɪl]
geaylin ‘shoulder’, pl. *geayltyl*, G. *guala(i)nn* (see §3.9.5)

Rhÿs (20) states that the realization of *leagh* ‘reward’ (G. *luach*) was monophthongal in the south **lũgh** [lu:x], and he heard a realization of *they* ‘common people’, G. *tuath*, as **tü** [ti:] from ‘a native of Dalby’ (on the west coast south of Peel).¹⁶⁴

The instances in Phillips of *geayl* ‘coal’ and *cheayll* / *geayll* ‘heard’ all have spellings which suggest a monophthongal pronunciation: one instance with <ýy> for the former and for the latter, seven instances of <ýy>, two of <yy> and one of <ý>. No spellings suggesting a diphthongal realization, such as <ya> or <ua>, are found for these items (see also §3.6.1.2 for discussion of Phillips’ orthographic representations). For *geaylin* only one instance occurs in Phillips, with <ya>, suggesting the regular diphthongal reflex of *ua*. The one instance of the plural has <ýy>, which may suggest the regular development of *uai* to /ə:/.

All the realizations of *geayl* ‘coal’ in terminal speech have monophthongal realizations, sometimes short. Southern **gy:l** (NM, EK and HK), **gu:l** (HK) and possibly **gλ:l** [gʷɪ:l] (NM), **gö:l**¹⁶⁵ (J:EK) probably represent the sound that Rhÿs heard, but the most frequent realizations are with **i:** (EKh, TT, south; JK, HB north), **ɪ:** (J:TL south), or short **i** (W:N/S) or **ɪ** (J:JK, north) (*HLSM* II: 188). There is also **ɛ:** (JTK, north).

For *cheayll* / *geayll* ‘heard’ we find **kyl** only from NM, **xi:l** from HK (both south) and **kɪl**, **kʷɪl** (TC, north), and also **ha** ‘**gɪl** *cha* *geayll*’ (TC, W:S). For *geaylin* we find

¹⁶⁴ Although possibly to be considered part of the north, according to the traditional administrative division (§0.8).

¹⁶⁵ Jackson explains his **ö** as ‘a slightly retracted central ö, very poorly rounded, further back and more open than ø in French *peu*, and somewhat closer than æ in French *pleure*; though occasionally it is open enough to write æ.’ Broderick (*HLSM* III: 44) explains his use of **ö** as follows: ‘In certain circumstances /ə/ can be realized as [ö] or [ö:] (i.e. articulated with a degree of retraction and lip-rounding)’.

diphthongal **iə** (TC), but also **i:** (EKh), **ɛ:** (SK), **i** (JK, HK), **ī** (W:S). In the plural we have **iə** (TC), **i** (NM, W:N) and **i:** (NM).¹⁶⁶

Strachan (1897) also gives monophthongal **ū** for G. *ua*:

χū *cheayll* ‘heard’, G. *chuala*
kū^{dn} *keayn* ‘sea’, G. *cuan*

3.5.1.4 *aoi* and *uai* > **œ** [ɤ:]

According to Rhÿs (22–6), **œ** is the regular reflex of both *aoi* and *uai*. The value of **œ** is defined by reference to the short vowel, described as followed:

By this I mean a rounded *ɛ* like the *ö* of the German words ‘brödchen’ and ‘hölle’: it occurs in Manx in a few words in which it is a shortening of long *œ*.

(Rhÿs: 21)

The vowel **œ** is defined as ‘Open *e*, short...so far as I can judge, that of *e* in the English words ‘get’ and ‘men’ (Rhÿs: 5), i.e. [ɛ]. These descriptions would suggest that **œ** represents front rounded mid-low [œ:], but again the degree of rounding is unclear (§3.5.6), and **œ** is therefore interpreted as a lowered version of **ȳ** [ɔ:]. This is noted as varying with **ē** [e:] in at least some items. The following items with G. *aoi* giving **œ** are given:

seihill ‘world’ (gen.?), G. *saogha(i)l*: **sœl** [sɤ:l]
seyir ‘carpenter’ (gen.?), G. *saoir*: **sœr** [sɤ:r]; a[ɪ] i[ɪ] Mac y Tœr [makə'tɤ:r]
 surname ‘Teare’, G. *Mac an tSaoir*
eash ‘age’, G. *aois*: **œsh** [ɤ:ʃ], **esh** [e:ʃ]
deiney ‘men’, G. *daoine*: **dœñey** [dɤ:nʲə], **dēñey** [de:nʲə], (voc.) **ghœñey**
 [ɣɤ:nʲə], **ghēñey** [ɣe:nʲə]
feysh ‘examine, question’, G. *faoiside* (no transcription)
skeayley ‘scatter, spread’, G. *scaoileadh* (no transcription)
Jeheiney ‘Friday’, G. *Dia hAoine*: **hœney** [hɤ:nʲə], **hēney** [he:nʲə]

¹⁶⁶ It should be noted that some of the attested forms show apparent confusion between the singular and plural, with non-palatalized [l] appearing in TC’s plural **giəltən** and palatalized [lʲ] in some of the singular forms such as SK’s **g’ɛ:l’ən**. Confusion between broad and slender consonants is apparently common in terminal speech (Broderick 1999: 90).

Jerdein ‘Thursday’, G. *Diardaoin*: **Jyrdǣñ** [dʒərˈd̪əːnʲ], **Jydǣñ** [dʒəˈd̪əːnʲ]

Rhÿs (23) states that **ǣ** can also ‘represent [...] *uai* or the umlaut of the Goidelic diphthong *ua*’. The following items are given:

Jelhein ‘Monday’, G. *Dia Luain*: **Jylǣñ** [dʒəˈl̪əːnʲ] ‘rhymes with *Jardain* pronounced **Jy(r)dǣñ**’
keayrt ‘time, occasion’, G. *cuairt* (no separate transcription)
mygeayrt ‘around’, G. *má gcuairt*: **myzǣrt**, **myziǣrt** [məˈgʲəːrt]
eayin ‘lambs’, G. *uain*: **ghǣñ** [j̪əːnʲ]¹⁶⁷
geayney ‘green’, G. *uaine*: **ghǣñey** [j̪əːnʲə], **ghēñey** [j̪eːnʲə]

The above suggests a merger between *uai* and *aoi*,¹⁶⁸ which Rhÿs (25) himself postulates:

From the foregoing instances it will be seen that the sound common to all the more regular representatives of *uai* and *aoi* is **ǣ** which, however, does not always remain thus, in the case of open syllables like *gheayney* ‘green,’ *deiney* ‘men,’ and *Jyheiney* ‘Friday,’ one hears either **ǣ** or **ē**: of these I should regard **ǣ** as the older sound and **ē** as a modification of it. So we seem to have the two series *uai*, **ǣ**, **ē** and *aoi*, **ǣ**, **ē**: in other words, the two series converge at **æ**.

(Rhÿs: 25)

Rhÿs’s observations appear to show a merger in progress, with [æ:] falling in with [e:] (from G. *éi*).

3.5.2 Marstrander (1932)

Marstrander lists different phones according to the Gaelic phonemes of which they are a reflex. The data relevant to *ua* and *ao* are summarized below.

¹⁶⁷ ‘with a palatal **gh** passing off into **i** or the **y** of the English words ‘yield’ and ‘yes’ (Rhÿs: 23).

¹⁶⁸ For some or most items; certain *uai* items may instead go with *ua* (§§3.9.5, 3.9.6).

3.5.2.1 ē [e:] < G. *aoi*, *uai*

This is primarily a reflex of G. *é* etc., but may represent G. *aoi*, *uai* (Marstrander: 64).

- aoi* *deiney* ‘men’, G. *daoine*: **dē' n̄ə** [de:n̄ə]
 meaish ‘measure of herring’, Norse *meiss*, cf. ScG. *maois*: **mēš** [me:ʃ]
 skeayley ‘spread’, G. *scaoileadh*: **skē' l̄ə** [ske:l̄ə]
 Jeheiney ‘Friday’, G. *Dia hAoine*: **d'žē hē' n̄ə** [d'ʒe'he:n̄ə]
 keayney ‘weep’, G. *caoineadh*: **kē' n̄ə** ['ke:n̄ə]
 meiygh ‘soft, tender’, G. *maoth*: **mē** [me:]¹⁶⁹
- uai* *naightyn* ‘news’, G. *nuaidheacht*, *nuadhacht*, *nódhacht*, cf. ScG. *naidheachd*:
 nē' axtən ['ne:axtən]
 cleaysh ‘ear’, G. *cluais*: **klēš** [kle:ʃ] **klēš** [kle:ʃ]
 gleashagh(t) ‘move’, G. *gluaiseacht*: **glē' žax** [gle:ʒax]

Marstrander (64) explicitly notes that before broad consonants *ao* becomes either ē [e:] (HK) or î [i:] (WQ).

The forms with [e:] would represent the innovating reflex of *aoi* / *uai* noted by Rhÿs (§3.5.1.4), [e:] resulting from unrounding of [ə:]. [kle:ʃ] for *cluais* would represent Rhÿs’s (24) southern form.

3.5.2.2 ē [ɛ:] < G. *ao*

Long open ē [ɛ:], predominantly representing G. *á* or *ó*, is also noted as a reflex of G. *ao* in two items (Marstrander: 63):

- teayst* ‘dough’, G. *taos*: **tēs** [te:s]
 seihll ‘world’, G. *saoghal*: **sēl** [sɛ:l]

This realization is noted as a Cregneash feature.

¹⁶⁹ The Manx spelling suggests a Manx reflex *maoith*, perhaps attested in TC **mōiqx** *meiyghagh* (HLSM II: 297) < **maoitheach* (cf. §3.9.1.1).

3.5.2.3 \bar{i} [i:] < G. *ua*

Long close \bar{i} , as well as representing G. *í*, *ia* and ‘broken’ *é* (§2.2.7), is noted as a reflex of *ua* (Marstrander: 65):

skeab ‘brush’, G. *scuab*: **skīb** [ski:b]
feayr ‘cold’, G. *fuar*: **fīr** [fi:r]
feayraght ‘coldness’, G. *fuaracht*: **fī rayt** [fi:raxt]
keayn ‘sea’, G. *cuan*: **kīdn** [ki:dn]
eaghtyr ‘surface’, G. *uachtar*: **ī'χtə(r)** [i:xtə(r)]¹⁷⁰

3.5.2.4 \hat{i} [ɪ:]

Under ‘*i*-lydene’ (‘*i*-sounds’), Marstrander (65–6) describes ‘[d]en senkede \hat{i} ’ as a frequent reflex of *ao*. This is described as ‘noe senket *i* omtrent som i irsk *daoine* i Kerry’ (‘a somewhat lowered *i* approximately as in Irish *daoine* in Kerry’).¹⁷¹ Presumably by this ‘lowered’ (‘retracted’?) vowel something like [ɪ:] is meant. The following items are noted:

geay ‘wind’, G. *gaoth*: **gī** [gi:], also **gīə** [giə], **giə** [giə]
eayl ‘lime’, G. *aol*: **īl** [ɪ:l]
keyl ‘slender’, G. *caol*: **kīl** [ki:l]
keyllys ‘sound’, G. *caolas*: **kī ləs** [ki:ləs]

Marstrander also notes \hat{i} from G. *aoi*, *ua* and secondary /i:/ (<*uidhe*):

skeayley ‘spread’, G. *scaoileadh*: **sk'ī'łə** [ski:lə], also **skē'łə** ['ske:lə]
keayn ‘sea’, G. *cuan*: **kīdn** [ki:dn], also **kīdn** [ki:dn]
guee ‘pray’ G. *guidhe*: **gwī** [gwi:], also **gwī** [gwi:]

¹⁷⁰ Marstrander (65) also lists *cleayney* ‘seduce, entice, persuade’ (**klī'ñə** [kli:nə]) here, apparently deriving this from *cluain* ‘deceit, flattery’ (which does not generally have a derived verbal form), although it is more likely from *claoín*, *claoínadh* ‘incline, slant; pervert, lead astray’. It is possible, however, that the Manx form represents conflation of both words, as might be suggested by the palatalized [n] noted by Marstrander, unless this is simply by analogy with the finite stem *claoín*, and by the alternative realization **klī'əñə** ['kli:nə] (Marstrander: 74).

¹⁷¹ I.e. ‘guta fada tosaigh [i:], beagán faoi bhun Guta Cairdineálta 1, liopaí leata [...] beagán lárnaíthe in aice le consan leathan’ (‘a long front vowel [i:], a little below Cardinal Vowel 1, lips spread [...] a little centralized adjacent to a broad consonant’) (Ó Sé 2000: 22).

Marstrander (66) notes that in all the words with **î**, open **ī** [i:] may also be heard. In addition, he suggests that **ē** [e:] and **ē** [ɛ:] vary with **î** before both broad and slender consonants. It should be noted that Marstrander does not use **î** in his transcriptions of Christian reading from the Bible in 1928 (Thomson 1976). This may be because this sound was not noted from Christian, or because Marstrander had not yet noticed the distinction at this point. Cf. Marstrander's introduction of the symbol **ï** part-way through his transcription of Christian (Thomson 1976: 256).

3.5.2.5 **î** [ɪə] < G. *ua(i), ao*

Marstrander (74–5) notes **î** [ɪə] as a realization of *ua(i)* and *ao*:

- ua* *leah* 'early, soon', G. *luath*: **lîə** [lɪə]
 geayl 'coal', G. *gual*: **gîəl** [gɪəl]
 eaghtyr 'surface', G. *uachtar*: **î'əxtər** ['ɪəxtər]
 leagh 'reward', G. *luach*: **lîəx** [lɪəx]
 creagh 'turfstack', G. *cruach*: **krîəx** [krɪəx]
- uai* *mygeayrt* 'around', G. *mágcuairt* **mə gî'ərt** [mə'gɪərt]
- ao* *bleayst* 'husk, egg-shell', G. *blaosc*: **blîəst** [blɪəst]
 geay 'wind', G. *gaoth*: **gîə** [gɪə]
- ?*ao/ua* *cleayney* 'seduce', G. *claoadh, cluain*: **klî'ənə** ['klɪənə] (see fn. 170)

3.5.2.6 **ei** [ɛi] < G. *ao*

Marstrander notes a diphthongal realization **ei** [ɛi] of *ao* before *r* in two items:

- deyr* 'dear', G. *daor*: **deir** [dɛɪr]
seyr 'free; carpenter', G. *saor*: **seir** [sɛɪr]

This may be explained as an onglide before the [ɪ], noted elsewhere in Late Manx (though more usually as [ə], §4.2.3). However, a similar realization is recorded in *seose* 'up', G. *suas*, **sëis**, **sei:s** (NM, *HLSM* II: 389).

3.5.2.7 \bar{u} [u:] < G. *ua*

Long tense back \bar{u} [u:] is noted as a reflex of *ua* in certain items (Marstrander: 69) where back realizations are well-attested:

hooar ‘got, found’, G. *f(h)uair*: **hūr** [hu:r] **wūr** [ʷu:r]
seose ‘up’, G. *suas*: **sūs** [su:s]

3.5.2.8 ‘ø’

Marstrander (69) describes a vowel sound resembling Norwegian \emptyset and occurring in various environments and being a reflex of various Gaelic vowels, including *ao* and *ua*. Both short and long versions of this vowel are noted.

Foran dentaler, likvider og sibilanter får vokalene ofte i betonet stilling en modifieret uttale, som for et norsk øre bryter på \emptyset . Denne uttalen skyldes en senkning av vokalen. Fortungevokaler senkes til en midttungevokal av lignende karakter som eng. *ea* i *earth*, ja ikke sjelden til en baktungevokal som kan ligge like dypt som eng. *u* i *but*.

[Before dentals, liquids and sibilants in stressed position the vowels often receive a modified pronunciation, which to a Norwegian ear resembles \emptyset . This pronunciation is due to a lowering of the vowel. Front vowels are retracted to a central vowel of similar character to English *ea* in *earth*, indeed not seldom to a back vowel which can be as low as English *u* in *but*.]

(Marstrander: 69)

The exact quality of this vowel is not identified, perhaps deliberately owing to uncertainty on the part of the author, and the examples are not transcribed phonetically, but rather simply listed in their orthographic form. The comparison with Norwegian [\emptyset] would suggest a rounded vowel, but English [ɜ:] in *earth* and [ʌ] in *gun* are unrounded (at least in Received Pronunciation). It is worth noting that English /ʌ/ is generally adopted as /ø/ in loans into Norwegian, as in *lønsj* ‘lunch’, *pønk* ‘punk’. See Lewin (2018: 172–4; also §3.5.6 below) for discussion of confusion between front rounded and unrounded vowels in fieldwork on the Gaelic languages, including that of the Norwegian Nils Holmer.

In line with the view adopted throughout this chapter that Manx reflexes of *ao(i)* and *ua(i)* were most likely unrounded, or at most only weakly rounded (cf. §§3.5.1.1; 3.5.5; 3.5.6), a neutral central vowel transcription will be adopted here and Marstrander's 'ø'-vowels will be transcribed as [ə] and [ə:] here. According to Marstrander, they are found in the following items:

[ə]

- ea* *edyr* 'at all', G. *eadar*, *idir*
jiarg 'red', G. *dearg* (also long vowel)
jialg 'thorn', G. *dealg*, also **d'žolg** [dʒɔlg], **d'žōlg** [dʒɔ:lɡ], pl. **d'žilg** [dʒɪlg]
- io* *fys* 'knowledge', G. *fios*, also **fis** [fis]
kys 'how', G. *cionnas*, also **kis** [kis]
chirrym 'dry', ScG. *tioram*, Ir. *tirim*
chymsagh 'gather', G. *tiomsaghadh*
myn 'fine', G. *mion*
burley 'cress', G. *biolar*
shutternee 'neigh', Ir. *siotrach*, *seitreach*, ScG. *sitir*, *sitrich*
smuirr 'marrow', G. *smior*
- éa, ao* *eddrym* 'light', G. *éadrom*, ScG. *aotrom*
- éa, u* *red* 'thing', G. *réad*, *rud*
- á, áí* *snaid* 'thread', G. *snáthaid*
garaghtee 'laugh', G. *gáireachtach*
- á* *mayl* 'rent', G. *mál*
slane 'whole', G. *slán*
lane 'full', G. *lán*
bane 'white', G. *bán*
- ui, (i)u* *dhyt* 'to you', G. *duit*, *dut*
rhyt 'with you', G. *riut*
cur 'put, send, give', G. *cu(i)r*
- u* *surranse* 'suffer', English *sufferance*
- oi* *stermagh* 'stormy', G. *stoirmeach*

o *brott* ‘broth’, G. *brot*

ao *sleayd* ‘tow, drag’, G. *slaod*
eyl ‘lime’, G. *aol*
keyl ‘slender’, G. *caol*
meayl ‘bald’, G. *maol*
keirn ‘rowan’, G. *caorthann*

aoi *Jardain* ‘Thursday’, G. *Déardaoin*

éa, ao *feddyn / geddyn* ‘get, find’, ScG. *faotainn*

uai (*Je*)*lune (sic)* ‘Monday’

/i/ < /i:/ < ighea *cheet* ‘come’, G. *tigheacht*

aigh *mainshter* ‘master’, G. *maighstir*

[ə:]

ea *fer* ‘man, one’, G. *fear*
aarloo ‘ready’ G. *earlamh*, OIr. *aurlam* etc. (§2.1.10)
jiarg ‘red’ (also short vowel)

ei *keird* ‘craft’, G. *ceird*

ao *teayst* ‘dough’, G. *taos*
seihll ‘world’, G. *saoghal*
freoagh ‘heather’, G. *fraoch*¹⁷²

aoi (*Jy*)*heiney* ‘Friday’, G. *Dia hAoine*
keayney ‘cry’, G. *caoineadh*
skeayley ‘spread’, G. *scaoileadh*
eoylley ‘dung’, G. *aoileach*
eash ‘age’, G. *aois*
deiney ‘men’, G. *daoine*
feysht ‘question’, G. *faoiside*

¹⁷² This item is mentioned separately at the end of the paragraph: ‘Stundom også foran andre konsonanter. Jeg har hørt *freoagh* „lyng” uttalt med samme senkede vokal’ (‘Sometimes also before other consonants. I have heard *freoagh* ‘heather’ pronounced with the same retracted vowel’). It is unclear whether Marstrander means a short or long vowel in this word. Rhys (18) notes that he usually heard a short vowel in *freoagh*.

ua *seose* ‘up’, G. *suas*

/a:/, /ɛ:/ <(e)a

baare ‘top’, G. *barr*

baarney ‘gap’, G. *bearna*

ard ‘high’, G. *ard*

giare ‘short’, G. *gearr*, also **g’ēr** [gʲɛ:r]

éa *Baarle* ‘English’, G. *Béarla*

abha *goayr* ‘goat’, G. *gabhar*

loayrt ‘speak’, G. *labhairt*

adha *eairk* ‘horn’, G. *adharc*

3.5.2.9 Analysis

It is unclear whether the rather wide range of following consonantal environments listed by Marstrander (69) (dentals, liquids, sibilants, as well as [x] in *freoagh*) is relevant in conditioning the appearance of the ‘ \emptyset ’ vowel phone. Many of those items which are not reflexes of *ao(i)*, especially when the vowel is long, are followed by [r], which is probably relevant (§4.2.3).

The large number of items with G. *io* reflects the tendency across Gaelic dialects for backing of /i/ before broad consonants, reflected in Manx orthography by the use of <y> (§2.1.7). Finally, the class of items *slane*, *lane*, *bane* and perhaps *mayl* probably represent centralization in Northern Manx of *á* [ɛ:] with shortening and prominent preocclusion noted by Rhÿs (160) and Broderick (*HLSM* I: 161) (§4.5.2).

Most of the remaining items represent G. *ao(i)*. The eight items with *aoi* and also *Jelune* (*uai*) would represent Rhÿs’s **œ**, **œ̄** [ə(:)]. Otherwise, Marstrander records *aoi* and fronted *uai* as giving **ē** [e:], with one example of **î** [i:] (*skeayley*) and **îə** [iə] (*mygeayrt*). This general picture of *aoi* / *uai* > [ə:] > [e:] is in line with Rhÿs’s findings. For *ao*, we have five items giving a short ‘ \emptyset ’ vowel and two the long version. Three of the short realizations are before [l], where Rhÿs (21) also notes a short vowel. Other realizations of *ao* are **î** [i:] (four items), **ē** [ɛ:] (two items), **ei** [ɛi] (two items, both with

following *r*) and **îə** [iə], **ia** [iə] (three items, two of which may show interference from *ua*). Although Marstrander's data apparently show more variation in realizations of *ao* than Rhys's, including more overlap with *aoi*, it should be noted that higher realizations represent only *ao*, but not *aoi*, and **î** is only found for *ao*, apart from one instance of *aoi*. It is likely that Marstrander's **î** corresponds to Rhys's **ȳ**, although the variation of realizations in Marstrander, and the variety of descriptions of **î** / **ȳ** in both authors suggest variation in the articulation, as well as uncertainty on the part of the fieldworkers.

For *ua*, Marstrander notes mostly high front or centralized unrounded vowels, which may or may not be diphthongized: **ī** [i:] (five items), **îə** [iə] (five or six items), **î** [i:] (one item). These would correspond to Rhys's **ī** [i:], **ü** [i:].

Marstrander's data appear to agree broadly with Rhys's descriptions:

ao > [ə:], [i:]
ua > [iə], [i:], [iə], [i:]
aoi / *uai* > [ə:] > [e:]

It is striking that Marstrander's data, when collated and examined, agrees so well with Rhys's, given that Marstrander gives no consideration in his description to grouping Manx sounds according by phonemes or diachronic developments, and does not discuss Rhys's data.

3.5.3 Jackson (1955)

Jackson finds the development of *ao(i)* in Manx to be 'varied and confused':

In Manx the history of *ao* and *aoi* is varied and confused; previous writers have noted chiefly sounds which mean **ö:** and **e:** or **ε:**, rarely **ɪ:** or **u:** [...] The curious thing is that several different stages in the history of a sound should appear contemporaneously in the language of one small island, as they seem to do.

(Jackson: 47–8)

He records 'the same bewildering variety' with *ua(i)*, and suggests that *ao(i)* and *ua(i)* may have fallen together.

In Manx, there is the same bewildering variety [with *ua(i)*] as with *ao* and *aoi*; indeed the two might be said to have fallen together if it were not that there is also *ɔ*: from *ua*, and that *ö*-sounds seem commoner from *ua*, *uai* than from *ao*, *aoi*. However, this latter may be illusory and due to the scantiness of the examples.

(Jackson 1955: 52)

The mention of *ɔ*: is not relevant to the question of whether *ua(i)* and *ao(i)* have, as a regular development, fallen together, since it is found only in *neose*, *seose* ‘up’, which has been noted as having an irregular development (§3.4.6). The matter of the ‘*ö*-sound’ is discussed below. Jackson’s caveat regarding ‘the scantiness of the examples’ should be borne in mind.

Jackson’s data are as follows:

[e:], [ɛ:]

- ao* *seyr* ‘carpenter’, G. *saor*: **se:ɪ** (NM)
 keyl ‘narrow’, G. *caol*: **ke:l** (EK)
 meayllee ‘hornless cow’, G. *maolaidhe*: **me:li** (NM)
 seihll ‘world’, G. *saoghal*: **se:l** (NM, TL)
 yn theihll ‘of the world’, G. *an t-saogha(i)l*: **ən tɛ:l** (NM)
- aoi* *deiney* ‘men’, G. *daoine*: **de:n’i** (EK)
 Jeheiney ‘Friday’, G. *Dia hAoine*: **dʒɛ’he:n’i** (EK)
 keayney ‘weeping’, G. *caoineadh*: **ke:n’i** (EK)
- ua* *keayn* ‘sea’, G. *cuan*: **ke^dn** (EK)
 eayn ‘lamb’, G. *uan*: **je^dn** (EK)
- uai* *cleayshyn* ‘ears’, G. *clua(i)s*: **kle:ən** (TL)

[ɪ:], [iɔ]

- ao* *keyllys* ‘strait’, G. *caolas*: **kr:lɔs** (EK)
 geay ‘wind’, G. *gaoth*: **gr:ɔ** (JTK, HB)
- aoi* *nuy* ‘nine’, G. *naoi*: **ni:** (NM)
- ua* *eayn* ‘lamb’, G. *uan*: **i:^dn** (JTK)
 creagh ‘stack’, G. *cruach*: **krɪ:^ax** (JK)
 feayr ‘cold’, G. *fiar*: **fr:ɔ** (JTK, TL)

geayl ‘coal’, G. *gual*: **gr:l** (TL), **gɪl** (JK)
keayn ‘sea’, G. *cuan*: **kr:ɫn** (JTK, HB, JK)

uai *mygeayrt* ‘around’, G. *má gcuairt*: **mə gr:t** (JK, TL)
cleayshyn ‘ears’, G. *clua(i)s*: **klr:ɫn** (JTK)

With shortening:

Gaelg, *Gailck*, G. *Gaoidhealg*: **gɪlk** (JK), **gɪlg** (NM)

[u:], [uə]

ao *un* ‘one’, G. *aon*: **u:n** (JTK)
foyr ‘edge of blade’, G. *faobhar*: **fu:əɪ** (EK)¹⁷³

ua *feayr* ‘cold’, G. *fiar*: **fu:ɹɪ** (TL), **fu:r** (EK)
booa ‘cow’, G. *bó*: **buə** (EK)

uai *ooashley* ‘worship’, G. *uaisle*: **uəʃli** (EK)
oor ‘hour’, G. *uair* (but probably Middle English ‘hour’ > **úr*): **u:r** (EK)

ö [ə]

ao *red* ‘thing’, G. *réad*, *raod*, *rud*: **röd** (EK), **riɪ** (TL), *c’red* ‘what’: **kræɪ** (JTK)

aoi *geay* ‘wind’, G. *gaoth*: **göi** (EK)¹⁷⁴

ua *geayl* ‘coal’, G. *gual*: **gö:l** (EK)
geaylin ‘shoulder’, G. *gualann*: **gö:lɪʃ** [*sic*] (EK)
seose ‘up’, G. *suas*: **sö:s** (NM)
keayn ‘sea’, G. *cuan*: **kö:ɫn** (EK)
cleaysh ‘ear’, G. *cluais*: **klö:ʃ**

[ɔ:]

ua *seose*, *neose* ‘up’, G. *suas*, *anuas*: **sə:s**, **n’ɔ:s** (EK)

¹⁷³ EK’s **fu:əɪ** for *foyr* ‘edge of a blad’ (G. *faobhar*), would represent a development of *aobh* to [u:] parallel to that of *naomh* giving Manx *noo* ‘saint, holy’, **nu:** (JW) (*HLSM* II: 326). The other realizations given in *HLSM* (II: 176) are similar to **fɔ:r** (EKh), suggesting a development with *aobha* falling in with (*e*)*abha* as in *lioar* ‘book’ (G. *leabhar*) **l’ɔ:r** (NM).

¹⁷⁴ ‘this must really be the genitive *geayee* = Ir. ScG. *gaoithe*, pronounced **gɛi** by [H]B in *gollan geayee* “swallow” (Jackson: 50).

[ei]

aoi *nuy* ‘nine’, G. *naoi*: **nei** (EK)

Jackson’s **ö:** and **ɪ:** would suggest that *ao* and *ua* survived as distinct phones in Manx (whether or not they were distinct from one another), and had not simply fallen in with /i:/, /iə/, /e:/ or /ɛ:/. Indeed, Jackson (36–7, 50–1) does not give any realizations of *ao(i)* or *ua(i)* with **ɪ:** at all, and his **ɪ:** does not appear as a variant of *í* or *ia*. Jackson’s **ɪ:** is defined as a long version of short **ɪ** ‘as in English *hit*’ (11), and seems to be intended to be equivalent to Marstrander’s **î** (Jackson: 48). Like Marstrander, Jackson notes this sound both from *ua(i)* and *ao(i)*. Two examples of a diphthongal realization of *ua* with [ɪ] as the primary element are given, although as Jackson notes, in the case of *feayr*, the schwa element could be explained by the final [r].

Jackson describes **ö(:)** as follows:

There is generally only one [ö-sound], a slightly retracted central **ö**, very poorly rounded, further back and more open than **ø** in French *peu*, and somewhat closer than **œ** in French *pleure*; though occasionally it is open enough to write **œ**. It is usually long, **ö:**; when short (and sometimes when long) it represents a special development of the other vowels before (less often after) *r*. Marstrander heard it also on occasion before dentals, *l*, and sibilants..., but I did not meet this.

(Jackson: 12)

Jackson’s examples of [e:] and [ɛ:] representing *ao* may represent a fronted variant of an /ə:/ phoneme. This may represent an ongoing merger of *ao* with /e:/ or /ɛ:/, perhaps to be understood as a partial loss of the fairly lexically restricted phoneme /ə:/ in obsolescent Manx. That is, the terminal speakers may have been unsure which lexical items should have /ə:/ and which should have /e:/, a confusion which may have been confounded by a tendency to centralize vowels before /r/ and possibly in other environments, as well as the relative smallness of the set of items with /ə:/.

3.5.4 Wagner (1969)

Wagner's data for *ao(i)* and *ua(i)*, extracted from the Manx glossary in *LASID* (IV: 173–88), are as follows. Tokens are marked S (south), N (north) or M (from Marstrander's unpublished notes) (§1.5.4).

[i(:)], [iə]

- ao* *deyr* 'dear', G. *daor*: **di:r** (S)
y Cheylllys 'the Sound', G. *caolas*: *ec y Cheylllys* **eɣə 'xi:ləs** (M), **k'i:l'əs** (S), **k'iləs** (S), **k'i.l'əs** (S)
geay 'wind', G. *gaoth*: **gi:ə** (N x5), **gi:** (N)
- aoi* *deiney* 'men', G. *daoine*: **di:nə** (N)
- ua* *geayl* 'coal', G. *gual*: **gil:** (N), **g'il** (S), **gil:** (N), **gil':** (N), **gil'** (N), **gil** (S)
feayr 'cold', G. *fuar*: **fi:ə** (N), **fi:ər** (N x2), **fi:** (N), **f'i:ə** (N), **f'i:r** (N), **fiər** (N)
feayraght 'cold' (noun), G. *fuarach*: **firəx**
keayn 'sea', G. *cuan*: **k'idn** (S x2, N x3), **k'i.dn** (S), **k'i^dn** (S), **kidn** (S)
geaylin 'shoulder', G. *gualann*: **gilən**
leah 'soon', G. *luath*: **li:** (S), **lūi:ə** (M)
creagh 'stack', G. *cruach*: **k'rix** (S), **k'riəxən** (N), **k'riəx** (N), **kriəx** (N)
- uai* *mygeayrt* 'around', G. *magcuairt*: **mə'gita** (N), **mə'gi.ət** (N), **mə'gĭət** (N x2, S), **mə'gi.ʔt** (N), *mygeayrt-y-mysh* **mə'gitə moʃ** (N), **mə'gi:t** (M), **mə'git** (N, S), **mə'gi:t** (N)
cleaysh 'ear', G. *clua(i)s*: **tli:f** (N), **klif** (N), **kli:ʒən** (N)
eayin 'lambs', G. *uain*: **i.dn** (N x2), **idn** (N x2)
neayr's 'since', G. *an uair is*: **nĭərəs** (S)
geayltyr 'shoulders', G. **guailtean*: **giL't'ʃən** (S x2), 'shoulder' **giL't'^f** (S)
keayrt 'time (occasion, instance)', *ny cheayrtyn* 'sometimes', G. *cuairt*: **k'iətən** (N), **k'i:tən** (S), **k'iəðən**, **k'i:t** (S)

ɪ, ĩ [ɪ(:)]

- ao* *geay* 'wind', G. *gaoth*: **gi:** (S x2)
eddin 'face', G. *éadan*, ScG. *aodann*: **idn** (S), **nĭðən** (S)
- ua* *skeab* 'brush', G. *scuab*: **skl.B** (S)
geayl 'coal', G. *gual*: **giɫ** (N)

cheayll, geayll ‘heard’, G. *chuala*: **gɪ.l** (S), **kɪl** (M)
keayn ‘sea’, G. *cuan*: **kɪ.dn** (S)

uai *geayney* ‘green’, G. *uaine*: **kʲɪnjə**
rimlagh ‘fishing-line, rope’, G. *ruaimneach*: **rɪmləx** (S)

y, ü

ua *geayl* ‘coal’, G. *gual*: **gy.l** (S)

uai *rimlagh* ‘fishing-line’, G. *ruaimneach*: **rümlax** (S, M)

[e:], [ɛ:]

ao *eaddagh* ‘clothes’, G. *éadach*, ScG. *aodach*: **eðax** (S), **eðax** (N), **ɛðax** (N)
eddin ‘face’, G. *éadan*, ScG. *aodann*: **eðan** (S), **neðan** (S)
seihll ‘world’, G. *saoghal*: **sɛ:l** (N), **se:l** (M)
keyrrey ‘sheep’, G. *caora*: **kɛrə** (N x3), **kɛru** (N), **kɛrax** (N)
tead ‘rope’, ScG. *taod*: **tɛɔ** (N)

aoi *eash* ‘age’, G. *aois*: **ɛ:f** (N)
keayney ‘cry’, G. *caoineadh*: **kʲe:njə** (N, S), **kʲe:njə** (N), **kʲè:nə** (N)
Jerdein ‘Thursday’, G. *Déardaoin*: **de dedn** (N), **dʒə 'de:dn** (M)
Jeheiney ‘Friday’, G. *Dé hAoine*: **de hɛnə** (N), **dʒe 'he:njə** (M)

ua *eayn* ‘lamb’, G. *uan*: **ɛ:n** (N)

uai *eayin* ‘lambs’, G. *uain*: **ɣɛdnʲ** (M)
Jelhein ‘Monday’, G. *Dé Luain*: **de lidn** (N), **dʒe lɛ:dn** (M)

ö: [ə:]

ao *eaddagh* ‘clothes’, G. *éadach*, ScG. *aodach*: *as eaddagh* **zöðax** (N), **öðax** (N), **nöðax** (S)
eayl ‘lime’, G. *aol*: **'ə:l** (N x2)
eddin ‘face’, G. *éadan*, ScG. *aodann*: **öðmʲ**
seihll ‘world’, G. *saoghal*: **tö:l** (S)

uai *cleaysh* ‘ear’, G. *clua(i)s*: **klöf** (S), **klö:ʒən** (S x2)

[u:], [uə], [u:], [o:]

- ao* *geay* ‘wind’, G. *gaoth*: **gəi** (S x2), **gə-i** (S) (probably *gaoith(e)*)
- ua* *feayr* ‘cold’, G. *fuar*: **fū:r** (S), *feer feayr* ‘very cold’ **fi:fu:** (S), **fu:** (S), **fū:r** (S), **fu:r** (S), **fu:r** (M)
heose ‘up’, G. *thuas*: **hλ:s** (N)
- uai* *hooar* ‘got, found’, G. *fhuaire*: *hooar ee* **hu:i** (N), **huər** (S), **hu:ə** (N), **hu:** (N), **hu:r** (M)

For *ao* we have two items with ə [ə] or ö: [ə:] *eayl* ‘lime’ (G. *aol*): **’əl** (N, two attestations) and *seihll* ‘world’ (G. *saoghal*): **tö:l** (S). For the short vowel in *eayl*, cf. Rhÿs (21). There are two southern attestations of *geay* ‘wind’ (G. *gaoth*) as **gr:**, and five northern attestations of **gi:ə**, plus one of **gi:**. For the diphthongal realization (as if *gaoth* > **guath*), noted by Rhÿs (17) as being more of a northern feature, see §3.9.3.

The remaining items include five instances of [i:], and seven of [ɛ(:)]. These may represent loss of the /ə:/ phoneme as perhaps evidenced in Jackson’s data, or freer allophonic variation in an obsolescent variety than would have been found in full native speakers of an earlier generation. Interestingly, four of the instances of [i:] are in the item *keyllys* ‘sound’ (G. *caolas*). Broderick notes realizations of this item with apparently rounded vowels **y**. [y:], **ū**¹⁷⁵ from NM and **y:** from HK, as well as back unrounded **λ**: [u:] from HK. NM also has front high unrounded **i**, as in Wagner’s transcription. These high realizations could represent a high allophone of /ə:/ before /l/, as noted by Rhÿs (17) in *eayl* ‘lime’ (G. *aol*), for which he records **ü** [y(:)] as a variant (§3.5.1.2). For *aoi* Wagner gives five items, all with [e(:)] or [ɛ(:)], i.e. the less conservative variant noted by Rhÿs, apart from one instance as [i].

For *ua* we have 15 items and 45 tokens. Of these there are 29 instances of [i(:)] or [iə] and 5 instances of [ɪ(:)]. These 34 instances out of 45 (75.6%) would represent the expected realizations of *ua* following Rhÿs (§3.5.1.3). The one instance of **y**. in *geayl* ‘coal’ (G. *gual*) may represent the more conservative reflexes noted by Rhÿs. The

¹⁷⁵ The vowel nasalization here (*HLSM* II: 504) is unexpected, especially in view of the general lack of nasalization in the Manx of the terminal speakers (§5.6); but for other examples of unhistorical vowel nasality adjacent to voiceless consonants, see Lewin (2019a: 82–9).

difficult to interpret **lūi:ə** for *leah* ‘soon’ (G. *luath*), has been counted under [i:], but may also represent a more conservative realization as in Rhÿs’s **lūŷ** or **lūə**. The remaining instances are the expected back realizations of *feayr* ‘cold’ (G. *fuair*) (also in *hooar* ‘got, found’, G. *fuair*), an instance of *heose* with back unrounded λ: [ʉ:], and an instance of [ɛ:] in *eayn* ‘lamb’, G. *uan*. The [ɛ:] in *eayn* may represent confusion between the singular and plural.

For *uai*, several of the items given are non-prototypical in one way or another owing to phonological developments or paradigmatic analogy (*keayrt*, *mygeayrt*, *cleaysh*, *geayltyl*, §§3.9.5, 3.9.6). The high vowel [i] in *Jelhein* ‘Monday’ (G. *Dia Luain*)¹⁷⁶ and *eayin* ‘lambs’ (G. *uain*), is more difficult to explain, unless the preocclusion plays a role; compare *LASID* (IV: 188) **blidn** or **bli.dn**, *blein* ‘year’ (G. *bliadhain* > Manx **bléin*) for expected and also attested **b’l’ɛ:n’** (NM) (*HLSM* II: 34). In the case of *eayn* there may also be confusion between singular and plural. The vowel in **k’injə** *g(h)eayney* ‘green’, G. *uaine*, is unexpected, but given the unexpected initial [k], the word may have been only half-remembered by the speaker; compare Rhÿs’s (24) comments on its near obsolescence. There are two instances of expected [e:] in *eayin* and *Jelhein*, although both of these are from Marstrander’s material.

3.5.5 Broderick (1986) (*HLSM* III)

Broderick (*HLSM* III: 138) claims that [e(:)] is the most common realization of *ao* and *aoi*:

In L[ate] S[poken] M[anx] this [AO] is mostly found as /e(:)/, sometimes as /i(:)/ or /u(:)/, occasionally as /o(:)/; also [ö(:)], [y(:)], [ʉ(:)]. AO may also represent ÉA before /t/, /d/.

(*HLSM* III: 138)

Here [in AOI] there is mostly /e(:)/, sometimes as /i(:)/ or /u(:)/.

(*HLSM* III: 138)

¹⁷⁶ Although the nominative form G. *Luan* with broad /n/ apparently existed, Cregeen’s *Lhein*, *Lheiun* (§3.4.3).

For *ua* and *uai* he gives a number of realizations, but does not state which are more common:

[UA and UAI] are found as follows: a) as /u(:)/ or /o:/, b) as /i(:)/ or /e(:)/, c) as [ö(:)], [y(:)], [w(:)]. There may also be the diphthongs /ua/, /uə/, /iə/, /ei/.

(*HLSM* III: 139)

Broderick gives a small number of examples for each of the noted realizations, but does not attempt to quantify the frequency of their occurrence. He notes (*HLSM* III: 58) that [y(:)] and ‘occasionally’ [w(:)] are sometimes attested for *ao(i)* and *ua(i)* in ‘about a dozen items’ out of the ‘about ninety or so lexical items containing in their stressed element [...] (Ir./ScG.) AO(I), UA(I)’, ‘in southern Manx especially’. These are discussed in a section entitled ‘THE ALLOPHONES [y(:)], [w(:)]’:

In LSM [y(:)] functions essentially as an allophone of /i:/ and [w(:)] as an allophone of /u:/ in limited circumstances only. In order to explain these circumstances clearly it will be necessary to refer to the Irish and Scottish counterparts of the Manx items involved.

[fn.] Both [y(:)] and [w(:)] may be found in apparent free allophonic variation in the same limited circumstances with realizations of /i/, /e(:)/, /u/, /u(:)/

(*HLSM* III: 57)

It is not clear what exactly is meant here by ‘functions essentially as an allophone’. If these phones are restricted to a particular set of lexical items, which can only be defined with reference to etymology, then the most natural conclusion would seem to be that they represent a distinct phoneme or distinct phonemes (which may nonetheless be in the process of falling in with /i:/ or /e:/), rather than that they are allophones of /i:/ etc. Otherwise, we would expect to find these phones representing historical G. *í*, *é*, *ú*, which is not the case. Broderick (*HLSM* III: 60) goes on to claim that:

(a) ‘in Manx [...] AO(I) and UA(I) have practically completely fallen together’;

(b) that [y:] and [w:] were perhaps more prevalent in these lexical items in the past, but equally that these phones may have existed (presumably over a long period) side by side with the more frequent variants [e:] and [i:];

(c) the phones [y:] and [u:] historically represent a phoneme equivalent to /u:/ in Scottish Gaelic and Donegal Irish:

In Manx, as we have seen, AO(I) and UA(I) have practically completely fallen together and are noticed mostly as /e:/ or /i:/ (also with secondary shortening). We have also seen, however, that in some instances AO(I) and UA(I) appear as [y(:)], occasionally [u(:)], thus (in the case of [u(:)]) falling in with the treatment of AO(I) in most of Scotland and parts of Donegal. These may have been more prevalent in Manx than the present evidence admits, and in theory could appear in all ninety or so words of this class. But as the Manx treatment of AO(I) and UA(I) falls in largely with the common treatment of AO(I) in Ireland, viz. /e:/ or /i:/, it does not necessarily follow that [y:] or [u(:)] were more prevalent than they are now, but that they have existed side by side with the numerically greater attested /e:/ and /i:/, particularly in southern Manx. The testimony as we have it today makes it clear that [y(:)] and [u(:)] are evidenced only in the context of (some) AO(I), UA(I) items where both are found side by side with each other, or either one or the other is found and (in theory) could be substituted for the other. Outside this context neither is attested. The allophones [y(:)] and [u(:)] would then be the representatives in LSM at any rate of the phoneme /u:/ found commonly in Scottish Gaelic (and to an extent in Donegal Irish) for AO(I).

(*HLSM* III: 60)

Broderick does not mention mid front or central (rounded or unrounded) vowels in this passage, although these are noted as reflexes of *ao* and *ua* by Rhÿs, Marstrander, and Jackson. Broderick does have a section on ‘/ə/ as [ö] or [ö:]’ (*HLSM* III: 44–8):

In certain circumstances /ə/ can be realized as [ö] or [ö:] (i.e. articulated with a degree of retraction and lip-rounding). It is the result of retraction or advancing of the other vowel phonemes particularly /e/ or /e:/, especially in the environment of /r/ (even though /r/ on occasion may not be realized), but to a lesser extent in the environment of /l/, /s/ and /s'/, /t/ and /d/, /m/ and /n/, also /x/, /g/, /b/.

(*HLSM* III: 44–5)

[ö] would sound similar to [ə], but would tend towards [ø].

(*HLSM* I: 3)

Several examples of items with *ao(i)* and *ua(i)* are given (*cleaysh* ‘ear’, G. *cluais*; *geayl* ‘coal’, G. *gual*; *seihll* ‘world’, G. *saoghal*; *seose* ‘up’, G. *suas*), presented as

examples of phonemes /e:/, /i:/ retracted, but without consideration of the possibility that the central vowel may be original here (*HLSM* III: 46).

As we have seen, Broderick claims, like Jackson, that *ua(i)* and *ao(i)* appear to have largely fallen together in Manx, and that they have at least partially fallen together with /i:/ or /e:/, although he recognizes that the existence of realizations such as [y:] and [u:] suggests that there may be or have been a distinct phoneme. He suggests this may have been something like the Scottish and Donegal phoneme /u:/, implying that he believes *ua(i)* had fallen in with *ao(i)*. He suggests a parallel for this in the fact that ‘in the north [of Ireland] UA(I) can appear as /ua/ and after labials there may be unrounding, so that UA(I) may fall together with AO(I)’ (*HLSM* III: 60). This apparent parallel is discussed below in §3.8.

It is difficult to interpret the passage ‘it does not necessarily follow that [y:] or [u(:)] were more prevalent than they are now, but that they have existed side by side with the numerically greater attested /e:/ and /i:/, particularly in southern Manx’ (*HLSM* III: 60). In this passage, Broderick appears to suggest the possibility that there was a stable period in the past when this old phoneme */u:/ was partially merged with /i:/ or /e:/, or merged in some dialects or idiolects and not in others. This scenario is justified with reference to the development of *ao(i)* in most Irish dialects. However, it is not clear why a similar outcome in Manx and Irish should necessarily be taken as evidence for a parallel pattern of development over a similar time-scale. Broderick comes to his conclusions based on ‘the present evidence’ (i.e. the material from the terminal speakers). It would have been useful, however, to consider other evidence, particularly the orthographic evidence (both from Phillips and the later system), and especially Rhÿs, as we have done in the present study.

In contrast to the scenario outlined by Broderick, Rhÿs (§3.5.1) paints a picture of nineteenth-century Manx in which (a) there is no general merging of *ua* and *ao*, but only of *uai* and *aoi* (in certain items), (b) the distinctive realizations of *ao* and *ua* (i.e. /ə:/ and /iə/) are equally prevalent in the north and the south, (c) while *ua* seems to be the way to merging with /iə/ or /i:/, there is no suggestion that *ao* was realized as [i:] or [e:], but only as *ȳ* and variants thereof. In order to see whether Broderick’s

conclusions are reasonable on the basis of his own data, a quantitative analysis of tokens from *HLSM* was carried out, as detailed in the following section.

3.5.5.1 A quantitative analysis of data from *HLSM* (II)

Tables 42–45 and Chart 1 show the number of instances of different realizations of *ao*, *aoi*, *ua*, *uai* in the data in Broderick’s dictionary (*HLSM* II).¹⁷⁷ All items with a known etymology from G. *ao(i)* or *ua(i)*, are included, except those forming a diphthong with vocalized G. *gh*, *dh* etc. (§3.9.1). Those items with known idiosyncratic or variable developments are included (e.g. *feayr* ‘cold’, G. *fuair*; *hooar* ‘got, found’, G. *fuair*, §3.4.6).¹⁷⁸ The wide range of phonetic realizations in Broderick’s data have been grouped into the following broader categories for the purpose of analysis. Vowel length is ignored:

Grouping of vowel phones representing *ao(i)*, *ua(i)* in *HLSM*¹⁷⁹

- [o]: **o, ɔ**
- [u]: **λ [u], λə [uə]**
- [u]: **u, ui, uə**
- [e]: **e, ei, eə, ɛ**

¹⁷⁷ All transcribed individual instances given after the headwords in *HLSM* (II) were included. Different realizations from the same speaker were counted separately, and where the same transcription is noted as being from *n* speakers, this is counted *n* times. Data from the example sentences were not included, as they generally duplicate instances given in the individual item transcriptions, but sub-headings (compound words, inflected forms etc.) were included. Extracting the data from the dictionary (rather than the larger task of combing the texts in vol. 1, which, however, in any case do not include the dialogue material found in the dictionary) runs the risk of giving undue prominence to the less frequent realizations, as these are likely to be listed exhaustively with only a selection of the commonest realizations of the most frequent items. However, given the overall relatively small size of the corpus, it is likely that the data are close to being exhaustive for most items.

¹⁷⁸ *Deayrtey*, ‘pour, spill’ (G. *doirteadh*, *dortadh*, *dórtadh*, *duartan*) is included under *ua* (see §3.9.8). Forms are excluded when it cannot be determined with certainty which class they should be assigned to (for example whether **fe:jlə** for *feaysley* ‘untie, release’, should be regarded as representing G. *fuascladh* or a by-form **fuaiscleadh* based on the stem *feayshil*). Also excluded are blatant spelling pronunciations (§1.6.9.2), such as those of *feoh* ‘hate’ (G. *fuath*), as **fɛ:ɔ** (TC, HK) and **fjɔ:** (JW), while expected **fi:ə** (TT) is included.¹⁷⁸

¹⁷⁹ This categorization may admittedly not be perfect. [ə] in particular represents a large range of symbols for various mid-central and mid-front vowels, but most commonly the **ö** described in the extract above (cf. also Jackson and Wagner’s use of the symbol). **ɪ** and **ĩ** could plausibly be included as variants of [ə], but they could also be grouped with [i]. For this reason, [ɪ] is taken as a distinct category.

[i]: i, iə
 [ɪ]: ɪ, ɪ̃ [ĩ]
 [ə]: əi, ɛ [œ], ø, ẽ [ə]
 [y]: y, yə, ʷi

Table 42. Realizations of G. *ao* in HLSM II

y	ə	ɪ	i	e	u	ʷ	o
11	16	5	25	29	3	4	1
11.7%	17.0%	5.3%	26.6%	30.9%	3.2%	4.3%	1.1%
sum items: 22 <i>bleayst (blaosc), cleayney (claonadh), deyr (daor), deyre (daoradh), eayl (aol), freoagh (fraoch), geay (gaoth), geayagh (gaothach), inney-veyl (inghean mhaol), keyl (caol), Keyllys (caolas), keynnagh (caonach), keyrrey (caora), meayll (maol), seihll (saoghal), seihltagh (saoghalta), seyr (adj.), seyr (n.) (saor), seyrey (saoradh), sleayd (slaod), teayst (taos), theyreeyn (?daoraidh)</i>							
sum tokens: 94							

Table 43. Realizations of G. *aoi* in HLSM II

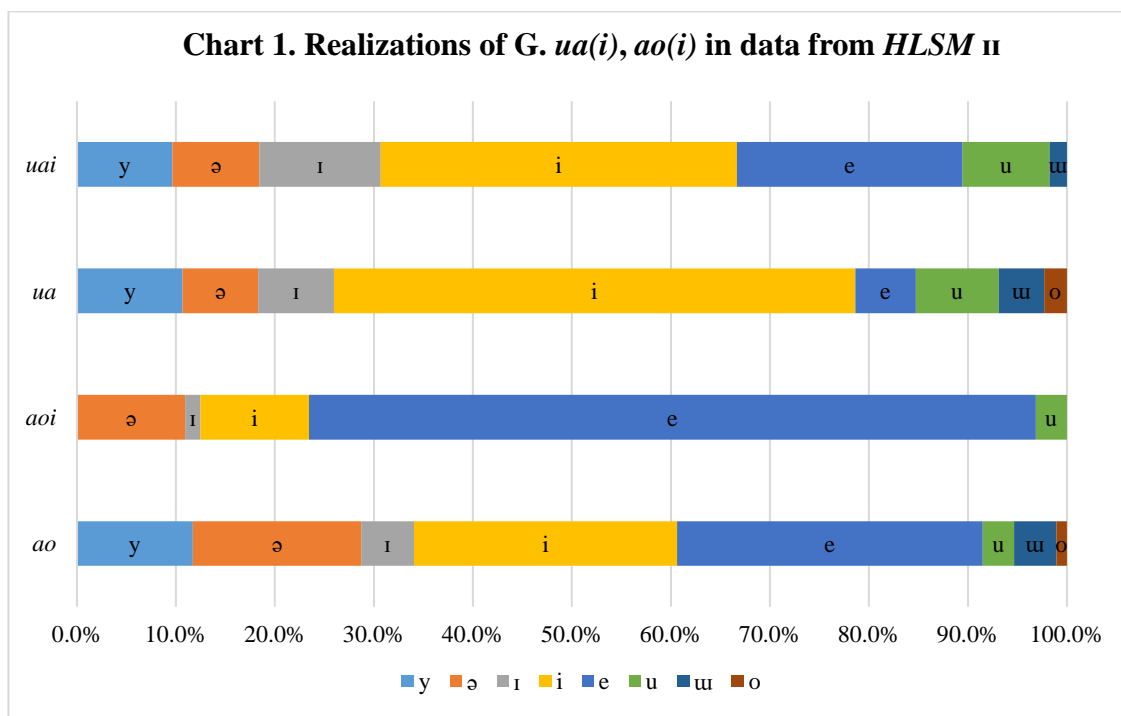
y	ə	ɪ	i	e	u	ʷ	o
0	7	1	7	47	2	0	0
0.0%	10.9%	1.6%	10.9%	73.4%	3.1%	0.0%	0.0%
sum items: 15 <i>deiney (daoine), deyr (daoire), eash (aois), eoylley (aoileadh), freayney (?raonadh), geaysh (gaoisid), geayshagh (gaoisideach), Jerdein (Déardaoin), Jyheiney (Dé hAoine), keayney (caoineadh), meaish (maois), nuy (naoi), ny s' deyre (níos daoire), skeayley (scaoileadh), Teare (Mac an tSaoir)</i>							
sum tokens: 64							

Table 44. Realizations of G. *ua* in HLSM II

y	ə	ɪ	i	e	u	ʷ	o
14	10	10	69	8	11	6	3
10.7%	7.6%	7.6%	52.7%	6.1%	8.4%	4.6%	2.3%
sum items: 23 <i>beayn (buan), beaynee (buanaidhe), cheayll / geayll (chuala), creagh (cruach), deayrtey (dórtadh, cf. duartan), eaghtyr (uachtar), eaghtyragh (uachtarach), eayn (uan), feayr (fuar), feayraght (fuaracht), feoh (fuath), geayl (gual), geaylin (gualainn), heose (thuas), keayn (cuan), leagh (luach), Leah (luath), leaystey (luascadh), leaysteyder (luascadóir), neose (anuas), seose (suas), skeab (scuab), skeabey (scuabadh)</i>							
sum tokens: 131							

Table 45. Realizations of G. *uai* in *HLSM II*

y	ə	ɪ	i	e	u	ʊ	o
11	10	14	41	26	10	2	0
9.6%	8.8%	12.3%	36.0%	22.8%	8.8%	1.8%	0.0%
sum items: 12 <i>cleaysh</i> (<i>clua(i)s</i>), <i>eayin</i> (<i>uain</i>), <i>feayshil</i> (<i>fuascail</i> > * <i>fuais(c)il</i>), <i>geayltyn</i> (cf. ScG. <i>guailnean</i>), <i>g(h)eayney</i> (<i>uaine</i>), <i>gleashaght</i> (<i>gluaiseacht</i>), <i>hooar / dooar</i> (<i>fuair</i>), <i>Jylhein</i> (<i>Dé Luain</i>), <i>keayrt</i> (<i>cuairt</i>), <i>mygeayrt</i> (<i>má gcuairt</i>), <i>ooashley</i> (<i>uaisele</i>), <i>rimlagh</i> (<i>ruaimneach</i>)							
sum tokens: 114							



These data challenge Broderick's claim that *ao(i)* and *ua(i)* have simply fallen together. For two of the categories, there is clearly one realization which is considerably more frequent than the others. For *ua*, this is [i] (51.9%) (rising to 60.8% if the idiosyncratic *feayr* and *seose / heose / neose*, with their [u] realizations, are excluded). For *aoi*, the most frequent realization is [e] (73.4%). *Ao* is the most varied, with a fairly even split between [e] (30.9%) and [i] (26.6%). *Ao* has the highest percentage of [ə] realizations (17.0%), and [ə], [ɪ], [ʊ] and [y] taken together — which might plausibly be taken to represent variants of a phoneme /ə:/ — account for 38.3% of instances of *ao*.

The preponderance of [i] realizations of *ua* is consistent with Rhÿs's observation of [i:, i̯] as a reflex of *ua*, as the culmination of a process of fronting and unrounding, alongside more conservative, less fronted realizations. The predominance of [e] realizations of *aoi* is consistent with Rhÿs's observation of [e:] alongside conservative \bar{e} . The mixed results for *ao* may suggest the preservation of a distinct phoneme /ə:/, alongside an apparent tendency (perhaps a recent and unstable one related to language obsolescence) to merge this with /e:/ or /i:/.

The results for *uai* are also mixed. Rhÿs would lead us to expect a preponderance of [e], as with *aoi*, since according to him *uai* and *aoi* have merged (at least in some environments or items). However, in the data from *HLSM*, [i] realizations are the most frequent for *uai* (36.0%, 41 occurrences) with [e] in second place (22.8%, 26 occurrences). This seems to be due to the large number of occurrences of *keayrt*, *mygeayrt* (G. *cuairt*), *cleaysh* (G. *cluais*) and *geayltyn* (**guailtean*) (68 occurrences, 59.6% of total for *uai*), which may pattern with *ua* rather than *uai* (§§3.7, 3.9.5–6). When all such idiosyncratic items are excluded from the *uai* category (also *hooar* / *dooar*, *ooashley*, *rimlagh*), [e] then accounts for 47.1% of instances (16) — in line with the expectations of merger between *uai* and *aoi* — and [i] for 32.4% (11). However, there are then only 6 items with a sum of 34 occurrences.

3.5.6 Front rounded realizations?

A number of the descriptions discussed above either implicitly or explicitly record front rounded realizations of *ao(i)* and *ua(i)* in Manx. Rhÿs and Marstrander both make comparisons between a single Manx phone and both rounded and unrounded phones in other languages (§§3.5.11, 3.5.2.8), which makes their comments difficult to interpret. Jackson (48) casts doubt on Rhÿs's (and Kneen's) descriptions of front rounded vowels for *ao(i)*, but himself records a phone \bar{o} with a degree of rounding (Jackson: 12). Broderick (*HLSM* III: 57) gives both [y(:)] and [u(:)] as possible realizations of *ao(i)*, *ua(i)*, and these are apparently interchangeable, cf. both **gy:l** and **gλ:l** [gʷ:l] from NM for *geayl* 'coal' (G. *gual*).

In listening to recordings of the last speakers for the present thesis (especially the material recorded by the Irish Folklore Commission), I did not hear any realizations which could be firmly identified as [y:] or [ø:] etc., although there were plenty of centralized, unrounded realizations which could be characterized as [ə:], [ɨ:], [ɪ:], perhaps [u:]. Some of these could perhaps impressionistically resemble vowels with some rounding, however.

It is possible that some of the reports arise from confusion between back unrounded vowels and front rounded vowels. In an experiment, Ladefoged (1967: 133–141) gave eighteen trained phoneticians the task of listening to recordings of a number of Scottish Gaelic words including various stressed monophthongs and plotting them on a cardinal vowel diagram. While the responses were quite accurate for cross-linguistically frequently-occurring vowels such as /i(:)/, /e(:)/ and /u(:)/, the phoneticians' judgments of /ɯ(:)/ and /ʌ(:)/ varied greatly in degree of rounding and backness. The question of front rounded vowels in south-western Scottish Gaelic dialects raises similar difficulties; see O'Rahilly (29) and Lewin (2018: 172–4) for discussion.

Since there is no clear, unambiguous evidence for front rounded vowels in Manx, the descriptions analysed above have been interpreted as referring to front-central but unrounded vowels. It remains possible, however, that there was a degree of rounding (perhaps no more than 'very poorly rounded', in Jackson's [12] words) which would have served to enhance the contrast between front-central /ə:/ and /iə/ on the one hand, and fully front vowels /i:/, /iə/, /e:/, /ɛ:/, on the other.

3.6 Written evidence

The two main orthographies used to write Manx are especially challenging to interpret with regard to reflexes of G. *ao(i)* and *ua(i)*, but nonetheless provide valuable evidence for change in these vowels from c. 1600 onwards.

3.6.1 Representation of *ao(i)*, *ua(i)* in Phillips

3.6.1.1 Overview

In the Phillips manuscript there are dozens of orthographic sequences representing G. *ao*, *aoi*, *ua* and *uai*. These range from one to three characters, with substantial overlap between representations of the four categories. Despite this complexity, clear patterns are discernible which can be related to the phonological developments attested from the other evidence discussed in this chapter. In the following discussion, as elsewhere in the thesis, Phillips' diacritics are disregarded (§1.6.3), and <æ>, and occasional instances of <ai>, are treated as equivalent to <e>. Taking the evidence of the initial character of the orthographic sequence, namely <i>, <e> (inc. <æ>), <y> and <u> (including a few instances of <o>) (Table 46, Chart 2), the following observations can be made:

(a) Spellings of the <y> type, while frequent (>30%) in all four categories, are especially prevalent in the case of *ao* (74.6%). This presumably represents the non-merging allophone of /ə:/ described by Rhÿs (§3.5.1).

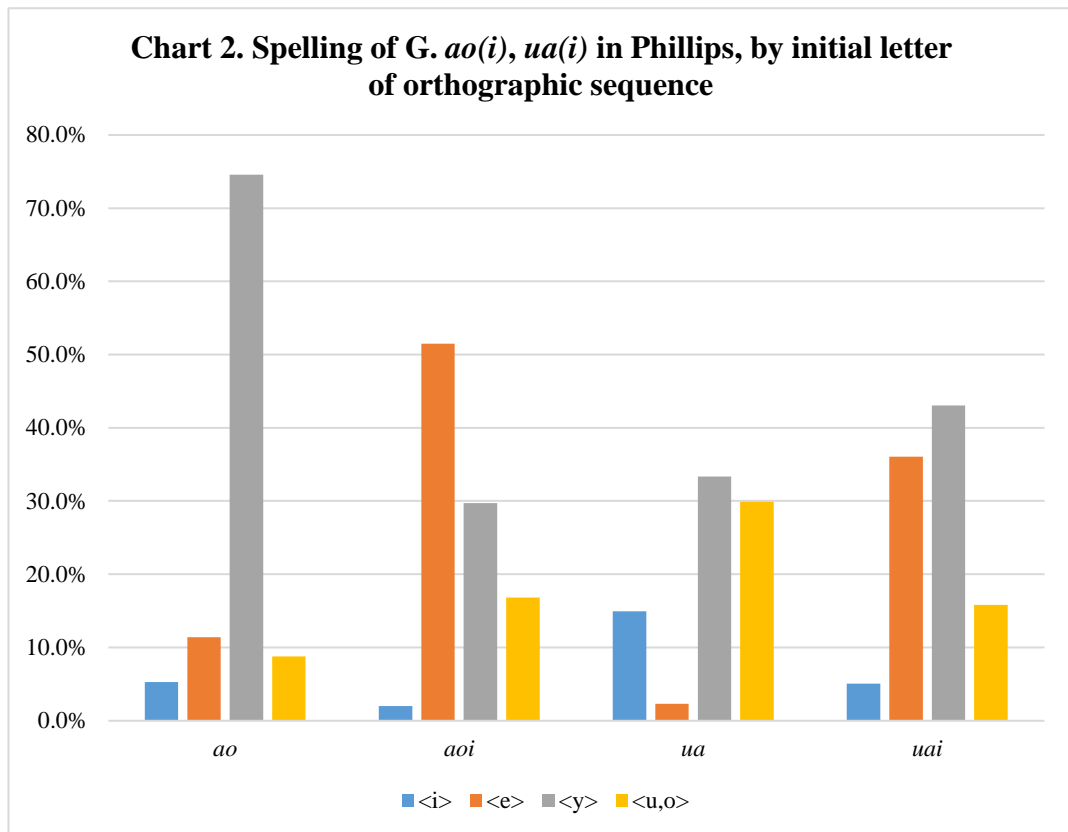
(b) Spellings of the <u> type are most prevalent in the *ua* category, and can be associated with back realizations of the historical /ua/ diphthong.

(c) *Aoi* and *uai* have somewhat similar profiles, with <e> and <y> being the dominant representations, although <e> is more prevalent in the case of *aoi*. This suggests that at this early date splits were already emerging between *ao* and *aoi*, and *ua* and *uai*, respectively, with *aoi* and *uai* moving towards the merger with one another seen in the later language. The <e> and <y> spellings can be interpreted as the allophone of /ə:/ described by Rhÿs which tends towards merger with /e:/ (§3.5.1.4).

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

Table 46. Spelling of G. *ao(i)*, *ua(i)* in Phillips, by initial letter of orthographic sequence

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



A glance at the tokens (§3.4) suggests that at least some of the above orthographic categories should be broken down further. Subsequent characters in orthographic sequences seem to be particularly important in indicating diphthongal realizations, e.g. <ya> is especially prevalent in the *ua* set, <y> and <yy> in *ao*, <ye> and <ey> in *aoi*

and *uai*. To investigate this further, the following finer-grained breakdown of the <e> and <y> categories has been brought to bear (Table 47):

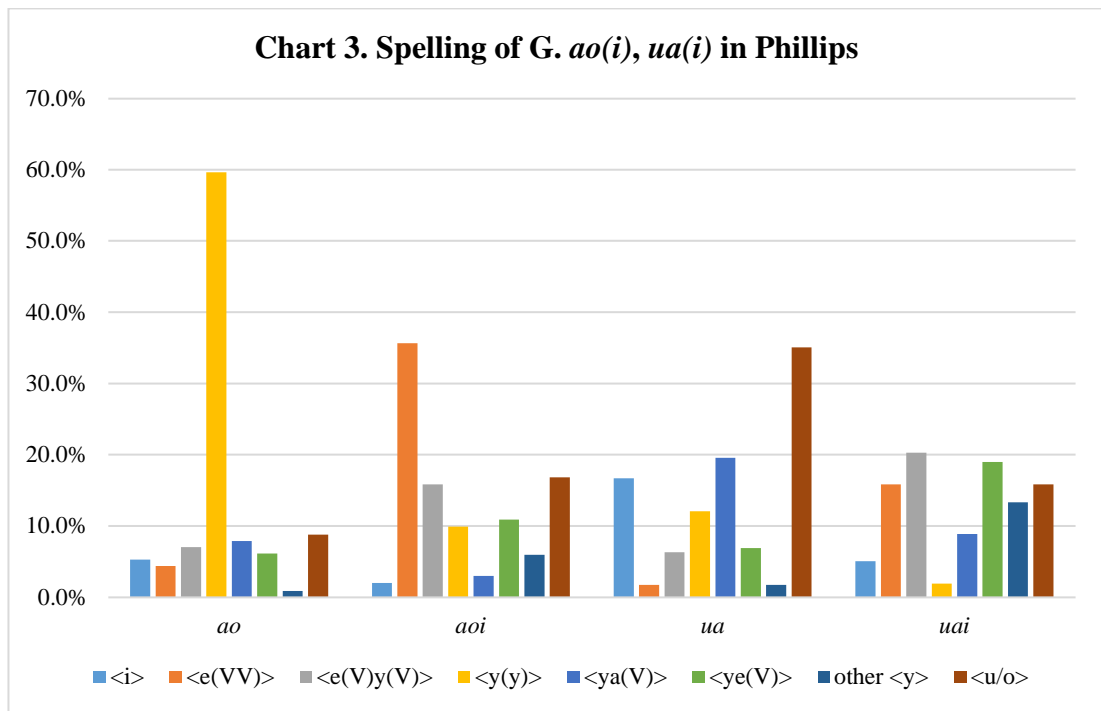
Table 47. Breakdown of orthographic categories <e> and <y>, taking into account following vowel characters

<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 Table 48, Chart 3.

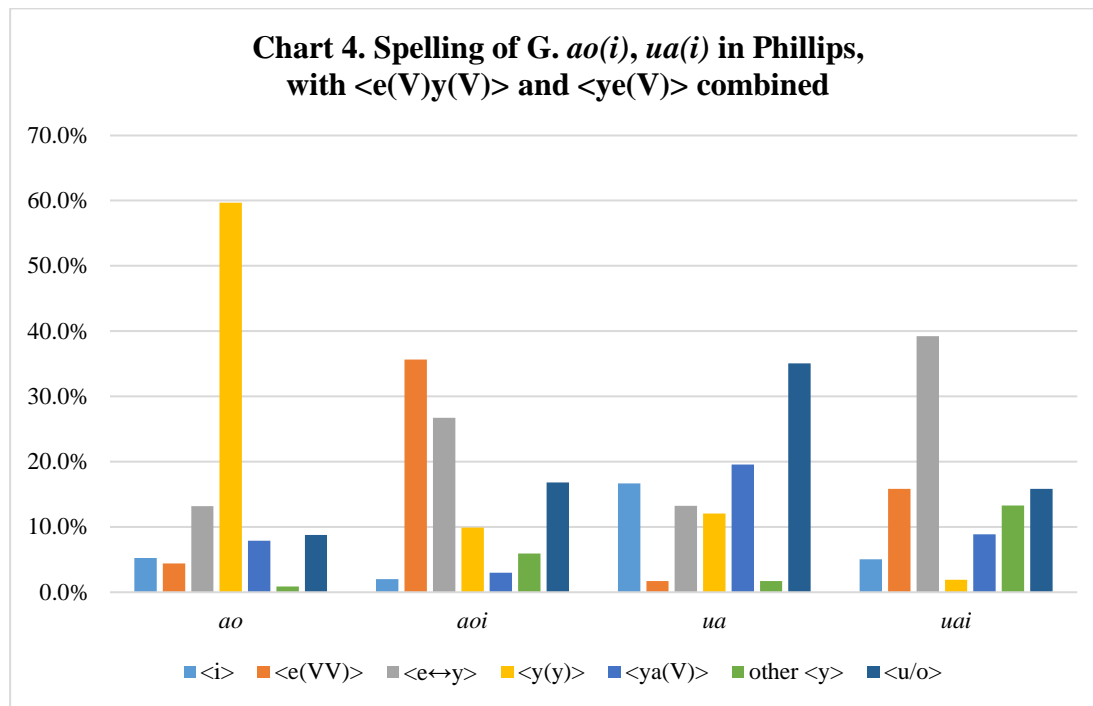
Table 48. Spelling of G. *ao(i)* and *ua(i)* in Phillips

	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	6	5	8	68	9	7	1	10
<i>aoi</i>	21	101	2	36	16	10	3	11	6	17
<i>ua</i>	27	174	29	3	11	21	34	12	3	61
<i>uai</i>	25	158	8	25	32	3	14	30	21	25
%	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%	4.4%	7.0%	59.6%	7.9%	6.1%	0.9%	8.8%
<i>aoi</i>	21	101	2.0%	35.6%	15.8%	9.9%	3.0%	10.9%	5.9%	16.8%
<i>ua</i>	27	174	16.7%	1.7%	6.3%	12.1%	19.5%	6.9%	1.7%	35.1%
<i>uai</i>	25	158	5.1%	15.8%	20.3%	1.9%	8.9%	19.0%	13.3%	15.8%



The breakdown of the data in Table 48, Chart 3 reveals the following details:

- (a) Orthographic sequences involving only the character <y> (single or doubled) are overwhelmingly concentrated in the *ao* category (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 *ua* category (19.5%), and 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 monophthongization.
- (c) Spellings involving <e> followed by <y>, or by a sequence of vowel symbols including <y>, are more frequent in *aoi* (15.8%) and *uai* (20.3%) than in the other categories (<5%). This may be associated with /ə: / > [ə:], [e:], as discussed above.
- (d) If, as seems reasonable, it is assumed that <e(V)y(V)> and <ye> represent similar reflexes, and their totals are combined (Chart 4), then the association between <e↔y> and *aoi* (26.7%), *uai* (39.2%) is clearer, as opposed to *ao* and *ua* (both 13.2%).



Note that monophthongization [i̯] > [i:] seems to be more prevalent in certain environments or items (§3.5.1.3).

Representations of *ao(i)* and *ua(i)* show a distinct pattern from those of /i:/, /i̯/, /e:/ and /u:/,¹⁸⁰ the front and back vowels with which they might be expected to show (near-)merger. The data in Table 49 is from entries under A to C in Thomson's (1953) glossary. All show very consistent (84.6% – 100%) use of the expected symbols <i>, <e, æ> or <u> in various combinations. Orthographic sequences based on <y, yy> are almost exclusively characteristic of *ao(i)* and *ua(i)*, which also have more heterogeneous ranges of possible representations in general, as shown above.

The orthographic evidence presented in this section strongly points to the conclusion that *ao(i)* /ə:/ and *ua(i)* /u̯/, /i̯/, /ə:/ were contrastive both with each other (with the exception of probable merger between some reflexes of *aoi* and *uai*), and with /i:/, /i̯/, /e:/ and /u:/.¹⁸¹

¹⁸⁰ Mostly representing G. *í*, *ia*, *é*, *ú*, but also new long vowels arising from fricative vocalization, as in *bea* /be:/ 'life' (G. *beatha*).

¹⁸¹ And also with /ɛ:/ (G. *á(i)*, *ó(i)*), which may however have been lower [a:] in Early Manx and is generally represented with variants of <a> (§2.2.4).

Table 49. Orthographic representations of /i:/, /iə/, /e:/, /u:/ in Phillips (A–C, Thomson [1953] glossary)

/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), æé, æe, æa, æ (8), æ (5), á, a	
/u:/	eu, iu (5), iú (11), iú, íu (2), îú, iúy, ôô (1), ou (3), u (28), ú (19), ũ, ui (19), úi (5), ûi (2), ũi, 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%)

3.6.1.2 *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:/.

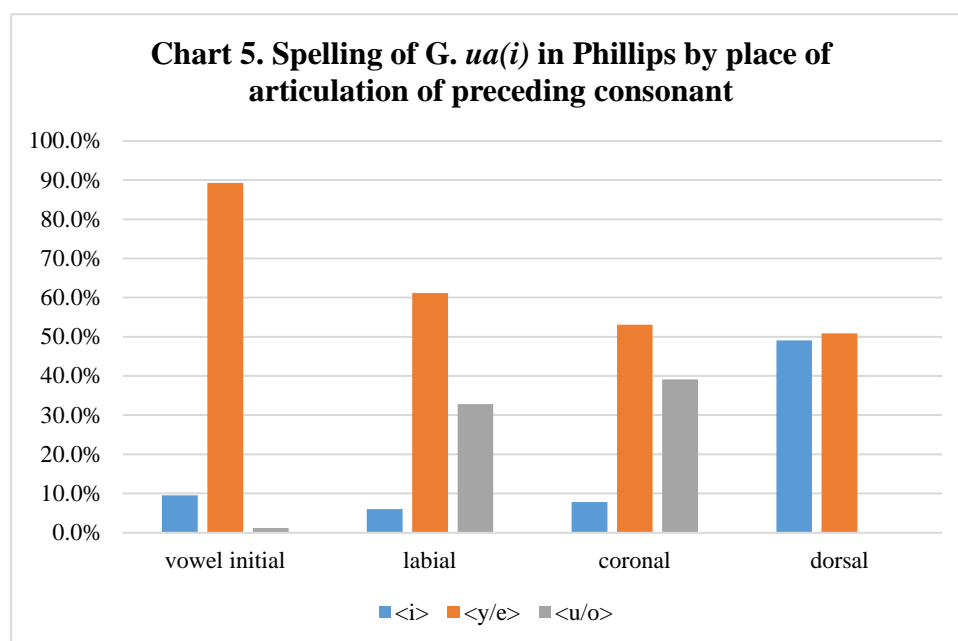
In the following analysis (Table 50, Chart 5), the sequences of symbols are split into three categories, based on the first symbol (as in Table 46 above), e.g. <ya> is classed under <y>. It is assumed that <i> spellings represent the most fronted and unrounded realizations, while <u> spellings represent the most back and rounded realizations. It is difficult to discern how <y> and <e> (including <æ>) spellings might represent differing sounds so they have been categorized together as <y/e> and assumed to represent prototypically intermediately unrounded and fronted realizations, i.e. roughly the later attested [i]. It is possible that <e> spellings in some cases represent /ə:/ rather than /i:/, however. The small number of <o> spellings are categorized together with <u>. ¹⁸²

There is clear evidence of conditioning by preceding consonant.

¹⁸² <o> spellings are consistent in the case of *bwoalley*, *bwoaill* ‘hit’ (G. *bualadh*, *buail*), and this is excluded since it could perhaps represent **bóladh*, **bóil*, as the later spelling could be interpreted as suggesting (HLSM data on the other hand suggests /u:/, /u/) (§3.4.5).

Table 50. 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	8	75	1
labial	12	67	4	41	22
coronal	25	179	14	95	70
dorsal	8	53	26	27	0
%		total	<i>	<y/e>	<u/o>
vowel initial	8	84	9.5%	89.3%	1.2%
labial	12	67	6.0%	61.2%	32.8%
coronal	25	179	7.8%	53.1%	39.1%
dorsal	8	53	49.1%	50.9%	0.0%



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. Also, there are no lexical items with preserved back /uə/ in Classical or Late Manx with preceding dorsal consonants.

Superficially similar fronting and unrounding of *ua* in Ulster Irish after labials has been explained by Ó Dochartaigh (1987: 110) as dissimilation between the labial consonant and the round quality of the vowel in items such as *fiar* ‘cold’ (§3.8). In Manx, however, *feayr* ‘cold’ is among the items which may have retention of backness,

and it might be hypothesized that the fronting represents rather 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%). It should be noted, however, that the dorsal category includes relatively few tokens (53) and lemmas (8); there are over three times more tokens in the coronal category.

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* for later *leah* (G. *luath*), *luagh* for later *leagh* (G. *luach*), *tua* for later *theay* (G. *tuath*), *búan* for later *beayn* (G. *buan*). None of these have /uə/, /u:/ in the later language, although Rhÿs's descriptions suggest a more back realization in some varieties, which however was apparently contrastive with the <oo>, <ooa> /u:/, /uə/ vowels (§3.5.1.3). However, *leah* (G. *luath*), for example, is also spelled *lié* and *lýa*; and other items such as *feayr* (Phillips *fiýar*-, *fúar*, G. *fuair*) seem to show the later attested range of variation.

Some innovating realizations are found in Phillips where the more conservative back realization is found in the later language (e.g. *yasyl* /iəsəl/ for later *ooasle* /uəsəl/, /wusəl/), attesting to the existence of variant forms of which it was not always the newer form which survived (§3.4.6). Similarly, Phillips' spellings of G. *fuair* 'got, found', ScG. *fhuair*, *d'fhuair*, mostly suggest /hə:rɪ/, /də:rɪ/, and while this realization is attested in Late Manx, the back realization was apparently more widespread (§3.8.2).

For the apparent height contrast between *ua* = [uə, iə, iə] and *uai* = [ə:, e:], conditioned by the broad or slender quality of the following consonant, see above (§3.6.1.1).

3.6.2 Representation of *ao(i)* and *ua(i)* in CM orthography

In the standardized orthography of the main eighteenth-century texts, most items have one fixed spelling, making the kind of analysis given for the Phillips' orthography (which looks for trends in a large mass of micro-variation both between and within lemmas) less feasible. There also appears to be considerably more overlap between orthographic sequences representing *ao*, *aoi*, *ua*, *uai*, and other vowels, as the following lists show.¹⁸³ To avoid more sporadic or idiosyncratic spellings, only those forms attested in the Bible, and/or from both Cregeen and Kelly, are given.

- <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* (*fuar*), *feayght* (*fuacht*), *feaysley* (*fuascladh*), *geayl* (*gual*), *geaylin* (*gualann*), *keayn* (*cuan*), *leaystey* (*luascadh*), *theay* (*tuath*)
- uai:** *cleaysh* (*clua(i)s*), *feayshil* (*fuascail*, **fuaisil*), *geayltyl* (*guailne*, **guailtean*) *g(h)eayney* (*uaine*), *keayrt* (*cuairt*), *mygeayrt* (*má gcuairt*), *neayr's* (?*an uair is*)
- agh:** *reayrt* (*radharc*)
- é:** *eayst* 'moon' (*éasca*), *falleays* 'gleam' (EIr. *folés*, ScG. *faileas*), *geayr* 'sour' (*géar*), *s'leayr* 'clear' (*is léir*)
- ia:** *shleayst*, also *shleeayst*, *shleas(s)id* 'thigh' (*sliasaid*)
- other: *freyll* 'keep' (*friotháladh*), *jeayst* 'beam' (Eng. 'joist'), *meayn* 'ore' (? *mian*, *méin*), *skeay*, also *skeeah* (*sceith*)
- <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*), *eajee* 'abominable' (*éidigh*), *eam* 'call' (*éigheamh*), *fea* 'rest, quiet' (*féath*), *greasee* 'shoemaker' (*gréasaidhe*), *kease*

¹⁸³ For meanings of *ao(i)*, *ua(i)* and *agh* items, see tables in §3.4, 3.10.1.

- ‘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*), *lhean* ‘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*).
- ío:** *creagh* ‘furrow’ (*críoch*)
- i:** *earish* ‘time, weather’ (*iris*)
- ea:** *feallagh* ‘ones, people’ (? *eallach*)
- <eai> **uai/ĩ:** *s’leaie* (*is luaithe*)
- agh:** *eairk* (*adharc*)
- éi:** *eaishtagh* ‘listen’ (*éisteacht*), *feailley* ‘feast, festival’ (*féile*), *reaish* ‘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/ĩ:** *fey-yerrey* (*faoi dheireadh*)
- é:** *dangeyr* ‘danger’ (*dainséar*), *geyre* ‘sharp’ (*géar*), *rey* ‘rid’ (*réidh*), *shey* (*sé*)
- ái:** *-eyr* (*-eóir*) 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*)
- <ey(gh)>
- aoi:** *keiyn* (*caoin*)
- ao(i)/ĩ:** *lhey* (*laogh*), *meiygh* (*mao(i)th*), *streiyraght* (*sraothar*)
- ua(i)/ĩ:** *seyi* (*suaithheadh*)
- /e:ĩ/: *jeigh* (*iadhadh*)
- /əĩ/, /eĩ/:
ey ‘footlock’ (*iodh*), *eiystyr* ‘halter’ (*adhastar*), *eyirt* ‘follow, chase’ (*adhart*),
feiyr ‘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*n (?*buan*), *creoghys* (*cruadhas*), *feoh* (*fuath*), *heose*, *neose*, *seose* (*thuas*, *anuas*, *suas*)

agh: *leodaghey* (*laghdaghadh*)

other: *ben-treoghe* ‘widow’ (*baintreabhach*), *scarleod* ‘scarlet’ (*scarlóid*), *skeog* ‘lock of hair’ (*ciabhóg*)

<eo(a)i(e)>

aoi/í: *freoai*e (*fraoich*)

uai/í: *leoai*e (*luaidhe*), *leoie* (*luaith*), *creoi* (*cruaidh*)

other: *keoi* ‘mad’ (*cuthach*, ScG. *caothach*, *caoch*), *skeoigh* ‘tidy’ (*sciamhach*)

<ae>

ao: *gaerr*, *gaer* (ScG. *gaorr*)

ó /ɛ:/: *aeg* ‘young’ (*óg*)

ae /ɛ:/: *aer* ‘air, sky’ (*aer*, EIr. *aër*, ScG. *adhar*, *aighear*)

<ei>

ao: *keirn* (*caorthann*)

aoi: *deiney* (*daoine*)

uai: *lheill*, *lheihll* (*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*), *sheiltn* ‘think’ (*saoil*, *síl*), *shirveish* ‘serve, service’ (*seirbhís*), *treisht* ‘trust, hope’

éi/í: *jei* ‘after’ (*i ndéidh*)

ei: *beinn* ‘peak’ (*beinn*), *bheill* ‘grind’ (*meil*, ScG. *beil*), *creid* ‘believe’ (*creid*), *greimmey* ‘grasp’ (*greimeadh*), *greinnaghey* ‘encourage’ (ScG. *greannachadh*, **greinn-*), *keiltn* ‘hide’ (*ceilt*), *keird* ‘craft’ (*ceird*), *meinn* ‘meal’ (*min*, *mein*), *sheilg* ‘hunt’ (*seilg*)

ai, oi: *clein* ‘kin’ (*clainn*), *eirin(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 + /i̯/:

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/i̯/: *dreih* (*draoi*), *mreih* (*mnaoi*)

uai: *lheihll, lheill* (*luadhail*)

ua(i)/i̯/: *sleih* (*sluagh*), *treih* (*truagh*), *teigh* (*tuagh*), *veih* (*uaidh*)

éi/i̯/: *lheihys* ‘healing’ (*léigheas*), *spreih* (*spréidheadh*) *ny-yeih* ‘however’ (*ina dhéidh*)

ei/i̯/: *jeih* ‘ten’ (*deich*), *meih* ‘weight’ (*meidh*), *sneih* ‘vexation’ (*snighe*)

/əi̯/: *leih* ‘forgive’ (*loghadh*), *reih* ‘choose’ (*rogha*)

<oaie>

ua(i)/i̯/: *oaie* (*uaigh*)

óigh: *doaie* ‘decency’ (*dóigh*)

éi/i̯/: *oaiagh* ‘perjurous’ (*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/i̯/: *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/i̯/: *ruy* (*ruadh*)

iodh: *fuygh* ‘wood’ (*fiodh*)

iú: *shuyr* ‘sister’ (*siúr*)

iu: *juys* ‘fir’ (*giuthas*)

<y>

agh: *yummyd* (*adhmad*)

io: *fynney* ‘fur’ (*fionnadh*), *myn* ‘fine’ (*mion*), *ynnyd* ‘place’ (*ionad*), and many others

<egh> *ao*/i̯/: *streghernee* (*sraothar*)

Although there are no orthographic forms which are exclusive to reflexes of G. *ao(i)*, *ua(i)* and *agh* (with the near exception of <eo>), and little to distinguish *ao(i)* and *ua(i)*, the following observations about the distribution of forms can be made:

(a) The representational overlap is mainly between *ao(i)* /ə:/, *ua(i)* /i̯ə/, /ə:/ on the one hand and *é* /e:/ on the other, and to a lesser degree *á* /ɛ:/, *í* /i:/, *ia* /i̯ə/. 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, as the other evidence presented in this chapter also shows.

(b) Although some of the main orthographic representations of *ao(i)* and *ua(i)*, namely <eay>, <ea>, <ey>, can also represent the front mid to high vowels noted in (a), it is noteworthy that there are a number of representations which never represent *ao(i)*, *ua(i)*, such as <ee, eey> (/i:/), <eea, ia> (/i̯ə/), <ay, ai, e_e> (/e:/), <aa, ay> (/ɛ:/). This, and (c, d) below, would suggest that there were indeed phonological contrasts between reflexes of *ao(i)*, *ua(i)* and these other vowels.

(c) Only one representation, <eo> (including <eoy>, <eoh>, <eoa>, <eoi>), is more or less unique to *ao(i)* and *ua(i)* (although it does not help in distinguishing between the two), apart from its obviously quite distinct use for /o:/ in a few other items. To some extent the use of <eo> in the Bible orthography seems to be a recessive survival from more widespread use in less standardized versions of the CM orthography. It is used for example in CS (1707): *sleoi* ‘sooner’ (*s’leaie*, G. *is luaithe*), *feosle* ‘relieve’ (*feayshil*, G. *fuascail*); in the 1796¹⁸⁴ edition of PC: *cheoy*n ‘sea’ (*keayn*, G. *cuan*), *feon* ‘expansive’ (*feayn*, G. *fao(i)n*), *beoy*n ‘eternal’ (*beayn*, G. *buan*), *chleosh* ‘ear’ (*cleaysh*, G. *cluais*), *feoyr* ‘cold’ (*feayr*, G. *fuar*), among others; and in variant

¹⁸⁴ Possibly deriving without substantial revision from a manuscript from the first half of the eighteenth century (Max Wheeler, personal communication) (§1.3.1.1).

spellings in Cregeen, e.g. *theo* ‘common people’ (*theay*, G. *tuath*), *cleoyn* ‘propensity’ (*cleayn*, G. *claon*, or *cluain*?).

(d) <eay>, although also representing /e:/ in a handful of items, and /iə/ in a couple more, is also very strongly associated with *ao(i)* and *ua(i)*.

It might be wondered why, firstly, no clear way to distinguish *ao(i)* from *ua(i)* (especially *ao* /ə:/ from *ua* /iə/) 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 forms such as <ea>. To an extent, it is likely that this 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 with time come to be made more clearly and consistently, but equally, there was no guarantee that the most “logical” orthographic forms would prevail.

It should be remembered that accurate representation of pronunciation was not necessarily the chief concern of Manx writers (Thomson 1984: 307; Thomson and Pilgrim 1988: 4) (§§1.6.4.2, 1.66). They were native speakers of Manx 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 have had a light functional load.

Another consideration is that the very complexity and fluidity of the situation with regard to the relationship between *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. 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 different parts of the island. Recall the variation attested in the following items:¹⁸⁵

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

The consistent retention of <eo> in *heose*, *seose*, *neose* may reflect the existence of a form with /o:/ (§3.4.5). 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; compare the substitution of <ai> for <ia> etc. (§1.6.5), and the problems caused by <eo> in the Manx of the terminal speakers, some of whom produce spelling pronunciations such as **fɛ:ɔ**, **fjɔ:** (*HLSM* II: 165) for *feoh* /fiə/ ‘hate’ (G. *fuath*). 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 John Woods’ 1696 sermon manuscript (Lewin 2015b: 74).

It is notable that there is also no clear attempt to distinguish diphthongal /iə/ from /ə:/ (and the monophthongal realization [i:] <ua(i)> which is in evidence in Late Manx), even though the other diphthongs of this type are consistently distinguished in the CM orthography from their corresponding monophthongs (<eea, ia> /iə/, <ee, eey, eei> /i:/; <ooa, ua> /uə/, <oo, ooy, ooi, u> /u:/) (§2.2.6). This may again reflect the above-mentioned reluctance to distinguish too clearly between reflexes of *ua(i)* and *ao(i)*, as well as the ongoing weakening of the second element of these diphthongs (* /Və/ > /V:/) throughout the attested period of Manx.

¹⁸⁵ There was, however, evidently no way of bridging the gap between /iə/ and /uə/, with one variant or the other having to be chosen.

3.7 Instrumental data

In order to investigate the realization of the Gaelic vowels *ao(i)* and *ua(i)* in the Manx of the terminal speakers, with respect to the reported mergers or near-mergers with each other and with the front vowels /i:/, /e:/ and /ɛ:/ (< G. *í, ia; é; á*) (§3.5), an investigation of data from audio recordings of the terminal Manx speakers made by the Irish Folklore Commission in 1948 (Manx National Heritage 2003) was carried out using the software package Praat (Boersma and Weenink 2015). All instances of *ao(i)* and *ua(i)* in the native speech samples in these recordings were included with the exception of one track, and some individual instances, where the sound quality was too low or the interpretation uncertain. For the other, more frequently-occurring vowels a sample was taken for each speaker of comparable size to the datasets for *ao(i)* and *ua(i)*. For the purposes of this analysis *ua* and *uai* were combined. There were relatively few tokens of *uai* and most of them are of the items *keayrt* (G. *cuairt*) and *mygeayrt* (G. *má gcuairt*), which appear to pattern with *ua* owing to the depalatalization of final */tʲi/ (§3.9.6). The total number of tokens were *á* (193), *ao* (23), *aoi* (35), *é* (58), *í* (141), *ua(i)* (41).

Chart 6. F1 tracks for front and central long vowels (corresponding to vowel height), all speakers, Irish Folklore Commission recordings

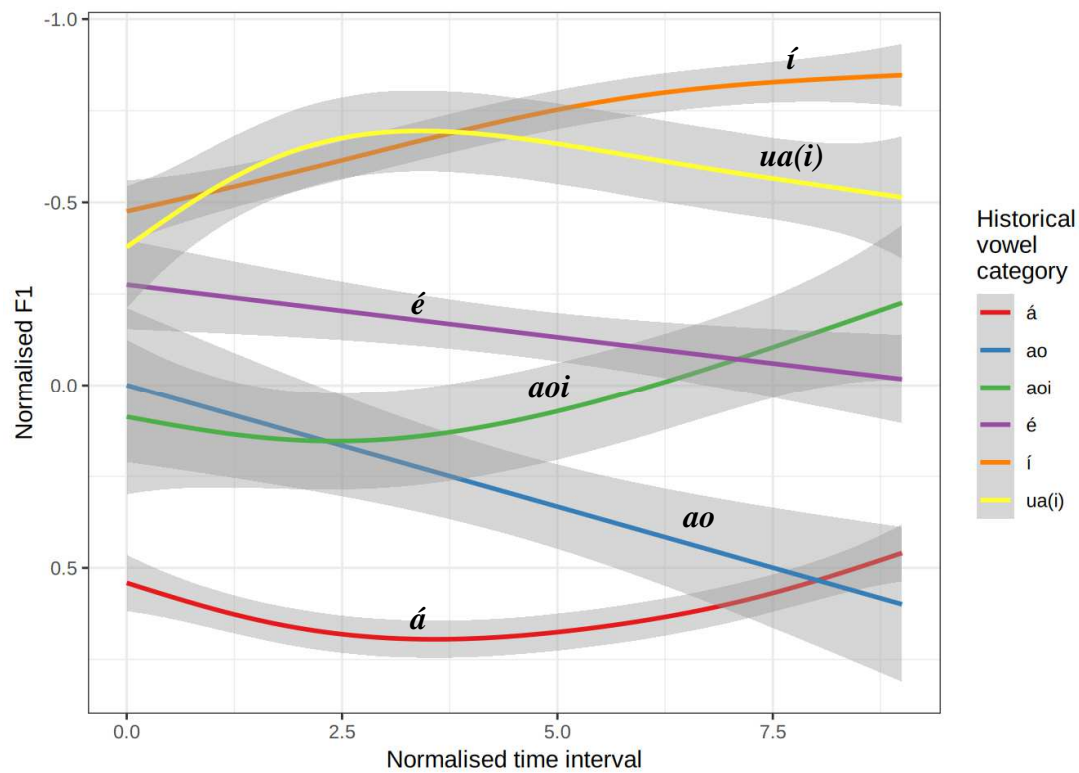


Chart 7. F2 tracks for front and central long vowels (corresponding to backness), all speakers, Irish Folklore Commission recordings

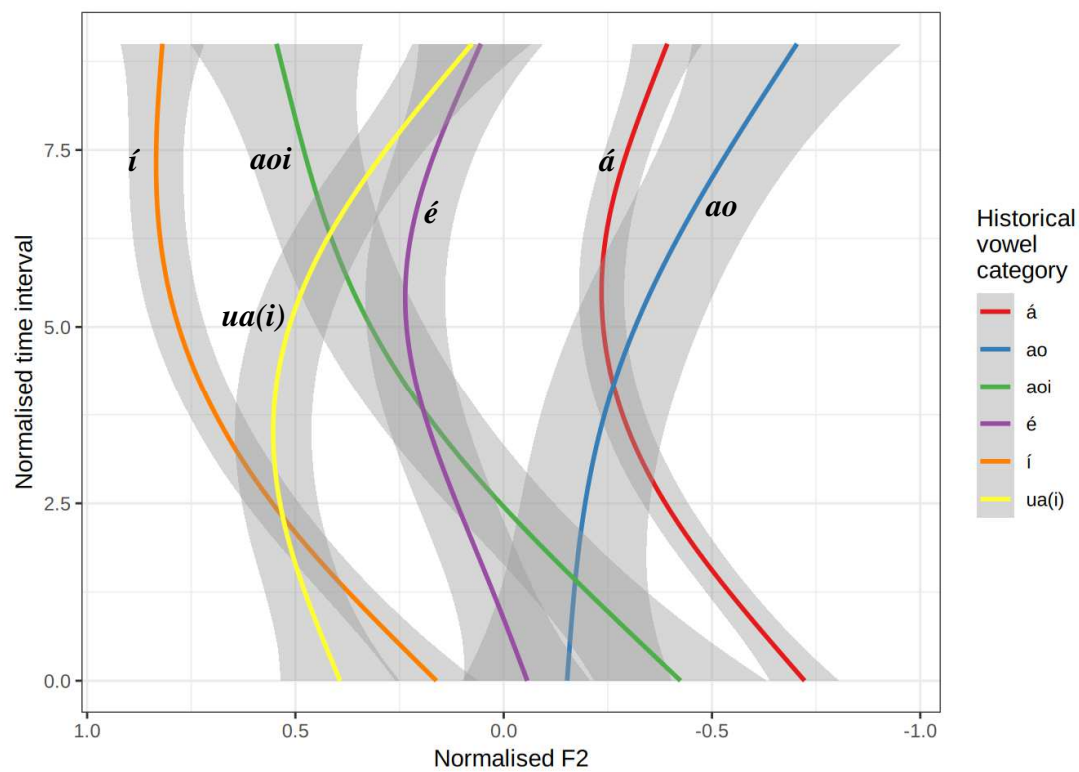
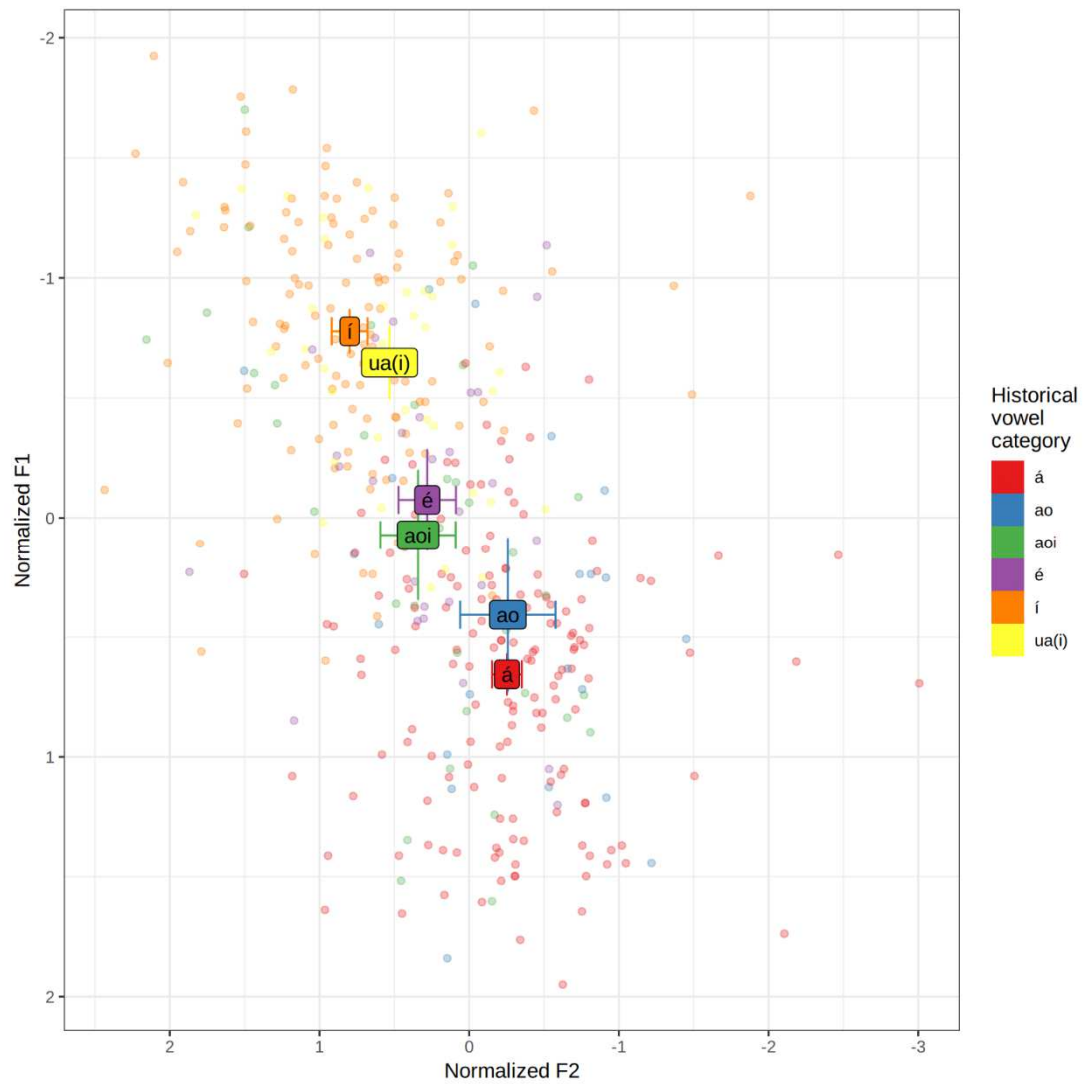


Chart 8. Means for each category with 95% confidence intervals, all speakers, Irish Folklore Commission recordings, showing F1 (height) and F2 (backness)



The frequency of the first and second formants (F1 and F2), which correspond roughly to vowel height and backness respectively, were measured over ten intervals of equal duration within each vowel, and also normalized by speaker via a z-scoring procedure (that is to say, each measurement was recalculated to show the distance from the mean, measured in standard deviations), in order to improve comparability. Charts 6 and 7 show regression curves of the normalized formant measurements against time, fit using thin plate regression splines using the R package *mgcv* (Wood 2006), together with 95% confidence intervals. Chart 8 shows the means of the two formant measurements for each category.

Although no specific statistical significance can be attached to Charts 6 to 8 in themselves, we can discern at least some qualitative patterns, including the following:

- In terms of height, *ua(i)* clearly patterns in the vicinity of the high vowel *í*, while *ao* and *aoi* are of mid height in the vicinity of *é*, in accordance with expectations from other sources of evidence discussed in this chapter.
- In terms of backness, *ua(i)* again patterns with *í*, but with some overlap with *aoi* and *é*, while *ao* and *aoi* are further back.
- While there is little apparent difference in height between *ao* (expected /ə:/) and *aoi* (/ə:/ [ə:] or /e:/), in backness they seem quite distinct, with *ao* being further back (in the vicinity of the lower *á*), which supports the expectation of an allophonic and/or phonemic split between the two categories.
- *á* /ɛ:/ is clearly distinct from *é* /e:/ (§2.2.3), against the claims of merger made by Broderick (*HLSM* III: 50).

To investigate further whether statistical significance can be discerned in these apparent contrasts, pairwise comparisons were run on the differences between the midpoints (=point 5 for our purposes). *T*-tests were used, correcting for multiple comparisons using False Discovery Rate (FDR) (Figures 11, 12).

Figure 11. Pairwise comparisons using *t*-tests with pooled standard deviation for Irish Folklore Commission data, F1 (height)

	<i>á</i>	<i>ao</i>	<i>aoi</i>	<i>é</i>	<i>í</i>
<i>ao</i>	0.0754	—	—	—	—
<i>aoi</i>	2.0e-07	0.0464	—	—	—
<i>é</i>	9.6e-10	0.0047	0.3020	—	—
<i>í</i>	< 2e-16	6.4e-16	5.9e-13	8.4-09	—
<i>ua(i)</i>	< 2e-16	1.3e-10	2.0e-07	6.2e-05	0.2290
P-value adjustment method: FDR					

Figure 12. Pairwise comparisons using *t*-tests with pooled standard deviation for Irish Folklore Commission data, F2 (backness)

	<i>á</i>	<i>ao</i>	<i>aoi</i>	<i>é</i>	<i>í</i>
<i>ao</i>	0.96750	—	—	—	—
<i>aoi</i>	4.8e-06	0.00141	—	—	—
<i>é</i>	8.4e-05	0.00507	0.75133	—	—
<i>í</i>	< 2e-16	9.1e-11	0.00049	0.00017	—
<i>ua(i)</i>	9.1e-11	2.0e-05	0.23047	0.12730	0.03169
P-value adjustment method: FDR					

With respect to F1 (height), we find that *ao* and *aoi* are marginally different (p-value just under .05), and there is no significant difference between *é* and *aoi* or between *ua(i)* and *í*. The difference between *á* and *ao* is marginal at best, but all the other pairs are strongly different from one another, although the difference between *ao* and *é* is more marginal than the rest. With respect to F2 (backness), there is a quite marginal difference between *í* and *ua(i)*, and no difference between *á* and *ao*, between *é* and *aoi*, between *aoi* and *ua(i)*, and *é* and *ua(i)*. The vowels *í*, *é* and *á* are all different from one another. *Ao* is different from *é* and *aoi*, but the differences are not as great as for F1.

The above results show that for the terminal speakers, *á* is certainly contrastive with *é* (against Broderick's claim, *HLSM* III: 50), and there is no general merger of *ao(i)* and *ua(i)*, contradicting Broderick's claim that 'AO(I) and UA(I) have practically completely fallen together' (*HLSM* III: 60). As expected from other data presented in this chapter, *ua(i)* shows no height difference from *í*, but seems to be a little different from it in backness; *ao* is somewhat different from *é* in both height and backness; and there is evidence of merger of *aoi* with *é*. Finally, there appears to be little difference between *á* and *ao*, especially in F2, although no other evidence or descriptions suggest

merger between these vowels. It should be stressed however that the relatively low number of tokens means that these results must remain tentative.

3.8 Fronting and unrounding of *ua(i)* in Manx and Ulster Irish

In Ulster Irish /ua/ may be fronted to [iə] or similar in certain environments (Ó Dochartaigh 1987: 110–4):

A similar explanation [to that offered for fronting of /u/ before /w/, namely dissimilation] might be offered for a phonetic shift affecting a [u] vowel when it is part of the /ua/ diphthong after a labial consonant. In a number of dialects, particularly in South Donegal, though including also some examples from further north, the /u/ of the diphthong appears occasionally as [i] or [i], usually accompanied by a labialised semivowel off-glide from the preceding consonant — e.g. [f^vɪər] for *fuar*.

(Ó Dochartaigh 1987: 110)

Ó Dochartaigh endorses Ó Searcaigh's (1925: 19) and Sommerfelt's (1922: 31) explanation for this, namely that the fronting represents 'a dissimilation between the initial labial and the rounded quality of the /u/, with unrounding followed by fronting to [i(:)]' (Ó Dochartaigh 1987: 110). Further evidence for this is an intermediate form [u(:)] replacing the [u(:)] element of the diphthong noted by Ó Searcaigh and also by Sommerfelt (1922: 145–6), who also records the complete replacement of the diphthong by long /u:/ in certain items. O'Rahilly's (37) explanation for these developments is somewhat different:

More important is the change, common in Ulster, of *ua* preceded by a labial to *I:*, *ɛ:* etc. Thus *buan* is pronounced in Donegal as if it were *baon*, viz. *b(w)ɛ:n* or *bwɛ:n*, comparative *bwɛ:n'ə*. In the same county *fuar* is pronounced *fwɛ:r* or *fwɛ:ar*... In these and similar words the Donegal development was, I take it, from *u:ɔ* (= *u:ə*, with the second element retracted) to *uɔ:*, by shifting of length, and thence to *wɛ:* and *wɛ:*, the originally long *u* of *ua* being finally reduced to a *w* offglide from the preceding labial.

(O'Rahilly: 37)

Ó Dochartaigh notes the sequence of developments suggested by O’Rahilly, but proposes a different sequence:

[u:ə] > [ʉ:ə] > [ʰi:ə] (> [ʰE:])¹⁸⁶

(Ó Dochartaigh 1987: 111)

Ó Dochartaigh’s explanation seems preferable to O’Rahilly’s, since the latter does not give an account of why the change should take place after labial consonants but not elsewhere.

The apparent similarity of these developments and Manx fronting of /uᵻ/ has been noted in passing by Ó Dochartaigh (1987: 112) and Broderick (*HLMS* III: 60). However, on closer inspection they seem to be quite distinct developments. Fronting of *ua(i)* in Manx may take place after any consonant, or in initial position, not just after labials, and indeed a number of the items where back /uᵻ/ is or may be retained in Manx have a preceding labial consonant. The principal exceptions in Manx are given in §§3.4.5, 3.4.6.

Of these, *mooar* and *booa* do not belong to the /uᵻ/ class in most Gaelic dialects, and thus might be expected to behave differently in Manx. Alternatively, fronting may be blocked in them by the labial quality of the initial consonant, as in *feayr* and *fooar*. In the case of *mooar* the back quality of /u:/ in the comparative *smoo* (G. *is mó*) may reinforce the retention of the back quality of the vowel in *mooar*. It appears that the fronting of /uᵻ/ in Manx either represents centralization of the [u] element to a quality closer to the second element [a] or [ə], or dissimilation between the back quality of [u] and the dorsal quality of consonants such as [k], as suggested by Phillips’ orthography (§3.6.1.2). If this is the case, this would be more or less the mirror image of the Ulster development. The Phillips data, as well as the lexical distribution of /uᵻ/ and /iᵻ/, /ə:/ in the later language, indicate that fronting spread by lexical diffusion.

In the case of *heose* etc., the motivation for the retention of back forms might be to avoid clashing with antonyms, since the regular development of both *thuas* ‘up’ and

¹⁸⁶ The development to [ʰE:] represents a realization found in East Ulster *buartha* (Ó Dochartaigh 1987: 111).

thíos ‘down’ could give *[hi:s] in Manx.¹⁸⁷ The forms with [o:] may represent original non-diphthongized *ós* (*GOI*: 40), or perhaps more likely later sporadic monophthongization of /uə/ (cf. Ó Curnáin 2007: 92–3). The retention of the back vowel in *ooasle* in Classical and Late Manx (but with a fronted form attested in Phillips, §§3.4.6, 3.6.1.2) may be connected with the development of an initial glide [w] (the Late Manx attested forms seem to have /wu/ rather than /uə/ or /u:/) (cf. *ibid.*: 93), or the fact that *ooasle* is a high-register word.

3.8.1 /iə/ ~ /uə/ in *feayr* ‘cold’ (G. *fuar*): register, dialect, idiolect

Rhÿs (20–1) gives the following comments on the distribution and usage of the different reflexes of *ua* in *feayr* ‘cold’ (G. *fuar*):

the *uy* [uə] of the *fūyr* [fuəɾ] which I have mentioned, was heard by me in Andreas in the North, also in the South, but, mostly as a slip: the person using it would quickly correct himself into *füyr* [fiəɾ] or *fīyr* [fiəɾ] as the pronunciation considered proper to give to a stranger, but I have heard it too often for it to have been an accident, even if we had not the northern pronunciation mentioned and the parallel instance of *hoar*.

(Rhÿs 20–1)

The observation of speakers correcting themselves suggests that a perception had developed that the fronted realization of the diphthong was more correct or standard, perhaps as a result of the spelling <eay>, even though the back variant is in fact the more conservative form. The only instance of *feayr* in Phillips is spelled *fúar*, which suggests the back variant, but the derivatives *fiýarghey* (later *feayraghey*, ScG. *fuarachadh*) and *fyaght* (*feayght*, G. *fuacht*) suggest more fronted realizations. In terminal speech we have southern **fu:ɾ** and **fuəɾǎx** (NM), **fu:rax** (HK) but also **fi:əɾ** (TL). From the north, only front unrounded realizations are found: **fi:əɾ** (TC), **fi:ə** (DC, HB), **fi:ə̃** (HB). From this limited data we might surmise that /fuəɾ/ was the usual

¹⁸⁷ The potential problem is exacerbated by a tendency to substitute /s/ for /ʃ/ in *sheese* ‘down’ (motion). Some speakers nevertheless seem to tolerate near homophones, cf. Ned Maddrell’s [si:s] ‘down’ and [sɪ:s] ‘up’.

Cregneash form (as represented by NM and HK), but that /fi̯r/ was found further east and north and east (including in Arbory as represented by TL). However, Rhÿs's comments suggest that the geographical distribution was more complex (see also data from Rhÿs's notes, Broderick 2019 s.v. *feayr*).

3.8.2 *hooar, dooar* 'got, found' (G. *f(h)uair, d'fhuair*)

Rhÿs (25) gives **hūær** [hu̯r̥⁽ⁱ⁾]¹⁸⁸ as the only realization he encountered of *hooar* 'got, found', ScG. *fhuair*. Most of the spellings in Phillips (§3.4.6), however, as Rhÿs points out, suggest a fronted reflex: *heyr*, *deyr* (27 occurrences, ignoring diacritic variation), *hæyr* (14), *dýyr* (1). Of the remaining occurrences, *duóer* (1), *dûêyr* (1) and *fóyr* (1) may represent [u̯], though this is not clear.

Rhÿs (25–6) assumes the fronted reflex attested in Phillips to be obsolete, and gives a suggestion as to why the more conservative form might survive and outlive the regular development, albeit one which is difficult to interpret:

If this form had been still in use it would be probably sounded *hær*: it is, however, a form phonetically later than the *hooar* still in use. Thus it follows that the two pronunciations **hūær** and **hær** have been in use together, and in this instance the reason can be detected, why the older form is the one surviving. Judging from the use made by Phillips of *heyr* [...] 'gat,' in the sense of 'begat,' I infer that association of ideas to have told against it and enabled the older form to survive, which it does as *hooar*.

(Rhÿs 25–6)

In fact the fronted development is attested in terminal speech as **hɛ:r** (HK) (*HLSM* II: 221), alongside forms with **u:**, **u:ə**, also from HK, as well as JTK, NM and W:N. The dependent form is attested as *dhere* or *deayr* in late eighteenth-century folksong manuscripts (Thomson 1961: 22; Broderick 1981a: 118). Nevertheless, it seems that the forms with /u̯/ were the most prevalent in the eighteenth and nineteenth centuries.

¹⁸⁸ For unaccented *æ* I have nothing to show here except the case of the diphthong **ūæ** about to be mentioned as probably involved in the pronunciation of the verb *hooar* 'gat, found' (Rhÿs: 22). The distinctive quality of the offglide may be related to the expected palatalized /rⁱ/ (§4.2.1.3).

It is possible that /hə:rʲ/, /də:rʲ/ (>[he:rʲ], [de:rʲ]), was disfavoured because of the near homophony with the semantically similar *haare* ‘caught; reached (place)’ (ScG. *tàir*) /hɛ:rʲ/, future dependent /dɛ:rʲ/ *daare* (especially considering raising of /ɛ:/ before /rʲ/, §2.2.3).

3.9 Other developments

3.9.1 New diphthongs: *ao(i)*, *ua(i)* + vocalized fricatives

The development of *ao(i)* and *ua(i)* before vocalized fricatives, especially in fronting diphthongs, deserves special discussion. It will be necessary to refer to the interaction of these with combinations involving other historical vowels. The scope of the present chapter, and considerations of space, preclude the provision of full data tables for these, but the relevant lexical items are given in the following lists. In the ensuing discussion, reference is to data to be found under the relevant headwords in *HLSM* (II) and Thomson (1953), unless otherwise stated.

leigh (*lagh*) /aɣ/, /oɣ/ > /əɨ̯/

ey (*iodh*), *eystyr* (*adhastar*), *eyrt* (*adhairt*), *feiy* (*foghar*), *cleigh*, *cleiy* (*cladh*), *fuygh* (*fiodh*), *reih* (*rogha*), *teiy* (*togha*), *leih* (*loghadh*), *oaie*, *oi* (*aghaidh*)

soie (*suidh*) /uj/ç/ > /uɨ̯/ > /əɨ̯/ or /i:/

cloie (*cluiche*), *broie* (*bruich*), *stroie* (*struidh*)

roie (*rith*) /Ri/ > /rəɨ̯/ or /ri:/

roih (*righ*)

oie (*aidhche*, *oidhche*) /ajçə/ > /əɨ̯/ or /i:/¹⁸⁹

mie (*maith*) /a/ɔj/hj/ç/ > /aɨ̯/

brie (*braith*), *crie* (*craith*), *criy* (*croich*), *drine* (*draighean*), *grih* (*groigh*), *lhie* (*laigh(e)*), *lhiy* (*loth*, **loith*), *Mian* (**Maitheán*), *moidyn* (*maighdean*), *side*

¹⁸⁹ For the special development of this item in Gaelic dialects, see Ó Maolalaigh (1997: 197).

(*saighead*), *sie* (*saich*, *saith*), *siyn* (*saitheach*, *soitheach*), *thie* (*taigh*), *trie* (*traigh*, *troigh*)

jeih (*deich*) /ej/ɣ/ç/ > /eᵢ/

lheihs (*leigheas*), *meih* (*meidh*), *feie*, *feai*, *fey*, *feiy* (*feadh*), *shleiy* (*sleagh*), *eirey* (*eighre*, *oighre*)

jei (*diaidh*, *déidh*) (/iaj/ɣ/ >) /e:j/ɣ/ > /e:ᵢ/

eie (*éigh(eadh)*), *feie* (*fiadh*), *greie* (*gréith*), *spreie* (*spréidh(eadh)*), *jeigh* (*(do-)iadh(adh)*), (?) *lhaih* (*léigh(eadh)*)¹⁹⁰

3.9.1.1 *ao(i) + /i/*

This mostly seems to give /ə:i̯/.

Table 51. *ao(i) + /i/*

	Phillips	CM pronunciation	etymology	English	HLSM
lhey	ŷi, ŷei, ŷæi, ŷoi, (pl.) yôi	/lə:i̯/	laogh	calf	ɛi TC, CC, WQ, HK, ei TC, W:N, ɛ:i EKk, HK, ɛ:i HK, ɛ-i JTK, ɛ:i NM, E:i W:N, a i W:S, ɛi J:HB, J:TL, J:JTK, J:EK, (pl.) Leᵢ, Leᵢᵠ, Løᵢᵠ, løᵢᵠ TC
fey-yerrey (Bible, Cr., K.), fei(h)- yerrey (SW), fy- yerrey (Cr.)		/fə:(i) 'jerə/	faoi dheireadh	at last	
freoai			fraoich (genitive)	heather	ɛ:i EK, i: NM, ɛi EKk
meiygh, meigh (K., Hymns)	ŷú, ŷ, ú	/mə:i̯/, ?/mə:/	maoth	tender	mɛ: TC, HK, (<i>meiyghagh</i>) møiqx TC
gleiy (Cr.), gleih (K.)		/glə:i̯/	glaodh	glue, slime ¹⁹¹	

¹⁹⁰ The spelling and some attested realizations of this item may suggest assimilation to the /e:i̯/ (< *áigh* etc.) class, although the motivation for this is unclear.

¹⁹¹ 'a fibre of slime or of any glutinous matter' (Cregeen)

mreih (Cr., K.), mree (PC 1796)	ý, íí	/mr̩:ĩ/, ?/mr̩i:/	mnaoi	woman (gen.)	
nuy; nuyoo	yú, yu, ýý, (nuyoo) nú (5), nu, nýú, nyu	/nə:ĩ/, /ni:/	naoi; naomhadh	nine; ninth	ɸi JW, i: NM, r: J:NM, ei J:EK, ʷi TC, ai JK, ε-i: JTK, (nuyoo) nɸiu JW, nɸi-u TC, ni:u: NM
siyr	eî (2), éi, ei, êî	/sair̩/	saothar, var. saoithear, saoitheir (eDIL saithir, sáithir)	haste	saiəʳ TC, saiɛ̃ JK, sajə, sajəʳ W:N, sa:ʳ HK, sa:iəʳ TT
streghernee (Bible, K.) streiyraght (Bible, K.), streighyr, streiy, streighraght, streighernee (Cr.),		/strə:iər/, /strə:iərni/, /strə:iərax̩t/	sraoth, sraothartach	sneeze	

Note the /ai/ diphthong in the Manx reflex of G. *saothar* (or rather *saoithear*) rather than /ə:i/ or /əi/, confirmed by the spelling and the back realizations **ai**, **aj** etc. (HLSM); long diphthongs appear to be disfavoured in closed syllables for prosodic reasons; cf. also *riyr* (§§3.4.2, 3.9.4).¹⁹² The spellings of *stregher-*, *streighyr* on the other hand suggest that this item remained disyllabic and preserved /ə:i/ in an open syllable.

As in other Gaelic varieties, the language name *Gaoidhealg*, *Gaoidhilg* is irregular, and gives a monosyllable with a short vowel in Late Manx (Table 52):

¹⁹² The [ə] in some of the HLSM realizations is probably to be interpreted as a glide associated with the Late Manx realizations of coda /r/ (§4.2.3). The metre shows it is monosyllabic in PC ll. 489, 662 and Hymns 43, 130.

Table 52. *Gaoidhealg, Gaoidhilg*

	Phillips	CM pronunciation	etymology	English	HLSM
Gaelck, Gailck, Gaelc (K.), Gaelic, Gailic, Gaelg (Cr.), Gailck (SW, Hymns, C19 newspapers); (adj.) Gaalgagh, Gailckagh etc. ¹⁹³	(adj.) gellgah, golgkagh	/gil'gi/, /gel'gi/, /gil'ki/, /gel'ki/	Gaoidhealg; *Gaoidhilgeach	Manx language; pertaining to Manx, Manx-speaking	g'il'k' JTK, HB, gilk' JK, gilk W.N, giLk' TC, gilk WQ, gelg JW, gilg , gilk NM, gilg , gelg W:S, gilk J:JK, gilg J:NM; (adj.) gelgax JW, gilkax TC ¹⁹⁴

3.9.1.2 *ua(i) + /i/*

These also mostly appear to give /ə:i/, but see below. For items with G. *uaidh* which retain back /uəi/ see §3.4.5.

Table 53. *ua(i) + /i/* (excluding items with synchronic /uəi/)

	Phillips	CM pronunciation	etymology	English	HLSM
leoie	yi, ýei, ýei; (G. <i>luaithreadh</i>) liyri	/lə:i/	luaith	ashes	øi TC, øi JW, NM, ei WQ, üi CC, ei EC
leoaiē		/lə:i/	luaidhe	lead (metal)	ei TC, WQ, ɛ:i HK, øi NM, J:JTK, qi EC
creoi	yei (2), yoi, ei (2), oi	/krə:i/	cruaidh	hard	ɛ:i JK, NM, ai JK, i: JTK, øi J:EK, J:JK, ei HB

¹⁹³ The simple form *Gaoidheal* ‘Gael, Gaelic-speaker’ does not seem to be attested in vernacular usage in Manx; Kelly’s ‘Gael, s. a Celt, a Manxman, an Irishman, a Highlander’ is probably an antiquarian insertion. From an early date the term *Manninagh* ‘Manxman’ (G. *Manannach*) seems to have sufficed for self-identification, and there appears to be little or no tradition of ethnic identification with the Irish or Scottish Gaels prior to the Celtic revival. The adjectives *Gaalgagh* (**Gaoidhilgeach*) and *Baarlagh* (**Béarlach*) are used for Manx- or English-speaking, or pertaining to the respective languages.

¹⁹⁴ Note that in the north only forms with devoiced final /kʰ/ are found, while both /gʰ/ and /k/ are found in the south.

treih	y ^{ei} , á ^{ei} g, eyi (3), é ⁱ ; (<i>truaighe</i>) y ⁱ , æ ⁱ (2), y ^{ei} , yei, y ⁱ , é ^y , eyg, á ^{eyi} ; trá ^{eanid} , tdr ^{ayid}	/trə:ɨ̯/	truagh	miserable	ø ⁱ TC, ɛ ⁱ JC, JW
sleih	y ^{ei} , yei (3), y ^{ei} , yi, y ^{æi} , y ^{ei} , yei	/slə:ɨ̯/	sluagh	people	ɛ ⁱ TC, ɛ ⁱ JK, J:EK, a ⁱ JK, NM, e ⁱ W:S, ø ⁱ J:TL
veih	ei (2)	/və:ɨ̯/	uaidh	from, from him, it	e ⁱ , ɛ ⁱ , e ⁱ TC, a ⁱ NM
teigh	y ⁱ , (pl.) té ^{igyn}	/tə:ɨ̯/	tuagh	axe	ɛ ⁱ HK, EK ^h , a ⁱ , ɥ ⁱ TC, a- ⁱ ø- ⁱ W:N
oaie ¹⁹⁵	y ^{oi} , yoi (2), y ^{oi} (4), y ^{oi} , y ^{oi} , y ^{oi} , y ^{oi} , yei (2), y ^{ei} , y ^{æi} , (pl.) yiaghyn, y ⁱ aghyn	/ə:ɨ̯/	uaigh, uagh	grave	ɛ:ɨ̯ HK, ɔ:ɨ̯ NM, ø ⁱ J:NM, r: W:S, ʰ ⁱ TC, ɛ:ɨ̯ HB, e ⁱ W:N, (pl.) ɛ:xə ⁿ , ɛɨ̯xə ⁿ HK
seiy	yoi, e ^{yi} , y ^{æi} , ú ^a , y ⁱ (3), yi (2), y ^e	/sə:ɨ̯/	suaith, suaith ^{eadh}	stir, mix, trouble	ø ⁱ TC, sa:ɨ̯ NM, a ⁱ W:S
s'leaie	y ^{ei} , y ^{ei} , yei (4), y ^{ei} (2), y ^{æi}	/s lə:ɨ̯/	is luaithe	sooner, earlier, quicker	iə NM, i: HK
ruy		/rə:ɨ̯/	ruadh	red, ruddy	a ⁱ , a- ⁱ NM, e ⁱ HK, rɛ ⁱ J:EK, J:NM, J:HB, NM

3.9.1.3 Interpreting the developments of *ao(i)*, *ua(i)* + /ɨ̯/

Rhÿs's notes on contrasts and mergers in the diphthongs /aɨ̯/, /əɨ̯/, /ə:ɨ̯/, especially the relationship between the seven near-homophonic monosyllables of the shape /V(:)ɨ̯/, are complex and difficult to interpret:

Open *o*, short...enters into a diphthong *oi* as in the word [...] *lhiy* 'a colt' (Ir. *loth* 'a colt, a filly'); [...] *leigh* 'law' (Goi. *lág*h [sic] [...] *lhie* 'a lying down'

¹⁹⁵ Bible MSS: *oaih* (Numbers 19:16,18), *eo*i (1 Samuel 2:6), *oaie* (1 Kings 2:6,9, 13:22,30), *oie* (1 Kings 14:13), *oaieaghyn* (2 Chronicles 16:14), *Oiee* (Revelation 6:8) *oaih* (Revelation 20:13), *oaih* (Revelation 20:14).

(Ir. *luigh*, ScG. *laidh*); and [...] *leih* to ‘forgive’ (O. Ir. *doluigim* ‘I forgive’). Ordinarily these words have much the same pronunciation, but when attention is called to it, Manx speaking people think that they make slight distinctions. As a matter of fact they never rely on those distinctions, for they resort to other means of avoiding ambiguity: thus *goll dy lhie* is said both of a person going to lie down in bed and of the sun setting, whereas going to law is *goll gys y leigh* [...] literally ‘going to the law*.’

* Since the above was put in type I have taken down from the mouth of a native of Ballaugh, Mr. Thomas Callister, the following pronunciations of these words: *lẏi* for (1) a calf, (2) law, (3) forgive, and *lōi* for (1) a colt, and (2) lying down. Here the *ō* represents a sound almost as open as that of *a* in the English word *all*. (Rhÿs: 9)

(Rhÿs: 9)

It enters into a diphthong *ẏi* as in [...] *roie* ‘a running’ (Ir. *rioth*, but ScG. *ruith*); [...] *lheyi* ‘a calf’ (Goi. *laogh*), which is sometimes pronounced *lẏi*, as for example, by natives of Dalby who thereby distinguish it from *leoaie* ‘lead,’ pronounced by them *lẏi*. Here may also be mentioned a group of words with *i* (probably for *igh* or *idh*) forming the second element of a diphthong which I have heard variously pronounced *ẏi*, *ō̇i*, and even *ēi*. The principal instances are the following: *sleih* ‘people’ ([...] Mod. Ir. *sluagh* [...]); [...] *treih* ‘miserable’ ([...] Mod. Ir. *truagh*, ScG. *truagh*); [...] *teighyn* ‘hatchets,’ plural of *teigh* ([...] Mod. Ir. *tuagh*, [...]), [...] *creoi*, *creoie* ‘hard’ ([...] Mod. Goi. *cruaidh*).

(Rhÿs: 11)

The other diphthong into which *ū* enters is *ūi*, which I have heard in words like *creoi* ‘hard,’ *leoie* ‘ashes,’ *leoaie* ‘lead,’ as pronounced by natives of Ballaugh and Jurby.

(Rhÿs: 11–12)

The vowel *ẏ* enters into a diphthong *ẏi* in [...] *lheyi* ‘a calf’ (Goi. *laogh*, [...]), pronounced both *lẏi* (and *lẏ̇i*), but the *ẏ* is perceptibly longer in the pronunciation of the word now written *leoaie** ‘lead’ (Ir. *luaidhe* [...]) [...]; and the pronunciation of [...] *leoie* ‘ashes,’ (Ir. *luaidh* [...]), is usually the same.

* This is no distinction invented by a grammarian, as I learned it in questioning an aged native of Dalby. He carelessly forgot to mark sufficiently the distinction between *lẏi* for ‘calf’ and the longer *lẏi* for ‘lead,’ when he was instantly corrected by his wife, who however could not read Manx. It is right to add that *y* is here only an approximation, as I sometimes seem to hear the word for ‘lead’ pronounced *lō̇i*, while in the North the principal vowel unmistakably recalls the sound of the *u* which the word originally involved. In the parish of Ballaugh the

word for calf is pronounced *lŷi*, and the plural *lŷi*, written *lheyee*; but the latter is more commonly superseded by a form in *-yn*.

(Rhÿs: 18)

the perfect [...] *hie* ‘went,’ which, in common with its Scotch equivalent *chaidh*, has dropped the *u* of the Goidelic form which appears in Irish as *chuidh*. The Manx form, no less than the others, continues slender, being pronounced *hái* and carefully distinguished from [...] *hoie* ‘sat, did set’ (Ir. *do shuidh* [...]), whose pronunciation oscillates between *hŷi* and *hăi*.

(Rhÿs: 25)

Dawson says *tē bíu er y chāðyn* [te: biu er ə xa:ðən] he is swift on his feet: but he calls a foot *cās* [kas], and *cāsádn* [ka'sa:dn]¹⁹⁶ for a footpath. He says *túi* [tui] north. Kelly distinguishes *tōi* [t^oei] hatchet completely from *tōai* [t^oai] house. Kelly says *hai mī* [hai mi:] ‘I went’ but *hei mi* [hei mi] ‘I sat’, and as to his age he said *tōa my éish tri fid as shaghđžég* [t^oa mə e:ɪʃ tri: fid as ʃax'dʒe:g]. Quirk’s wife pointed out the distinction between *lŷi* [lə:ɪ] ‘lead’ and *lŷi* [ləɪ] ashes. Dawson said *lūe* [li:ə] early in the sentence *ha lūe oð y vohrə* [ha li:ə oð ə voxrə] ‘as early in the morning as &’.

(John Dawson, John Kelly, Margaret Quirk, Rhÿs notebook 6: 135)

Rhÿs’s comments (taken largely at face value) are summarized in Table 54.

Kelly in his dictionary (1866 s.v. *lheyi* ‘calf’) also gives an account which suggests at least a three-way pronunciation contrast:

LHEIY, a calf. This word, and *leoie*, or *leoaie*, and *leigh*, or *leih* require some practice in speaking the language to be able to pronounce them differently and distinctly.

(Kelly 1866: 119)

¹⁹⁶ For the unexpected final stress here, see §4.5.5.

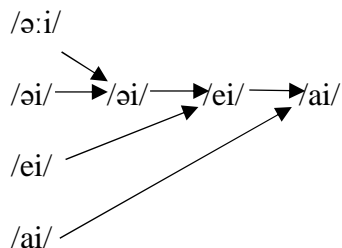
Table 54. Interpretation of Rhÿs's descriptions of /aᵢ/, /əᵢ/, /ə:i/ etc.

expected CM vowel	Rhÿs's descriptions					
aᵢ	aᵢ	lhie (laigh) lhiy (lo(i)th) leih (logh) leigh (lagh) 'Ordinarily...much the same pronunciation'	aᵢ	lhie (laigh) lhiy (lo(i)th) (Thomas Collister)	aᵢ	hie (ScG. chaidh)
əᵢ			əᵢ	leih (logh) leigh (lagh)	əᵢ	hoie (shuidh) roie (rith)
ə:i	əᵢ	lheyi 'natives of Dalby'	əᵢ	lheyi (laogh) (Thomas Collister; Ballaugh)	ə:i	lheyi (laogh)
			ə:i	lheyiye (laoigh) (Ballaugh)		
uəᵢ > ə:i	əᵢ, eᵢ	sleih (sluagh) treih (truagh) teigh (tuagh) creoi (cruaidh)	ə:i	leoai (luaidhe)	ə:i	leoai (luaidhe) leoie (luaith)
					œ:i	leoai (luaidhe) sleih (sluagh) treih (truagh) teigh (tuagh) creoi (cruaidh)
					u:i	leoai (luaidhe) leoie (luaith) creoi (cruaidh) 'in the North', 'natives of Ballaugh and Jurby'

3.9.1.4 /aᵢ/ ~ /əᵢ/ contrast

Concerning those items which are posited here as having either the pronunciation /laᵢ/ or /ləᵢ/, Rhÿs notes that '[o]rdinarily these words have much the same pronunciation, but when attention is called to it, Manx speaking people think that they make slight distinctions'. However, he notes from Thomas Callister of Ballaugh the historically expected distribution of *lhie* 'lie', G. *laigh* = /laᵢ/ (apparently with a back realization) and *leigh* 'law', G. *lagh*, *leih* 'forgive', G. *logh* = /ləᵢ/. It is possible that Rhÿs failed to recognize this contrast when he was not looking for it, especially as central /əᵢ/ might be difficult to distinguish from back realizations of /aᵢ/. On the other hand, a merger /əᵢ/ > /aᵢ/ may have been underway, and more advanced in certain speakers. There are a good deal of examples of **ai**, **ui** etc. in the *HLSM* data for the *leigh* (ScG.

lagh) and *soie* (G. *suidh(e)*) sets, as well as in the *lhey* (G. *laogh*) and *leoie* (G. *luaith*) sets, but no instances of /a_i/ words with **øi**, **öi** etc. The *jeih* (G. *deich*) set with expected /e_i/ also have several realizations with **ai** and similar in *HLSM*. There would thus seem to have been a tendency towards mergers in the following direction in Late Manx:



The evidence of the CM orthography points to a robust contrast between /ə_i/ (G. *agh*) and /a_i/ (G. *aith*, *aigh* etc.), however. The /a_i/ items are consistently spelled <ie>, <iy>, <i_(e)>, while the /ə_i/ (G. *agh*) items are all spelled <ei(g)h>, <ey>, <oaie>. The items with the development /u_i/ > /ə_i/ (>/i:/) all have <oie>, as do the items /Ri/ > /rə_i/. The Phillips orthography has predominately <yei>, <yoi>, <yi>, <ei> etc. for the *leigh* set, and also for *soie*, *soiaghey* and *oie* and *roie* (for these there are also spellings <i>, <ii> suggesting /i:/ pronunciations). The <yei> type spellings are also used for *lhey* and the *leoie* set, with no obvious marking of the expected length contrast.

As for /a_i/, the Phillips orthography predominantly uses <ai>, <ei>, <æi> in *drine* ‘thorn’, *Mian* ‘Matthew’, *crie* ‘shake’, *mie* ‘good’, *sie* ‘bad’, *piyr* ‘pair’, *moidjyn* ‘virgin’. However three items, *thie* ‘house’, *lhie* ‘lie’ and *lhiy* ‘colt’, mostly have <yei>, <yoi> and <yi>. *Taigh* is found as /tɔj/ in most Scottish Gaelic dialects.¹⁹⁷ It is possible that in Manx, as in Scottish Gaelic, the shift /a/ > /ə/ which occurred before /ɣ/ (resulting in *leigh* ‘law’ /lə_i/ etc.) also took place less consistently before /ɣⁱ/. The Phillips spellings would then represent forms */tə_i/ and */lə_i/ which later lost ground to forms with /a_i/. Perhaps forms with /a_i/ were favoured, in part, to disambiguate from otherwise homophonous /tə_i/ *teiy* ‘choose’ (G. *tagh*) and /lə_i/ ‘law’ (ScG. *lagh*), ‘forgive’ (G. *logh*). The spelling of *lhiy* ‘colt’ (G. *lo(i)th*), expected /la_i/, as *l̥yôi*, *lyôi*,

¹⁹⁷ Apart from a region on the north-west coast from Applecross to Assynt where /taj/ is found (*SGDS* v: 292–3). There are also areas where [te] and [toi] are found, which may be derived from /tɔj/ or /taj/. *Laigh* is found almost universally as /Laj/ or /La/ in Scottish Gaelic (*SGDS* iv: 547–8) (with both front and back and a few rounded realizations) apart from 82 and 84 which have Γ ʃ̥ç and Γ ʃ̥ç respectively which might be interpreted as /Lɔj/.

l̥yoi is difficult to explain, unless these spellings represent confusion with *lheyi* ‘calf’ (G. *laogh*) = *l̥yi*, *l̥yei*, *l̥yǎi*, *l̥yoi*, pl. *lyôi*, or else a survival of a contrast /o̥i̯ ~ ai̯/ which appears to be neutralized in Classical Manx (§1.7.5).

Rhÿs (25) describes a clear distinction between /ai̯/ and /əi̯/ resulting from historical /ui̯/ in the *soie* class.

3.9.1.5 *lheyi* ‘calf’, G. *laogh*

Rhÿs reports both long **l̥yi** [l̥ə:i̯] and short **l̥yi** [l̥əi̯] realizations of *lheyi* ‘calf’ (G. *laogh*). Thomas Callister of Ballaugh is reported as using **l̥yi** [l̥əi̯] for ‘calf’, expected /l̥ə:i̯/, as well as ‘law’ (G. *lagh*), and ‘forgive’ (G. *logh(adh)*), expected /l̥əi̯/. Rhÿs also describes a length contrast in Ballaugh between the singular *lheyi* and plural *lheyiee*, G. *laoigh*, and in Dalby he notes short **l̥yi** [l̥əi̯] *lheyi* ‘calf’ contrasting with long **l̥yi** [l̥ə:i̯] *leoai* ‘lead’ (G. *luaidhe*). Rhÿs also seems to imply a three-way contrast between [l̥əi̯] *leigh* ‘law’ and *leih* ‘forgive’, **l̥yi** [l̥ə:i̯] *lheyi* ‘calf’, and ‘the longer **l̥yi**’ ?[l̥ə:i̯] *leoai* ‘lead’. This confusing picture possibly represents instability in the length contrast in diphthongs (and perhaps in vowels more generally), and/or Rhÿs’s failure to perceive the contrast consistently (for example he reports a short diphthong for expected /ɛ:i̯/ (5) and a long diphthong for expected /ũi̯/ (46)). On the other hand, certain explanations for the observed facts may be suggested.

The development of a length contrast between singular and plural may represent an attempt to keep these distinct once vocalization of both /y/ and /y̥/ to /j/ had rendered them otherwise identical. The longer plural form could also represent bisyllabic /l̥ə:i̯.i̯/, with the final /j/ reanalysed as the plural suffix /i/ (G. *-igh*). This may also be the analysis represented by the plural spelling of the biblical orthographic *lheyiee*, if this is not merely an orthographic device to mark the semantic difference between homophones. Some of the original translators of the Bible at any rate did not use this *-ee* termination, nor make a clear orthographic distinction between singular and plural, since in the Bible manuscripts we have plural *ley*, *lheyi* (1 Kings 12:32) and *lheyi* (1 Samuel 14:32), with the standard spelling inserted by the editor. It is possible also that the claimed extra-long pronunciation of *lheyiee* represents a spelling pronunciation

from the Biblical form, especially since, as Rhÿs notes, this was ‘more commonly superseded by a form in *-yn*’ (18). A plural form with termination *-aghyn* is attested in the manuscript of 1 Samuel 6:7.

Pressure to disambiguate /l̪ə:ĩ/ *lhey* ‘calf’ from *leoaie* ‘lead’ (G. *luaidhe*) and *leoie* ‘ashes’ (G. *luaith*), once the latter two had also come to be pronounced /l̪ə:ĩ/, might also explain the shortening of *lhey* ‘calf’ (G. *laogh*) that Rhÿs notes from some speakers. The influence of the short diphthong in *lhiy* /l̪ai̯/ ‘colt’ can also not be ruled out. Furthermore, bearing in mind the apparent survival of triphthongal /uəĩ/ in *gruaie* ‘cheek’, G. *gruaidh* etc. in CM (§3.4.5), it is possible that *leoaie* and *leoie* contained three vowel qualities until a later date (whether /uəĩ/ or /iəĩ/), whereas *lhey* would have been diphthongal, and open to vowel-shortening, for a considerably longer period.

3.9.1.6 *leoie* etc., G. *ua(i)* + /i̯/

Rhÿs reports a long diphthong *ȳi* /ə:ĩ/ in *leoaie* ‘lead’ (G. *luaidhe*) and *leoie* ‘ashes’ (G. *luaith*). However, he notes (Rhÿs: 11) short *ȳi*, *öi* /əi/ or *ěi* /eĩ/ in a series of other items with G. *ua(i)gh/dh* which we would expect to have a similar development: *sleih* ‘people’ (G. *sluagh*), *treih* ‘miserable’ (G. *truagh*), *teigh* ‘axe’ (G. *tuagh*) and *creoi* ‘hard’ (G. *cruaidh*). It is possible that Rhÿs did not perceive the length of the diphthong in these items since (apart from *teigh*) they do not form minimal pairs with items with short /əĩ/, and so he would not have been listening out for a contrast.

Rhÿs (11–2) also notes a diphthong *ūi* /u:ĩ/ in *creoi*, *leoie* and *leoaie* ‘as pronounced by natives of Ballaugh and Jurby’, reporting (18) that ‘in the North the principal vowel unmistakably recalls the sound of the *u* which the word originally involved’. This pronunciation is not recorded in Rhÿs’s fieldnotes, however, and one wonders whether this description represents a *post hoc* analysis based on these items’ etymology.

On the other hand, it is interesting that Rhÿs notes only these three items here, with their distinctive spelling involving <eo>, and does not mention the items with historical *uagh* which have the spelling <ei(g)h>, which renders them indistinguishable, as far as the orthography is concerned, from the the *leigh* class (G.

agh etc., expected /əi̯/). The spelling of *creoi*, *leoie* and *leoai* possibly represents a conservative pronunciation of these particular items. Another potential factor here is that for two of these items there could have been analogical pressure to retain the conservative vowel reflex in the form of the derived nouns *creoghys* ‘hardness, hardship’ (G. *cruas*, *cruadhas*, *cruachás*), *creoghan* ‘gadfly, harsh creditor’ (G. *cruadhachán*) (Kelly) and the genitive *leoh* ‘of ashes’ (G. *luatha*) (Cregeen).

On the other hand, the spellings *leoie* and *leoai* could simply be intended to distinguish them from the near homophones *leigh* ‘law’ (G. *lagh*), and *leih* ‘forgive’ (G. *logh*).

CC’s¹⁹⁸ pronunciation **l̥i̯i** of *leoie* ‘ashes’ perhaps represents Rhÿs’s **ūi**. According to Broderick’s vowel chart (*HLSM* I: 1), **ū** is a high back unrounded vowel and is ‘similar to λ and could very well be interchanged for it’ (ibid.: 2).¹⁹⁹ (Broderick’s λ = [u], although he also uses the latter symbol, e.g. *HLSM* III: 60.) The transcription **l̥i̯i** should thus be understood as [lu̯i̯]. If Rhÿs’s comment that ‘the principal vowel unmistakably recalls the sound of the *u*’ is taken to refer to height and backness, but not necessarily rounding, this may agree with the existence of a realization of G. *ua* as [u:] or [u̯] (Rhÿs’s **ū(y)** and **ū(y)**).

As discussed above, there is no clear evidence in the Phillips orthography for pronunciations of the *leoie* (G. *luaith*) set as /u̯i̯/, or of a clear differentiation between these items and the *leigh* (ScG. *lagh*) and *lhey* (G. *laogh*) sets. It would seem that the pronunciation of G. *ua(i)dh/gh/th* as /əi̯/ goes back to the early seventeenth century, or else that the Phillips orthography fails to distinguish between /u̯i̯/ or /u̯:̯i̯/, /əi̯:̯/, and /əi̯/, which, if distinct, must nonetheless have sounded similar (especially to an L2

¹⁹⁸ Presumably Caesar Cashen of Peel (b. c. 1859), although he is not included in Broderick’s list of speakers (*HLSM* I: xxvii–xxviii). Cashen was literate and held Manx classes in Peel in the early twentieth century (Broderick 1999: 75), so there is perhaps a risk that his realizations represent spelling pronunciations.

¹⁹⁹ The use of this character probably follows Wagner (*LASID* I: xvii), for whom **ū** is ‘a slightly rounded variety of \ddot{i} ... \ddot{u} and \emptyset are much less rounded than German \ddot{u} , \ddot{o} , although they give a similar acoustic impression’. Wagner’s \ddot{i} is a mid-high central unrounded vowel.

speaker, if the orthography is attributed to Phillips himself), as well as representing a contrast with little functional load.

3.9.1.7 /ə̃j/, /ə̃:̃j/, (/ũ:̃j/) > /ẽj/

Many of the realizations of the *leigh*, *soie*, *roie*, *lhey* and *leoie* sets in *HLSM* have transcriptions representing [ẽj] or similar. This may represent a reduced phoneme inventory (i.e. the loss or avoidance of sounds not found in English) among the terminal speakers, but Rhÿs's comment on members of the *leoie* sets that he 'heard variously pronounced *ỹi*, *ö̃i*, and even *ě̃i*' suggests that this merger was underway among some of his informants. The CM spellings <eih, eiy, eigh> used to represent /ə̃j/ and /ə̃:̃j/ may suggest that this tendency towards merger with /e(:)j/ was already underway in the eighteenth century. They are more consistently distinguished in the Phillips orthography, with /ə(:)j/ being represented by <yei, yoi, yi, ei> while /e(:)j/ is usually <ei, æi>. The merger /ə(:)j/ > /e(:)j/ may be seen as part of the wider merger of *aoi*, *uai* /ə:/ > /e:/ before slender consonants reported by Rhÿs (§3.5.1.4).

3.9.1.8 /ə̃j/, /ə̃:̃j/, (/ũ:̃j/) > /i:/

There is also a tendency to monophthongize /ə(:)j/ to /i:/, which seems to be lexically and dialectally conditioned. In particular it is more frequent in the south (cf. *HLSM* I: 162). Monophthongization is not found in the *leigh* category with original broad /y/.

The Phillips orthography apparently records both pronunciations. It is attested from southern speakers in the *soie* (G. *suidh(e)*) set, alongside the diphthongal pronunciation. Phillips' spellings *sigi*, *siggi* for imperative plural *soie-jee* (Ir. *suidhigí*) apparently represent the /i:/ pronunciation alongside the more frequent spellings with <yi, ei, yei>. In this set /i:/ could arise directly from fronting of /u/ before a slender consonant (§2.1.8), or via /ə̃j/. In the *roie* set /i/ is original, and realizations with /i:/ are attested from southern speakers alongside diphthongal realizations.

In the *lhey* set there are only diphthongal realizations, apart from *nuy* 'nine' (G. *naoi*), where /ni:/ is attested from southern speakers alongside diphthongal realizations. The

spellings *myníí* (Ph.) and *mree* (PC 1796) for *mreih* (G. *mnaoi*), genitive of *ben* ‘woman’,²⁰⁰ perhaps also represents a pronunciation with /i:/. In the *leoie* set we have mostly diphthongal realizations from both north and south, but **kri:** for *creoi* ‘hard’ (G. *cruaidh*) from the northern speaker JTK, **r:** (Wagner, southern informant) for *oaie* ‘grave’ (G. *uaigh*), and **slia, sl’i:**, from the southern speakers NM and HK respectively, for comparative *s’leaie* ‘sooner, -est’ (G. *is luaithe*), although this could represent the uninflected form *leah* (G. *luath*). In this set /i:/ may represent the general fronting and unrounding of G. *ua(i)*.

3.9.1.9 *ao(i) + /u/*

This gives both diphthongal and monophthongal forms.

Table 55. *ao(i) + /u/*

	Phillips	CM pronunciation	etymology	English	HLSM
cheu	cheu (13), chééy̆f, cháéf, cháéf, cháef, cháyf, cháeyf, cháeyf, chêyf ²⁰¹	/tʃe(:)u/	taobh > *téabh	side	øu JW, TC, au JK, NM, TL, u TC, JTK, EC
crouw		/krə:u/	craobh	bunch of shrub	øu JW, TT
eunys	áeu, êa, eú, eu	? /e:un ⁰ əs/, > /ju:n ⁰ əs/	aoibhneas, ScG. éibhneas	joy	ju:nəs JW, TC, jūnəsax TT
foyr	fôêr, fÿior	/fo:r/, ?/fu:.ər/	faobhar	edge of blade	fø:r EK _h , fu:ər J:EK, ə 'nə:r W:S, əɲ 'ø:ə EL, (foyragh) fo:rəx HK
noo	ú (11), u (8)	/nu:/	naomh	holy; saint	u: JW, HK

²⁰⁰ = G. dative form *mnaoi* rather than the historical genitive *mná* (Thomson 1995: 142).

²⁰¹ Note unexpected maintenance of /v/ here, as if the form were **taoibh*, or rather **téibh* (slender *bh*, *mh* are often retained in Phillips, written <f(f)>, where later they are vocalized to /u/, as was the case already in Phillips with their broad equivalents). Given that the noun is feminine according to Cregeen, this could be a dative form, perhaps under the influence of *lá(i)mh*.

sou		/sə:u/	saobh	vexition, distress; (prefix) foolish etc.	
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3.9.2 /e:/ > /ə:/ in Scottish Gaelic and Manx

A number of items in Scottish Gaelic show *ao* (northern /u:/, southern /ə:/) for OIr. *é* /e:/ before broad consonants (O’Rahilly: 32; Dillon 1953: 322–3; Ó Maolalaigh 2007: 226), especially in initial position as in *aodach* ‘clothes’ (Ir. *éadach*), *aodann* ‘face’ (Ir. *éadan*), *aog* ‘death’ (Ir. *éag*), *aogasg* ‘countenance’ (Ir. *éagcosc*), *aotrom* ‘light’ (Ir. *éadrom*); also *taod* ‘halter, rope’ (Ir. *téad*), *faod* ‘may, can’ (Ir. *féad*), *maodal* ‘stomach, paunch’ (Ir. *méadal*) and others.

This change is not consistent in Scottish Gaelic; some words which one might expect to be affected do not have reflexes in *ao* at all, such as *eud(ach)* ‘jealousy, zeal’. Others, including *eug* / *aog*, and the adjectives with the negative prefix *eu-*, *ao-* such as *eu-coltach*, *ao-coltach*, are variable. Even the items which appear to have *ao* universally in the spoken language may have written variants with *eu*, as in *eudach* ‘clothes’, which are presumably literary and influenced by the Classical Irish standard. O’Rahilly (32) claims that this change is ‘unmistakeable proof that the **Ų**: or **Ɔ**: of current ScG. could have developed from **E**:', for it has a number of words in which an historic *ē* followed by a non-palatal consonant has acquired the value of *ao*, after first passing through **E**':. O’Rahilly’s **E**:' seems to be intended to represent a retracted [e:] or fronted [ə:], while **Ɔ**:' represents [u:].

O’Rahilly is probably right: it can easily be seen how an interchange between /e:/ and /ə:/ could take place when these were similar sounds, adjacent in the vowel space. It is much less likely that /e:/ would synchronically interchange with /u:/. Since *aodach* etc. is found throughout Scotland (and apparently the Isle of Man), it presumably represents an early change that affected the whole of the Scottish Gaelic area before the vocalization of *adh/gh* and the raising and backing of /ə:/ to /u:/ in the northern dialects.

Dillon (1953) suggests that the existence of doublets with *ao* and *eu* in Scottish Gaelic is an example of ‘semantic distribution’ whereby different phonological reflexes of the same item gain different meanings; Ó Maolalaigh (1997: 114, 200, 227, 514, 634) refers to this as ‘homophonic lexical split’. Dillon (1953: 323) gives a number of examples, including *taod* ‘halter’ : *teud* ‘harpstring’, *faodail* ‘waif’ : *eudail* ‘treasure, darling’, and *saod* ‘good condition or humour’ : *seud* ‘way’. In all of these doublets, the form preserving /e:/ can be seen as the higher-register or literary form, although *eudail* has come into popular use as a term of endearment (*m’ eudail*, *m’ iadail*).²⁰² Ó Maolalaigh (2007) makes the following observations concerning the change *é* > *ao*:

it is unlikely to be purely coincidental that the change *é* > *ao* in Scottish Gaelic is confined to words with initial *éa-* and *f-, s-, t-*. The development in the case of *féad* > *faod* clearly represents a subclass of initial *éa-* given the lenition product of *f-*. Lenition of both *s-* and *t-* yields *h* which is phonemically neutral with regard to palatalisation. The retraction of original *é* in certain words with initial *f-, s-* and *t-* in Scottish Gaelic may first have occurred in lenited variants *fh-, sh-, th-*, and the loss of initial palatal quality may have been due to hypercorrection in much the same way that non-palatal initial *s-* and *t-* in some Irish dialects have been replaced by palatal *s-*, and *t-* in certain *CiC’* sequences, e.g. *saoil* > *síl*, *tuit* > *tit* etc.

(Ó Maolalaigh 2007: 226)

There are also one or two cases of /ə:/ > /e:/, notably *aoibhinn* (O.Ir. *oíbind*) which is found as *éibhinn* in Scottish Gaelic (alongside the historic form), and apparently in Manx, if *eunys* /ju:nəs/ ‘joy’ (HLSM II: 154) derives from *éibhneas* rather than *aoibhneas*.²⁰³ Similarly, the case of Ir. *saoil* > *síl* is paralleled in Manx by the form *sheill*, *sheiltyn* (apparently = **séil*) (§5.5.1).

There is some evidence in Manx of /e:/ > /ə:/ in some of the same items as in Scottish Gaelic. Rhÿs (17) notes *ÿ* [ə:] as the most frequent realization of the initial vowel in *eddin* ‘face’, Ir. *éadan*, suggesting a form parallel to Scottish *aodann*. However he notes *ē* [e:] ‘once or twice in the South’. Spellings with <y> in Phillips, such as *yddyn*,

²⁰² Homophony also offers a possible motivation for the initial change /e:/ > /ə:/, distinguishing the pre-existing homophones *eudach* > *aodach* ‘clothes’ from *eudach* ‘jealousy’. Interestingly, the latter item may itself have undergone a subsequent homophonic split between *eud* /e:d/ ‘jealousy’ and *iadach* /iadəx/ ‘zeal’ (Dwelly s.v. *eud*; Dillon 1953: 323).

²⁰³ Breatnach (1994: 233) notes a Middle Irish spelling *ébind*.

ydyn, occur eight times, and would seem to suggest the /ə:/ pronunciation, while there are nine occurrences with <e>, <æ>, <é>, <ey> which might imply /e:/. *Eaddagh*, *eaddeeyn* ‘clothes’, Ir. *éadach*, ScG. *aodach*, is consistently spelt with <y> in Phillips (12 occurrences). Lhuyd’s collector writes *ady*n for *eddi*n (Ifans and Thomson 1980: 137). *Tedd* (G. *téad*, ScG. *taod*) is attested in Phillips as *tæddyn*, *teddyn*, and *tydyn*; the spelling *tedd* is found in Isaiah 5:18, while Cregeen has both *tedd* and *tead*.²⁰⁴ Phillips only has <e> in *eddrym* (G. *éadrom*, ScG. *aotrom*) (three occurrences, all with single following <d>).

The Classical Manx spellings, and some of those in Phillips, appear to suggest short vowels in these words. From terminal speech only short \emptyset (TC) and **ɪ** (NM) are attested for *eddi*n (*HLSM* II: 141). The former especially suggests a pronunciation of the *ao* rather than the *é* type. For *eaddagh* there is **ɪ**, **e**: (both JW), **e** (JTK, NM) and **ɛ** (TT), while for *eddrym* there is **ɛ** (HK), **e** (JTK) and **ɛ** (W:N). *Tead* / *tedd* is attested with **ɛ** (HK, JW), **e**: (JTK), **ɛ** (W:N). The initial /t/ rather than /tʃ/ confirms that the Manx form represents *taod* rather than *téad*, however, possibly with vowel shortening. For the other items it is quite possible that historical *éadan*, *éadach*, *éadrom* co-existed in Manx with the Scottish-style development to initial *ao*. For shortening of stressed long vowels in polysyllables, see §551; shortening in *tead*, *tedd* possibly originates in the plural form *teddyn*.

The Manx form *fod*, *foddee* ‘can’ (G. *féad*, ScG. *faod*) apparently has an irregular development to short /o/, confirmed by Phillips where forms of this verb are consistently spelt with <o>, sometimes with following <dd>. However, in Late Manx, NM has realizations with **ɪ**, **ɛ**, **ə**, apparently representing (shortened) *féad* or *faod*, alongside a form with **ɔ**, which agrees with the Manx spelling. Other speakers only have forms with /o/. Similarly, G. *féileacán* ‘butterfly’ gives Manx *foillycan* (Cr.), *folican* (K.), **fɔ:lɔkən** (W:S, *HLSM* II: 173) presumably via a form **faoileacán*.

Finally, Cregeen’s spelling of word *meydlagh*, *meyhdlagh* ‘heavy and slow in moving on account of size; unwieldy’ (Ir. *méadlach*, ScG. *maodalach*) is ambiguous and could represent either /e:/ or /ə:/ (cf. §3.6.2 for <ey>).

²⁰⁴ G. *téad* with initial /t/ would give something like **thead* in Manx orthography.

3.9.3 *geay* ‘wind’, G. *gaoth*

For the noun *geay* ‘wind’ (G. *gaoth*), as well as a regular development **gȳ** [gə:], Rhÿs (17) notes diphthongal pronunciations (probably not a ‘dissyllable’):

Here also belongs one of the pronunciations of the Manx word for wind, namely that which I should represent as **gȳ**, to be heard in the South of the Island, and to be equated with the Irish and Scotch *gaoth* ‘wind’; but it is superseded in the North (and sometimes in the South too) by a form which I should almost represent as a dissyllable **gūā** or **gāā**.

(Rhÿs: 17)

Phillips’ spellings (*gya*, *gȳa*, *gȳæ*, *gye*, *gua*, *gūa*, also *gyei*, *gȳei*) appear mostly to represent the diphthongal variant. This diphthong is otherwise noted by Rhÿs as reflexes of G. *ua* (§3.5.1.3), and it may be that the northern (and occasionally southern) pronunciation of *gaoth* represents a form **guath* on the pattern of *leah* ‘soon’ (G. *luath*), *theya* ‘people’ (G. *tuath*), and *feoh* ‘hate’ (G. *fuath*), or is a back formation from the genitive (or dative) form *geayee* /gə:i̯/ (G. *gaoith(e)*), since /ə:i̯/ can represent both *uai/i̯* and *aoi/i̯* (§3.9.1).

Strachan has **gū**, which may represent the monophthongal form, or monophthongized form of the /gi̯ə/ (Strachan 1897), while Lhuyd’s collector gives **gèe** (Ifans and Thomson 1980: 133) which probably represents the /gə:/ form. The Terminal Manx forms are as follows: from the south we have **gλ:ə**, **g’e:ə**, **g’e:** (NM), **ən yλ:** (HK), **gi:** (TCr), **gōi**, **gō-i** (Wagner), and from the north **g^ui:** (TC), **gⁱ:ə** (JK), **gr:ə** (J:JTK, HB). These forms are somewhat difficult to interpret, given that monophthongal forms may represent either historical *ao*, or monophthongization of *ua*, and Wagner’s southern forms seem to represent oblique *gaoith(e)*.

There are four occurrences of *geay* in *PC* in rhyming position, all rhyming with *leah* (G. *luath*), which suggests the /gi̯ə/ realization.

3.9.4 *riyr* ‘last night’, G. *aréir*, *araoir*

This is *irráir* in Early Irish, which Ó Briain (1923: 318) derives from *fár* ‘sunrise, dawn’ (*eDIL* s.v. *fáir*), giving approximately the meaning ‘the time before the dawn’. For the irregular change *ái* /a:/ > *éi* /e:/, Ó Briain suggests the analogy of *indé* ‘yesterday’. The G. variant form with *aoi* (ScG. *a-raoir*) would then be an example of the interchange between *é* and *ao* (§3.9.2). The spelling and attested realizations of this item in Manx show a diphthong (e.g. **ra̠iər** NM, **ra̠:iər** JW, *HLSM* II: 369). The development, or maintenance, of this diphthong is unexpected; one might tentatively suggest the influence of *oie* ‘night’ (G. *oidhche*; northern Manx /əi/) which often precedes this word.

3.9.5 *cleaysh* ‘ear’, G. *clua(i)s* etc.

G. *cluas* ‘ear’ is found with a generalized dative form *cleaysh* (*cluais*) as nominative in Classical and Late Manx. Rhÿs (24) reports that this was realized as **clúsh** [klw:ʃ], **clísh** [kli:ʃ], plural **clúshyn** [ˈklw:ʃən], **clíshyn** [ˈkli:ʃən] in the north, while **cløsh** [klø:ʃən], plural **cløshyn** [ˈklø:ʃən] was ‘usual in the South, and may be heard as far North as Kirk Michael’.

Forms which appear to indicate forms with both [s] and [ʃ] (i.e. G. nominative *cluas* and dative *cluais*) are found in Phillips (e.g. *cluas*, *kluash*, *klyesh*, pl. *klúasyn*, *klyasyn*, *klúashyn*, *klýæshyn*), although to some extent <s> and <sh> are used interchangeably for both [s] and [ʃ] in Phillips (Rhÿs: 155–6; Thomson 1953: 10; Lewin 2015b: 78; Wheeler 2019: 4–5), so that the phones intended by the author or the scribe are not entirely certain. An apparent survival of *cluas* is found in the appendix to the earliest (1707) printed book in Manx (*PSD*: 19), in the passage *Te fosley nyn gleays* ‘He is opening their Ear’, which may perhaps represent a fossilized genitive plural after the verbal noun, or else simply the original nominative singular form translating the English singular.

Rhÿs’s northern forms apparently show the usual reflex of *ua* as /i̠ə/, /i:/ rather than that of *uai* as /ə:/, notwithstanding following slender [ʃ]. This could be a lexical

exception, or a result of the analogy of *cluas* before this form disappeared from the language. Cf. Rhÿs's (24–5) comment: '[t]his will serve to illustrate the difficulty of distinguishing in Manx between changes purely phonetic and others which are declensional with their roots in analogy'. The southern form would thus show the usual development of *uai* to /ə:/.

From Terminal Manx we have from the north **klif**, **klizən** (TC), **klö:f**, **klr:dn** (J:JTK), **klɪz'ən**, **klɪ:zən** (HB), and from the south **kle:f** (HK), **kl'ɛ:f** (JW), **kle:if** (EKh), **kle:fən** (NM), **kle:iə** (SK), **kle:ən** (J:TL), **klö:zən** (W:S) (*HLSM* II: 83). From the north, then, we mostly have high front unrounded vowels, which could represent the most progressive reflex of *ua* (/uə/ > /uə/ > /iə/ > /iə/) in Rhÿs's description, thus supporting the conclusion that the vowel in the northern reflex of *cluais* behaves as if followed by a broad consonant. The southern reflexes mostly have front mid unrounded vowels, following the regular development of *uai*, falling in with *aoi* and giving /ə:/ or /e:/. The form noted by Wagner from the south with **ö**: may be equivalent to Rhÿs's **œ**, although Jackson also gives **ö** for a northern speaker.

A similar case may be *geayltyl* 'shoulders' (G. *guailne*, but Manx **guailtean*), which on the evidence from *HLSM* appears to have /iə/ rather than /ə:/, presumably on the basis of paradigmatic analogy from the singular *geaylin* (G. *gualainn*) with broad *l*.

3.9.6 *keayrt* 'time, occasion', G. *cuairt*

Judging by the *HLSM* forms and the spellings with <iy> etc. in Phillips, this item, and the derived preposition *mygeayrt* 'around' (G. *ma gcuairt*), have mostly /iə/ rather than /ə:/, presumably because final /rit/ is regularly depalatalized in Manx (Jackson: 82; *HLSM* III: 86).

3.9.7 *seaghyn* ‘sorrow, affliction, trouble’Table 56. *seaghyn*

	Phillips	CM pronunciation	etymology	English	HLSM
seaghyn	ya (6), <i>ýa</i> (6), <i>eia</i> (2)	?/siəxən/, /sə:xən/	?sua(i)th-	grief, sorrow, affliction	sɛ:əxən , s^hi:qən TC, si:ən W:N, si:yən HK, (part.) sɛ:xənət' , s^hi:xənít' TC, si:yənət' JW

Seaghyn ‘affliction, sorrow, grief, trouble, agitation’ (Cregeen), ‘distress, trouble’ (Kelly) appears to have *ao(i)* or *ua(i)*, but its etymology is not entirely clear. Broderick (HLSM II: 388) suggests the following derivation:

Prob[ably] a deriv[ative] of OIr. *sóid* [*sic*], later *suaithid*, vn. OIr. *sóud* [*sic*], later *súathad* ‘turn, stir, agitate’, the simplex giving Mx. *seiy* [‘stirring, mixing’] qv.: w[ith] (*a*)*chan*. But v. also Ir. *saochán*, sub *saobhán* in Dinn[een].

(HLSM II: 388)

Thomson (1953: 302) suggests ‘cf *Seiy*, and Ir *saoth*’.

For figurative senses of *sóid*, *sua(i)th*²⁰⁵ etc. relating to mental states, cf. ‘upset; *s[uaithim] mé féin*, I exercise myself’ (Dinneen, s.v. *suaithim*), ‘*Tá a aigne suaite*, his mind is fuddled’ (Ó Dónaill, s.v. *suaith*); also *eDIL* (s.v. *soud*, [e]) ‘turn, mood, experience, behaviour’.

The predominant high realizations in *HLSM* (also Rhÿs notebooks, Broderick 2019 s.v. *seaghyn*) would point to *ua*, as would Phillips’ spellings in <ya>, <ýa> (although these could also possibly represent a trisyllabic realization /sə:.əxən/). However Thomas, Kermode’s **sÿyyñ** [sə:yən] (Strachan 1897), TC’s forms with **ɛ:** (if not examples of the spelling pronunciations to which this speaker was prone), and Phillips’ *seiaghyn* might point to /ə:/, /ə:ɨ/. Possibly these forms represent by-forms with *suath-* and *suaith-* respectively (cf. Ir. stem *suaith*, vn. *suathadh*).

²⁰⁵ These verbs are not equated in *eDIL* or *LEIA*. Thomson (1953: 303, s.v. *seiy*) seems to connect them, ‘Ir *sódh*, *suidhim*, also *suathadh*’.

Broderick is probably right to see the ending *-achán* in this item, as in *gweeaghyn* ‘curse’ (G. *guidheachán*), *níeaghyn* ‘washing’ (G. *nigheachán*). Note that Phillips has one instance of *-an* in the final syllable (otherwise *-yn*), which might represent older /an/ (for interchange of /an/ and /ən/ in these words, see §4.4.7.3).

Derivations from *saoth-*, *saobh-* etc. seem less plausible, since the forms with high vowels would then be difficult to account for.

3.9.8 *deayrtey* ‘pour’, G. *dort, doirt, dórt, duart*

Deayrtey, ‘pour, spill’, Ir. *doirteadh, dortadh, dórtadh*, ScG. *dòrtadh*, OIr. *do-fortai, do-foirti, -dortai, dórtad*, is included under *ua* in this chapter (§3.4.3), because it is clear from the Phillips and later spellings, and from the realizations in *HLSM*, that the Manx should be regarded as a form **duartadh*. Compare Ir. *duartan* ‘downpour, a torrential shower; calamity’ (Dinneen), *dúartan* ‘downpour, shower’ (*eDIL*).

3.9.9 *smooinaghtyn* ‘think’, G. *smuain, smaoin*

O’Rahilly (38) notes that ‘[i]n *smaoin* < *smuain* the *aoi* is universal in current Irish, and is also common in Sc[ottish]; here the *aoi* seems to have been taken over from the verb *saoil*’. In Manx, this appears in the verb *smooinee*, verbal noun *smooinaghtyn* (in Phillips mostly *smún-*, with or without the diacritic, and sometimes *smúin, smuyn*), which apparently represents **smúin*, or else the general tendency to monophthongize /uə/, /iə/ in Manx (§2.2.6), although this would be very early in Phillips.

Smooinaghtyn is recorded with **u** or **u:** from JK, HB, TC, NM and TT, although Wagner transcribes the vowel as **ï** (*HLSM* II: 419), which might plausibly represent *smaoin*, or shortening (cf. §5.5.1) of the vowel to **smuin*. The lack of fronting and unrounding in the Manx realizations may be another example of the lack of fronting after a labial consonant, as in *feayr* ‘cold’ (G. *fuar*) etc. (§§3.6.1.2, 3.8). It is also worth noting that the form *saoil* does not exist in Manx, being represented by *sheill* (**séil*,

cf. Ir. *síl*) (§§3.9.2, 5.5.1). However, there is possibly analogical influence from *cooinaghtyn* ‘remember, memory’ (G. *cuimhne*), which has /u:/ in Manx (*HLSM* II: 92).

3.9.10 Manx derivatives of G. *draoi*, *druadh*

The spellings of derivatives of G. *draoi* ‘druid’ (OIr. *druí*, *druí*), gen. *druadh* in Manx are complex. There are two occurrences in the Bible: *fer-druiaigh* ‘charmer’ (Deuteronomy 18:11) and *druaiaghtee* ‘enchanters’ (Jeremiah 27:9). The latter would appear to point quite clearly to a derivative **drua(i)dh(e)acht(ach)* (for usual G. *draoidheacht*), with preservation of back /uəj/, as in *dwoaie*, *gruaie*, *twoaie* (§3.4.5). Cregeen, whether deliberately or not, simplifies this spelling to *druaight* ‘a Druid’, *druaightagh* ‘Druidic’, ‘a Druid’ (citing the Jeremiah passage), *druaightys* ‘Druidism, enchantment’, and also gives an alternative abstract derivation *drualtys*, *driualtys*. If genuine, all of these suggest /uə(i)/.

Kelly in the earlier manuscript of his dictionary (MNHL MS 1477) gives *druaiaghtagh* with a reference to Jeremiah interlined between *druaie* ‘a Charmer, wizard, Druid, G. Draoi’ and *druiaigh* ‘Pertaining to a Charmer, enchanting’ with the example *cloagey druiaigh*. In the later MS 1045–47 he has *druiaigh*, *druiaightagh*, *druiaight*, with the Jeremiah passage cited with the spelling *druiaightee* rather than Bible *druaiaghtee*; this is also the case in the 1866 printed version.

For the simple form, G. *draoi*, Kelly has *druí*, pl. *ny druee* or *darui* (*druí*, *ny druee*, *darui* MS 1045–47) with a long paragraph on the history and etymology of the term ‘druid’, citing both G. forms *draoi* and *druadh*. This entry does not appear in MS 1477 and is probably a later insertion inspired by Kelly’s antiquarian etymologizing tendencies (§1.6.8.1). Kelly also has *druai* ‘a dwarf, a pigmy; a sorcerer, an enchanter. (Ir. *droich*)’ (MS 1477 ‘druai p. -yn. A dwarf’). The reference is apparently to ScG. *troich*, *droich* ‘dwarf’, Ir. *troch* ‘wretch’, but this would give **/drai/* in Manx (cf. *criy* /krai/ ‘gallows’, G. *croich*, §1.7.5). This *druai* might be equated with Manx *dreih*, *dreigh* ‘wretch’, which according to Thomson (1998: 122) represents G. *draoi* ‘druid’

with pejoration of meaning, but Kelly has a separate entry (s.v. *dreigh*) for this and does not equate the two.

These forms do not occur in *HLSM*, but Rhÿs notes a form of the abstract noun from one of his informants:

drōghagh or **dreghagh** ‘enchantment’ (**cŭr ayd fo ghréghagh** ‘to put them under enchantment’ – I cannot discover druiaght anywhere ~~except~~ in the spoken language.)

(Tom Kermode, Rhÿs notebook 6, original deletion)

This form appears to be a little garbled, but points to a realization /ə:/ or /e:/, whether from *draoi-* or from a fronted variant of *drua(i)dh-*.²⁰⁶

All in all, the evidence is not entirely clear but suggests that by-forms with /druəj-/ (<*drua(i)dh*) and /drə:ɨ/ (<*draoi* or *drua(i)dh*) may have existed side by side. It is also possible that the Manx spellings are influenced by English ‘druid’ and/or the Gaelic forms.

3.9.11 Unstressed and shortened *ao(i)*, *ua(i)*

Ao(i) and *ua(i)* are found shortened in initial syllables through stress shift (§5.1) or sporadic stressed long vowel shortening in polysyllables (§5.5.1). They are also shortened in post-tonic position, such as *cassid* ‘accusation’ (G. *casaoid*), and *fynneraght* ‘coolness, breeze’ (G. *fionnuarach*), but this is not discussed here, since the possible results in this position are more limited (§5.1.6). Stressed or pre-tonic unstressed shortened vowels generally retain (broadly) their original quality (§§5.1.3, 5.5.1), but this is problematic in the case of *ao(i)* /ə:/ and *ua(i)* /iə/, as they do not historically have short counterparts in the vowel inventory. (However, see §3.9.2 for the possible development of short stressed /'ə/ in certain items.)

²⁰⁶ Cregeen also has ‘*fo ghruaigh*, s. under druidism or inchantment [*sic*]’. The fossilized lenition after *fo* here and in Kermode’s realization would suggest this is a genuine, established phrase (cf. Broderick 1984a: 166).

Rhŷs (18) notes short \ddot{y} [ə] as the usual realization of *ao* in *freoagh* ‘heather’ (G. *fraoch*), although he states that he has ‘occasionally’ heard it long, but only long forms are given in *HLSM* (II: 174). He also notes the short sound in *un* ‘one’ (G. *aon*), which is also indicated by the spelling, although some long forms are given in *HLSM* (II: 468–9). For data on these, see §§3.4.1, 3.4.2; for *fod* ‘can’ (G. *féad*, ScG. *faod*), see §3.9.2. The short vowel in *Gailck*, *Gaelg*, /gil'ki/ etc., ‘Manx Gaelic’ also seems to be long established; irregular developments of this word are found throughout Gaelic dialects (§3.9.1.1). Similar vocalism is found in the shortened stressed vowel in *kirree* ‘sheep’ (G. *cao(i)r(a)igh*), where harmony with final /i/ might perhaps play a role.

A problematic word is *foillan* ‘gull’ (G. *faoileán*) (also with *-óg*). The heavy-heavy structure of this word would lead us to expect stress shift (§5.1), as indeed seems to be the case in Kelly’s form *foilleig*, unless a form with a shortened vowel in the first syllable developed at an early date, or the Manx form represents G. *faoileann* with the analogical development /əN/ > /an/ found in a number of other items (§4.4.7.3). Some of the forms in *HLSM* (II: 173) have long [o:], which may represent a case of the ‘occasional interchange of *ao* with other vowels’ noted by O’Rahilly (34–5), e.g. ScG. *ònar* alongside *aonar* ‘alone’, cf also the semantic split *failt* ‘welcome’ (G. *fáilte*), *feoilt* ‘generous’ (G. *faoilte*). *Toshiagh-jioarey* (Cr.), *toshiaght-joarrey* (K.) ‘coroner’,²⁰⁷ apparently G. *taoiseach deóra* (Thomson 1988: 141), with shortened vowel /o/, may similarly represent the variant *tóiseach* (cf. Ó Maolalaigh 2008a: 213–4), or else result from the weak stress in the initial element of the compound.

Table 57. Pre-tonic *ao(i)*, *ua(i)*

	Phillips	CM pronunciation	etymology	English	<i>HLSM</i>
caghlaa	y (10)	/ka'xlɛ:/	c(l)aochlódh, ScG. caochladh	change, difference	ɔ NM, ɞ NM, HK, JK, EK, a JW, HB, ə JK
carrane	a	/ka're:n/	cuarán	sandal	ə SK, J.EK, a SK, krɛ:nən TC, krɛ:nən JTK
dhiane (Cr, K., Bible),		/daj'ɛ:n/	? daoi + án (<i>HLSM</i> II: 121)	worm	dʒi'ɛ:ⁿ HK, (pl.) dø'iniɲ (sic) TC

²⁰⁷ A Manx court official whose role is quite different from that of coroners in the United Kingdom (see <<https://www.courts.im/court-information/coroners/>>).

daiane, gaiane (K.)					
farrane	y (2)	/fa' rɛ:n/	fuarán	spring, fountain	a JN
feoghaig (Cr.), fughage (K.)		/fu' xɛ:g/	faochóg	periwinkle (shellfish)	ə W:ʔN
freoaghane (Cr.), freeoaghane (K.)		/frə(:)' xɛ:n/	fraochán	bilberry	
leaystane		/liɔ' stɛ:n/	luascán	swing	
sonnaase	u, o (2), ou	/so' nɛ:s/	saobhnós	arrogance, riot	ɔ TC
treicknane (Cr.), tratneayn (K.)		/trik'i' nʲɛ:n/	tuairgnín	beetle, mallet	
unnane, annane (CS), annanjeig (Cr.), annan (<i>Mona's Herald</i> 22.12.1840); unnaneys	a (26), y, aý	/u' nɛ:n/ /a' nɛ:n/ /' anan/	aonán	one; unity	anan JK, JTK, ɔ' nɛ:n TK, (<i>unnane-jeig</i>) ɔnɔn d'zɛg JK, anan d'zɛg JK, arənd'zɛg Fa, arən d'zɛg Co

The spellings of items such as *freaoghane*, *leaystane* clearly show an awareness of their etymology, and possibly a corresponding pronunciation (at least in careful speech), although it is less easy to account for Cregeen's *feoghaig* with <eo>, which apparently shows an awareness of the original vowel in the initial unstressed syllable, despite the non-attestation of the corresponding simplex form (G. *faocha*, ScG. *faoch*). Compare also with retained back realizations *boirane* 'clamorous fellow' (Cr.), 'gidd[iness]' (K. s.v. *kione-y-lhei*) (G. *buaidhreán*), *bwoail(l)teen* 'mallet' (G. *buailtín*).

3.9.11.1 Pre-tonic *ao, ua* > /w/

Where the shortened vowel is followed synchronically by a long vowel without an intervening consonant or glide, it may be reduced to non-syllabic /w/ (cf. also *bwaane*, *bwaag* /bwɛ:n/, /bwɛ:g/ < *bothán*, *bothóg*):

Table 58. Pre-tonic *ao, ua* > /w/

	Phillips	CM pronunciation	etymology	English	HLSM
mwane		/mwɛ:n/	maothán	embryo, foetus	
whaaley ²⁰⁸	fóaly, fualy	/xwɛ:lə/	fuagháil	sew	hwɛ:lɛ HB, kwɛ:lɔ TT, kwɛ:lɔ, kwɛ:lɔ, k'e:lɔ, k'ɔ:l NM, kwɛ:l'ə HK, f'ɛ:lɔ W:N

3.9.11.2 *unnane, annan* ‘one’, G. *aonán*

Cox’s (2011: 277; 2013: 271) derivation of Manx *unnane, annan*, ScG. *aonan* from OIr. *a n-óen* is implausible, as this would give /-ə:n/ (*-*eayn* or the like) not /-ɛ:n/ in Manx, and, as shown elsewhere in this chapter, there is little evidence of these vowels being confused.²¹⁰ It seems much simpler to derive both the Scottish and Manx forms from G. *aonán*, with northern Manx *annan* being easily explainable as a form arising under weak postlexical or phrasal stress in e.g. *unnane-jeig* /,əne:n 'dʒeg/ ‘eleven’ (G. *aonán déag*) > *annan-jeig* /,anan 'dʒeg/, as in other cases discussed in §5.1.1.5, and later generalized. It is perhaps no accident that Cregeen has this spelling only in a form of *aonán déag*, and that it is also only attested in *HLSM* (II: 9, 469) in this phrase. The phrasal stress in *dagh annan* ‘each one’ (G. *gach aonán*) (*Mona’s Herald* 22.12.1840) is uncertain but perhaps represents /,dax a'ne:n/ > /dax 'anan/.

²⁰⁸ For the development of this item see Thomson (1981: 142–3), and compare *foast* ‘yet, still’ (G. *fós*, ScG. *fhathast*), realized as **hwɛ:s, hwo:s** etc. by some speakers (*HLSM* II: 170), and *hooar* for older *fooar* ‘got, found’ (G. *fuair*, ScG. *fhuaire*) (Thomson 1995: 121). The stages of the development are apparently /'fuəya:ləy/ > /fuə'ɣɛ:lə/ > /fuə'ɛ:lə/ > /'fwɛ:lə/ > /'xwɛ:lə/ (> ['kwɛ:lə]), with dissimilation between the labials /f/ and /w/.

²¹⁰ The stress shift in *a n-óen* > ScG. *aonan*, Manx *annan* is also unlikely, and the *n* in *a n-óen* might be expected to be fortis, giving **aonnan*.

Chapter 4 Sonorant consonants and associated developments

4.1 Introduction

Earlier Gaelic varieties are generally considered to have had a system of four-way sonorant contrasts in rhotics, coronal nasals and laterals:

In Old Irish there was probably a contrast between laminal dental and apical alveolar coronals, each of which could be palatalized or velarized, giving four possibilities [...] these possibilities for the laterals would be ɫ^{h} , ɫ^{v} , ɫ^{h} , ɫ^{v} .

(Ladefoged et al. 1998: 14)

Reduction of these to either three or two contrasts is widespread in Gaelic dialects (Ó Maolalaigh 1997: 57–65), and no dialects retain four rhotics (§4.2.4).

In the Late Manx of the terminal speakers, the following sonorant consonant phonemes (nasal stops, laterals and rhotics) are securely attested (cf. *HLSM* III: 2, 106–17):

/m n n^j l l^j r ŋ ŋ^j/

In addition, /r^j/ seems to have been marginally retained by some speakers, and some may have had a three-way lateral contrast /ɫ^h ~ ɫ^v ~ l^j/.

There is evidence of a more complex system, with greater retention of fortis and lenis contrasts in Early Manx, and perhaps later. In general, the Manx orthographies do not show fortis-lenis contrasts clearly (i.e. there is no equivalent of the Irish-Scottish use of single v. double consonants medially and finally), and do not always mark the broad-slender contrast either. For example, medial <ll> may represent all four original G. laterals /L L^j l l^j/ in the following items:

ollan /olan/ ‘wool’, G. *olann* /oləN/
balley /bal^jə/ ‘town’, G. *baile* /bal^jə/
bollag /bolag/ ‘skull’, G. *ballóg* /baLo:g/
keylley /kel^jə/ ‘forest’ gen., G. *caille* /kaL^jə/

The double <ll> here serves to mark the preceding short vowel, as per English spelling conventions.

Palatalization is, however, often marked by a preceding or following <i>:

caill /kaiⁱ/ ‘lose’, G. *caill*
toilley /tulⁱə/ ‘more’, G. *tuilleadh*
thoilley /tulⁱə/ ‘flood’, G. *tuile*
doillee /dolⁱi/ ‘difficult’, G. *doiligh*

Because of the opaqueness and inconsistency of the orthographies, our analysis of the development of these consonants must rely heavily on phonetic descriptions of Late Manx (although these are not always easy to interpret, and date from a period when the system had already been significantly simplified), and on evidence of collateral historical changes within or connected with the sonorant system (e.g. development of vowels before historically fortis sonorants, and the development /Nⁱ/ > /ŋⁱ/ which is reflected in the orthography).

4.2 Rhotics

In the Manx of the terminal speakers, and to some extent that of Rhÿs’s informants, the rhotics are notable for significant loss in coda position, change in quality, and alterations to preceding vowels, apparently reflecting parallel developments in English. However, it is evident that loss or weakening of rhotics, and the changes in vowel quality, are a late development, since they are not shown in the standard orthography of eighteenth and nineteenth century Manx. Early loss of rhotics is only found in certain limited environments.

4.2.1 /r ~ rⁱ/

Twentieth-century descriptions of the Manx of the terminal speakers mostly report merger of /rⁱ/ and /r/ as non-palatalized tap or approximant [r] with only a few traces of palatalized [rⁱ]. However, Rhÿs and Strachan report more robust maintenance of this

contrast, and orthographic evidence suggests it is maintained at least in some positions in Classical and pre-terminal Late Manx.

4.2.1.1 /rj/ in Classical Manx

There are representations in the eighteenth-century orthography which clearly indicate medial and final /rj/, including the following pairs:

ooir /u:rj/ ‘earth’, G. *úir*
oor /u:r/ ‘hour’²¹¹

*coair*²¹² /ko:rj/ ‘near’, G. *i gcóir* (but *coar* ‘kind, decent’, G. *cóir*)
coayr /ko:r/ ‘odd’, G. *corr*

coirrey /korjə/ ‘kettle, caldron, furnace’, G. *coire*
correy /korə/ ‘sowing’ (gen.), G. *cor*, *cur*

laair (Cr.) /lɛ:rj/ ‘mare’, G. *láir* (but *laayr* K.)
laare /lɛ:r/ ‘floor’, G. *lár*

See also:

erriu /erju/ ‘on you’, G. *oirbh*
 (but *erroo* ‘ploughman’, also /erju/,²¹³ G. *aireamh*)
merriu /merju/ ‘dead’ pl., G. *mairbh*
terriu, *teirroo* /terju/ ‘bulls’, G. *tairbh*
luirg /lurjg/ ‘staffs’, G. *luirg*
fuirree /furi/ ‘remain, stay, wait’, G. *fuirigh*
oirr /orj/ ‘edge’, G. *oir*
mooir, *muir* /murj/ ‘sea’, G. *muir*
buirroogh /bu'ri:u:x/ ‘roar’, G. *búirfeadhach*

A diaeresis apparently represents palatalization in the following morphological alteration:

²¹¹ Probably a later borrowing of the English / French word than G. *uair* < Latin *hora*, which however appears to be present in *neayr*'s ‘since’ (§3.4.4).

²¹² But *coayr* in Ezekiel 44:25.

²¹³ /rj/ confirmed by Rhÿs (notebook 6: 115).

jeir /dʒe:r/ ‘tear’, G. *déar*
jeïr /dʒe:rʲ/ ‘tears’ pl., G. *déïr*

Cf. *mair* /me:rʲ/ ‘finger’ (G. *méar*), and *meir* /me:rʲ/ (pl.) (G. *méïr*).

However, very often there is no clear indication of /rʲ/. As shown by *erroo* and *coar* above, the desire to keep homophones orthographically distinct often seems to trump phonological accuracy in Manx orthography (§1.6.4.2).

arrey /arʲə/ ‘watch’, G. *aire*
 (cf. *carrey* /karə/ ‘friend’, G. *cara*; *marrey* /marə/ ‘sea’ gen., G. *mara*)
earroo /erʲu/ ‘number’, G. *áireamh*
obbyr /obərʲ/ ‘work’, G. *obair*
s’lhiurey /liurʲə/ ‘longer’, G. *is libhre*
cheer /tʃi:rʲ/ ‘country’, G. *tír*
 (cf. *feer* /fi:r/ ‘true, very’, G. *fíor*)

Note also *seyr* ‘free’ and *seyir* (also *seiyr*) ‘carpenter(s)’ in the Bible (G. *saor*), where the two spellings might have been expected to distinguish singular /sə:r/ and plural /sə:rʲ/ (G. *saor*, *saoir*), but appear to be used to distinguish the adjective from the noun.²¹⁴ Whether such ambiguous spellings suggest incipient merger of /r/ and /rʲ/ is unclear, since broad and slender contrasts in other consonants are frequently obscured in the orthography as well.

4.2.1.2 /rʲ/ in clusters

While /rʲ/ is reasonably well evidenced in the orthography in medial and final position as an individual consonant, it is less clear to what extent it was found in clusters such as *br*, *cr*, *gr* etc. While spellings such as *cliaghtey* ‘custom, practice’ (G. *cleachtadh*) clearly attest to initial /kli/, we do not find e.g. **criagh* for *cragh* ‘plunder, prey, disaster’ (G. *creach*) so it is unclear whether this represents /krax/ or /krʲax/. The initial clusters /tr/ and /dr/, at least, tend to be non-palatalized throughout in most Scottish dialects (e.g. *SGDS* III: 238–41 *dream*, v: 386–7 *tric*), and this may be represented by <thr> in Manx *three* ‘three’ (G. *trí*), where the /t/ is certainly non-palatalized (*HLSM*

²¹⁴ Originally a single lemma (*eDIL*, s.v. 2 *saer*).

II: 459). On the other hand, there is some evidence for initial /*(s)krʲi/* in Rhÿs's notebooks, e.g. **skřiu** [skriju] *screeu* 'write' (G. *scríobh*) (Margaret Cowley, Rhÿs notebook 6: 66).²¹⁵

We may compare Ó Maolalaigh's (1997: 67–8) comments on the weak development of palatalization in certain initial clusters in Scottish Gaelic, which he sees as an archaism as contrasted with Irish. Given that Manx seems to go with Scottish Gaelic in having either lost or not developed palatalized labials (§1.7.6), it might be guessed that it would show similar reflexes to Scottish Gaelic in initial clusters.

In view of the lack of certainty in this matter, non-palatalized /*r/* is assumed in all initial /*(C)Cr/* clusters in this thesis.

4.2.1.3 /*r ~ rʲ/* in pre-terminal Late Manx

Rhÿs expresses considerable uncertainty about the articulation of Manx rhotics. He describes the main realization of broad *r* (G. /*R, r/*) as follows:

I am bound to speak with the utmost diffidence of the Manx *r*'s, as I have but a very imperfect idea how they are produced. In most words initial *r* in Manx produces on my ear the effect of English *r*, but I greatly doubt that it is formed in the same way. At any rate, it seems highly probable that the *r* which is associated with broad vowels is approximately an [a]mbidental *r*. This I would write *ρ* [...] I should say that the part of the tongue made to vibrate lies on a lower level than in the case of English *r*, and that the edge of the tongue is brought somewhat closer to the edge of the upper teeth instead of recurved, as is done when pronouncing the English liquid.

(Rhÿs: 147–8)

Rhÿs (148–9) also distinguishes an '[a]lveolar *r* [...] a sound produced as nearly as possible like the English *r*. He admits he has 'no certain instances' but 'should guess that we have it in' *ayr* 'father' (G. *athair*), *fer* 'man' (G. *fean*). Slender /*rʲi/* would be

²¹⁵ If there was a contrast /*kr ~ krʲi/* in initial position, then the form **krʲi**: *cree* 'heart' noted by Jackson (121) would seem to represent G. *croidhe* rather than ScG. *crìdhe*.

expected in *athair* (though see below). It is not clear what the significance of this claimed variant is.

Rhÿs (149–50) gives a description of a palatalized (‘mouillé’) rhotic. He gives clear affirmation of its presence in medial and final position (although with few examples), and also claims with less certainty to have noted it in initial position:

By this [*R Mouillé*] I mean an *r* pronounced analogously to *ñ* [n^h] and *ʃ* [ʃ^h], that is to say, a palatalized *r*. It may be represented as *ṛ*, and it stands mainly for Aryan [Indo-European] *r* associated with a slender vowel or *i*; but first of all I wish to state how far I hear it is a distinct kind of *r* from the *ρ* already discussed. Initially I have sometimes thought I noticed a crispness or sharpness which argued as *ṛ* rather than a *ρ*, as for instance in words like [...] *ree* ‘a king’ (Med. Ir. *rí* [...]); but I have never felt certain about it, and no help is to be got from the semivowel yod which has been sunk in most places where one would expect it, as in *riu* ‘to you’ (Med. Ir. *frib*, Mod. Ir. *ribh*) and *roo* ‘to them’ (Med. Ir. *friu*, Mod. Ir. *riu*), which are both pronounced *ṛiu* [r^hiu:], possibly *rū* [ru:]. Medially this crispness which I have mentioned has often struck me as quite unmistakable and amounting now and then almost to the sharpness of a Welsh or Italian *r*, as for example in words like *marish* ‘with, together with’ [...] Finally, the difference between *ṛ* and *ρ* or *r* is rendered still more certain by a sort of a parasitic whisper, which if reinforced would make a sound approaching *ch* in the German word ‘ich’. This has attracted my attention especially in the case of the word for ‘gold’, namely [...] *airh*, which seems derived not from the Latin *aurum* but from its genitive *auri* [...], as it is pronounced *ṛi*; [ɛ:r^h] or *ṛi*; [ɛ:r^h], if I may use ; for this kind of whisper.

(Rhÿs: 149–50)

Regarding the reported final /r^h/ in *airh*, a more plausible explanation is suggested by the noun’s feminine gender in Manx, as in *airh vuigh as palchey j’ee* ‘yellow gold and plenty of it’ (Cregeen) (G. **óir bhuidhe agus pailte dí*), *airh ghlen* ‘pure gold’ (Bible) (G. **óir ghlan*), in which case *óir* could represent generalization of an oblique form. Compare also the genitive or adjectival form *airhey*, which perhaps originates in a reanalysis of the adjective *órdha* ‘golden’ as feminine genitive **óire*. The noun is masculine in other Gaelic varieties, but was neuter in Old Irish (*eDIL* s.v. *óir*).

In contrast to /r/, slender /r^h/ is noted as Rhÿs as not being subject to deletion in final

or preconsonantal position:²¹⁶

This *r̃* is not liable to be elided or assimilated, though we have an apparent exception in the word [...] *lajer* ‘strong,’ pronounced *lāžȳr* [lɛ:ʒɔr] or *lāžȳ* [lɛ:ʒɔ] ([...] Mod. Goi. *láidir*); this is, however, not so much perhaps a matter of phonology as of declension, just as if the Irish word were to be changed from *láidir* to *láidear*.

(Rhÿs: 50)

Rhÿs’s notebooks shed further light on the matter. He distinguishes between *r* and *r̃* as well as *ṛ* (‘= English *r*’, Rhÿs notebook 6: 77). It later becomes clear that *r̃* means palatalized [rʲ] (*r̃* in Rhÿs: 1894), although in the earliest diary entries (from 1888) it appears medially and finally in a number of positions where broad /r/ would be expected. Later, it is used more consistently for expected [rʲ], as well as in some words in initial position (§4.2.1.5), although some unexpected uses still appear, such as *scarrey* ‘divide’ (G. *scaradh*) (Rhÿs notebook 6: 82). The change in Rhÿs’s usage suggests a gradual attuning of the ear to the contrast, which presumably was relatively unsalient. Explicit comments are as follows, including consideration of minimal pairs:

He pronounces *aynrit* [*sic: aanrit*] as *ȳnr̃it* [ɔnr̃it]²¹⁷ with a very slight pal[atalized] *r* and so does his wife

(John Joughin, Rhÿs notebook 6: 58)

He pronounces *airh* [‘gold’, G. *ó(i)r*] *ēr* [ɛ:r] almost *īr* [i:r] but *ēr* [ɛ:r] ‘father’ [*ayr*, G. *athair*] or *ār* [ɛ:r], which?

(Thomas Collister, Rhÿs notebook 6: 169)

aer [‘air’, G. *aer*], *ayr* [‘father’ G. *athair*], *airh* [‘gold’, G. *ó(i)r*] all pronounced the same he thought: I doubt it.

(William J. Caine, Rhÿs notebook 7: 198)

²¹⁶ Although his transcription of *ooir gys ooir* ‘earth to earth’ (G. *úir*) as *ū(r̃) dy ū(r̃)* might suggest otherwise (Richard Qualtrough, Rhÿs notebook 6: 14). At this point (12.09.1888) Rhÿs seems not to have noticed palatalization in /rʲ/ (if present), and *r̃* seems to represent a weakened (?) coda [r].

²¹⁷ G. *anart*, *anairt* > ?*ainrit*.

aer [G. *aer*] & ayr [G. *athair*]²¹⁸ both pr[onounced] **ā**r [ɛ:r] but airh pr[onounced] differently, **ā**r̃ [ɛ:r̃]

(Thomas Collister, Rhÿs notebook 7: 199)

In the following the higher vowel realization of /ɛ:/ (> [e:]) preceding /r̃/ is noted (§2.2.3), but not the palatalized rhotic itself:

λɛr [ɫɛr] ‘a mare’ with ɛ [e(:)] as in *airh* ‘gold’ and *nearey* ‘shame’

(Thomas Collister, Rhÿs notebook 6: 174)

Strachan (1897: 55) also notes the contrast /r ~ r̃/, although he expresses similar uncertainty to Rhÿs:

Broad and slender r have been distinguished by **r** and **r̃**, but I doubt if I have always distinguished them aright. In **χr̃ī** [xri:] heart, and **rī** [ri:] arm, a broad r stands before a slender vowel. A Manxman with whom I talked distinguished **r̃ī** [r̃i:] king from **rī** [ri:] arm.

(Strachan 1897: 55)

Again this suggests a maintained contrast, but of relatively little phonetic salience.

4.2.1.4 /r ~ r̃/ in terminal Late Manx

Marstrander (56) notes two rhotic phones, but for the most part his ‘løst artikulert bakre *r*’ (‘loosely articulated back *r*’) **ɣ** can be understood as an allophone occurring preconsonantly in codas. He does not note a palatalized [r̃], although he refers to raising of /ɛ:/ (G. *ái*) ‘foran gammelt palatalt *r*’ (‘before old slender *r*’) (§2.2.3). However, he does note a contrast between **ɣ** in e.g. *corp* ‘body’ and **r** in *kirp* ‘bodies’ (G. *corp*, *cuirp*), which would appear to represent a trace of the /r ~ r̃/ contrast noted by Rhÿs (§4.2.1.1), in that /r/ is more liable to weakening or elision than /r̃/.

²¹⁸ A reflex of *athair* with final broad /r/ may reflect the historical genitive *athar* (Manx *ayrey* /ɛ:rə/, cf. Ir. variant *athara*), or reflect syncopation in the plural as in ScG. *athraichean* (Manx *ayraghyn*).

Jackson (117–8), like Marstrander, notes two predominant rhotic phones which represent positional allophones rather than the historical Gaelic contrasts. He does not note anything corresponding to the contrast noted by Marstrander in *corp* ~ *kirp*.

In general there are only two *r*-sounds, and their occurrence is independent of whether they were originally “broad” or “slender”, lenited or non-lenited, double or single, in dental groups or not. Indeed it is clear that the second variety is simply a recent weakening of the first so that the elaborate Gaelic system of *r*-sounds was really reduced in principle to one [...]. The first is a one-flap alveolar **r**, the second is a quite weak alveolar fricative **ɹ**. The first occurs initially, intervocally, and after consonants; the second before consonants and finally.

(Jackson: 117–8)

Jackson adduces evidence that the weakened variant is a recent development, noting a comment by one of his informants to this effect:

However, it is very significant that [Eleanor] K[arran] and [Thomas] L[eece] sometimes use final **r** where others have **ɹ**; and on *mooar* “big” L[eece] commented to me that **ɹ** here is wrong and is a modern corruption.

(Jackson: 118)

There may be centralization of vowels preceding coda /r/ (Jackson: 119). Jackson (118) also notes palatalized /rʲ/ in initial position in a limited set of items, as also noted by Rhŷs and Broderick (§4.2.1.5). Broderick’s (*HLSM* III: 17–8, 107, 113–7) descriptions are similar to Jackson’s.

4.2.1.5 Initial /rʲ/

Jackson (118–19) and Broderick (*HLSM* III: 114) note /rʲ/ in a limited set of items:

There is also rarely a palatalized **rʲ**, which is a weak alveolar buzz similar to the “slender” *r* of Modern Irish. This occurs, initially only, precisely where initial **rʲ** occurs in Ir. and ScG., namely in lenited position, but only as a fixed characteristic in a few words in which it is also stereotyped in ScG. Gaelic. It represents therefore original lenited “slender” *R*-. For this initial **rʲ** some Manx speakers use, however, **r**.

(Jackson: 118)

The items noted by Jackson and Broderick are the prepositional forms *riu* (G. *ribh*) and *roo* ‘to them’ (G. *riu*) and the temporal adverb *rieau* ‘ever’ (G. *riamh*), and also the nouns *rio* ‘frost’ (G. *reódh*) and *red* ‘thing’ (G. *réad, rud*).

Rhÿs (149–50) records a somewhat wider distribution for initial /rⁱ/, including in *ree* ‘king’, although his comments are tentative:

ree ‘a king’ (Med. Ir. *rí* [...]); but I have never felt certain about it, and no help is to be got from the semivowel yod which has been sunk in most places where one would expect it, as in *riu* ‘to you’ (Med. Ir. *frib*, Mod. Ir. *ribh*) and *roo* ‘to them’ (Med. Ir. *friu*, Mod. Ir. *riu*), which are both pronounced **rū** [rⁱu:], possibly **rū** [ru:].

(Rhÿs: 149–50)

A realization perceived as [z] may also perhaps be interpreted as /rⁱ/:

I once thought I heard *rhyt* ‘to thee’ (Ir. *riot*) pronounced **zŷt**, but the man reading to be quickly corrected himself: this was also in the North.

(Rhÿs: 149)

In his notebooks, Rhÿs is ‘bothered’ by initial [rⁱ] as he cannot explain it:

řen [rⁱen] ‘did’, **řā-f řā** ‘too’ [rⁱo:] very guttural but **řo** [rⁱo:] frost – both [‘did’ and ‘frost’] seem to have ř [rⁱ] but why? **rolāg** [roⁱlæ:g] ‘a star’, **ruggit^{ch}** [rugitʃ] ‘born’. I am bothered by these words as they all seem to have ř [rⁱ] whereas I should have expected **řā**, **ruggit**, & **rolæg** to have **r̥** [r, ɪ] (= English r).

(William Mylrea, Rhÿs notebook 6: 77)

Jy særn [dʒə^ssæ:n] [‘Saturday’], **řī** [rⁱi:] ‘king’ **ben rē^{dn}** [ben re:^{dn}] ‘queen’, **maž řéu** [maʒə^ulæ:u] ‘oar’ **řo** ‘rhew’ [Welsh, ‘frost’], but he seemed to sound **řóish** [rⁱo:(i)ʃ] [‘before’] and not **řóish** [ɪo:(i)ʃ], but he said **ruggitsh** [rugitʃ] ‘born’ right enough. I am inclined to think that initially ř [rⁱ] is ousting **r̥** [r, ɪ] as an initial, just as **ř** [rⁱ] tends to do l.²¹⁹

(Daniel Kelly, Rhÿs notebook 6: 82)

Initial /rⁱ/ is well-attested in lenited position in Irish dialects (Ó Murchú 1986). Ó Murchú (1986: 22) explains this as overgeneralization of /rⁱ/ as the lenited form of both

²¹⁹ It is unclear what the comparison with the laterals refers to.

historically broad and slender initial rhotics after the falling together of unlenited /R/ and /R^j/. In the items noted by Rhÿs, *ren* ‘did, made’ (G. *rinne*) is a preterite verbal form where lenition would be expected; the participle *ruggit* ‘born’ (a new formation in Manx) can be explained as generalization of lenited *r* from the preterite *rug* ‘bore, was born’ (G. *rug, rugadh*). Lenited *roish* (G. *roimh*) may represent analogy with forms of *rish* ‘to, with, by’. The spread of [r^j] to other items noted by Rhÿs, including presumably in non-lenited positions, may perhaps represent a ‘last gasp’ phenomenon (cf. Barras 2018) in the face of the trend towards merger of /r/ and /r^j/, and the rapid shifts in articulation of the rhotics in Late Manx.

As noted by Jackson (119), Cregeen’s (vii) comment and spelling *rhed* seems to indicate /r^j/ in *red* ‘thing’. This realization is recorded from two of Jackson’s informants. Jackson claims that ‘[t]here seems no reason for the **r**’ in this case’; but it is easy enough to derive it from the lenited form in frequent collocations such as *dy chooilley red* ‘everything’ (G. *gach uile rud*).

The spelling *rio* ‘frost, ice’ (G. *reódh*) may represent the initial /r^j/ discussed here and noted in this item by Rhÿs, Jackson and Broderick, or perhaps it represents maintenance into Classical Manx of a diphthongal realization of G. *eó*, as in certain Scottish dialects (e.g. Borgstrøm 1940: 148). It is much less likely to represent survival of original */R^j/, given the evidence of early loss of this phoneme throughout Gaelic dialects.

4.2.2 Early loss of /r/, /r^j/

As noted above, <r, rr> generally appears in the Manx orthography where a rhotic would be historically expected, and any loss seems to be associated with the obsolescent stage of language shift. The exceptions are as follows:

4.2.2.1 /rs, rʃ/ > /s/ (?/ʃ/)

The rhotics are regularly deleted in medial and final *-rs-* in native and established loanwords, although /r/ may be retained or reintroduced by analogy (e.g. *coorse*, *persoon*, see below). According to Jackson (125–6), the *s* in such items is ‘cacuminal’ (retroflex) or alveolar, as also in Irish and Scottish dialects (with or without deletion of *r*), as opposed to the usual broad /s/ which is described as dental. Since the orthography (both Phillips and CM) shows this as <s(s)>, it appears that this was not interpreted as a cluster /rs/, which would suggest the necessity of positing a distinct phoneme /ʃ/ or /s̺/. Broderick also notes this alveolar *s* (*HLSM* III: 119).

A near minimal triplet would be: *messyn* ‘fruits’, ScG. *measan*; *eshyn* ‘he’ G. *eisean*, *essyn* ‘doorjamb’ ScG. *ursainn* /mesən eʃən eʃən/. The following items have *rs* > *s(s)*:

as ‘said’, G. *arsa*
claasagh ‘harp’, G. *cláirseach*
custey ‘cursed’
essyn ‘doorjamb’, G. *ursann*
fess, fesst ‘spindle’, G. *fearsaid*
foster ‘forester’
pesson ‘parson’
possan ‘parcel of sheep’, Eng. ‘portion’
wistad ‘worsted’ (fabric)

/r/ is retained, restored or introduced in the following:

coorse ‘course’, G. *cúrsa*, but Ph. *kuys* (Thomson 1995: 132)
erskyn ‘above’, G. *os cionn* (Thomson 1981: 50)
ersooyl ‘away’, G. *ar siubhal* (Thomson 1981: 22)
persoon ‘person’

4.2.2.2 Other cases of early rhotic deletion

G. *urchar*, EIr. *aurchor* (§2.1.10) gives Phillips *orghyr* /or(ə)xər/, but CM *orraghey* /orəxə/ ‘bow-shot’, with deletion of the second /r/. The appearance of adjacent /r/ and /s/ across the word boundary in the collocation *orraghey sidey* ‘arrow shot’ (G. *urchar saighde*), as in Genesis 21:16, may explain the development (§4.2.2.1). and/or the

influence of the shape of *dorraghey* ‘dark’ (G. *dorcha*) and verbal nouns in *-aghey* (ScG. *-achadh*).

There is simplification of the cluster /RLⁱ/ to non-palatalized /l/ in G. *magairle*, Manx *maggie* ‘testicle’ (with syncopated plural /maglən/, *HLSM* II: 286). The only item of similar shape is *coyrle* ‘advice’ (G. *comhairle*), but here the cluster is preserved (**kɔːrlʲ** etc., *HLSM* II: 98), perhaps because it synchronically constitutes the coda of a stressed syllable /kɔːrlʲ/. There may also be analogous simplification of /RN/ to /n/ in Manx *abane* ‘ankle’ (EIr. *odbrann*, ScG. *adhbrann*) if this is derived from earlier **adhbarn* (Ó Maolalaigh forthcoming b) (§3.4.7.4).

4.2.3 Weakening and loss of /r/ Late Manx

The weakening and loss of coda /r/ is widely attested in the material from the terminal speakers (Marstrander: 56; Jackson 118–24; *HLSM* III: 113–5). Jackson (118) attributes this to English influence:²²⁰

Further, **r** is very often dropped altogether or much reduced, and in addition it is apt to develop before it after a vowel, or substitute for itself, an **ə**. Both these features have notable analogues in standard Southern English, and also, significantly, in the English of the Isle of Man.

(Jackson: 118)

Following these descriptions, this weakening and associated developments can be summarized as follows:

- (a) Weakening of coda /r, rⁱ/ to an alveolar approximant [ɹ].
- (b) Insertion of [ə] before /r, rⁱ/.
- (c) Loss of /r, rⁱ/.
- (d) [ə] in place of coda /r, rⁱ/.
- (e) Centralization of vowels before coda /r, rⁱ/, with or without retention of rhotic.

²²⁰ Although see §3.3.2.1.

In addition, there are occasional cases of intrusive [r], as in non-rhotic varieties of English, in the speech of the terminal speakers (cf. *HLSM* II: 169). The following example is from Ned Maddrell:

ha 'rau mi 'ru: e:vil' 'lai q rəðə
cha row mee rieu abyl lhaih eh [r] edyr
 'I was never able to read it [Manx] at all'
 (*HLSM* II: 267)

In Rhÿs's informants these developments are not so advanced (for example, they apparently do not affect /rⁱ/, §4.2.1.3), but their incipient presence is noted:

ŷ [ə] is a favourite a vowel before the broad *r* in Manx as the same vowel sound is before *r* in English words
 (Rhÿs: 16)

This **ρ** [r] is assimilated very readily to other consonants, as in [...] *jiarg* and pronounced **džŷg** [dʒəg] 'red' (Goi. *dearg*), and this is especially the case before consonants of the ambidental group, as in *ard* 'high', pronounced **ŷδ** [əɟ]. [...] This is not the only point of similarity between the Manx **ρ** and English *r*; for like the latter it is wont to be preceded by a furtive **y** [ə] [...] In some cases this **ρ** like English *r* disappears as in [...] *feer* 'true' (Goi. *fior* [...]), which in such phrases as [...] *feer veg* 'very small,' is frequently pronounced **fŷŷ veg** [fi:ə veg] or **fī veg** [fi: veg].
 (Rhÿs: 148)

It has already been noted that these developments must be recent, as they are not shown in the eighteenth-century orthography, where *r* always appeared where historically expected apart from in certain limited circumstances (§4.2.2), and Jackson provides evidence that the change was underway in the lifetime of his informants.

Given the very close congruence between these developments and those of the English dialects of the Isle of Man, and the sociolinguistic situation of language shift, it is highly likely that the changes observed reflect language contact. Rhotics have been noted to be particularly liable to change via contact; compare, for example, the spread of uvular rhotics through several adjacent western European languages (Trudgill 1974). For English influence on Gaelic rhotics, we may compare the replacement of

/r/ and /rʲ/ by an English alveolar approximant [ɹ] in the Irish of younger ‘post-traditional’ speakers (Ó Curnáin 2012: 290, 292).

Coda rhotics were until recently widespread in north-west England, the area with which Manx English has the closest correspondences (Barry 1984), and are still retained in a shrinking area of Lancashire (Wells 1982: 367; Barras 2018: 364–5). Traces of rhoticity were recorded in traditional rural Manx English in the mid-twentieth century (Barry 1984: 174–5), which ‘points to a change from rhoticity to non-rhoticity, around the end of the nineteenth century’ (Hamer 2007: 173).

We may note the pronunciation of ‘November’ with a clearly audible final approximant [ɹ] by the native Manx speaker John Nelson (1839/40–1910)²²¹ in a wax cylinder recording from 1906.²²² This [ɹ] appears to be his realization of /r/ (and /rʲ/?) in codas, as in *Hiarn* ‘Lord’ (G. *a Thighearna*), *ort* ‘on you’ (G. *ort*), *cur* ‘put’ (G. *cu(i)r*), *danjeyr* ‘danger’, whereas a flap [ɾ] is used elsewhere, including in final position when immediately followed by an initial vowel (e.g. *ayr ain* ‘our father’, G. *athair againn*).²²³

It appears that coda /r/ followed a parallel trajectory in Manx English and Manx Gaelic in the nineteenth century, i.e. [r, ɾ] > [(ə)ɹ] > [ə] > Ø. It is possible that the occasional instances of ‘strongly trilled’ realizations in final position noted by Broderick (*HLSM* III: 18) represent hypercorrection in reaction to these developments.

Onset rhotics in conservative Manx English may resemble those noted for Manx /r/:

usually either an alveolar trill [r] or tap [ɾ] [...] This variant is now becoming restricted to the speech of older adults, particularly males

(Hamer 2007: 172)

²²¹ See *HLSM* I: 320–3; Broderick 2018a: 141–2.

²²² ‘Manx language archive recording: Part of the Evening Prayer in Manx read by John Nelson.’ Manx National Heritage. <<https://youtu.be/6rwnK0ZeB9Y>> [accessed 12.02.2019].

²²³ The sound quality is not good enough to be sure whether or not any subtle contrast between /r/ and /rʲ/ is maintained in Nelson’s Manx.

4.2.4 Fortis /R/

/R/ and */Ri/ have fallen together²²⁴ in all Gaelic dialects (Jackson: 117; Greene 1977: 159; Ó Murchú 1986: 21; 1989b; Ó Maolalaigh 1997: 53–7),²²⁵ leaving a maximal ternary system of rhotic consonant phonemes in conservative dialects, and reduction to one or two phonemes in others. There is no synchronic evidence of a rhotic fortis-lenis contrast in Late Manx in medial or final position (Marstrander: 56; Jackson: 117–8; *HLSM* III: 107), although see above (§4.2.1.5) for traces of initial lenition in the form of a palatalization contrast. However, the occasional trilled realizations described by Broderick (*HLSM* III: 18) may represent a non-phonemic trace of earlier /R/, as noted in Iorras Aithneach Irish (Ó Curnáin 2007: 228–34).

There is no orthographic evidence for a /R ~ r/ contrast, although that is not to say that such a contrast did not exist in earlier periods, as there is no obvious way it would be encoded in the orthographies;²²⁶ compare the fortis-lenis contrast in laterals and coronal nasals, which must have existed at least in Philips’s period if not later, but is not indicated orthographically (see below). As in other dialects, there is lengthening of certain short vowels before historical /R/, e.g. *baare* /bɛ:r/ ‘top’ (G. *barr*) (§4.6.1). There may also be diphthongization of /i(:)/ in a handful of items after initial /R/ (Jackson: 121), namely *roie* ‘run’ (G. *rith*, ScG. *ruith*), *roih* ‘arm’ (G. *righ*), and also Ph. *rÿi*, also *ríi* etc., CM *ree* ‘king’ (G. *rí*).

4.2.5 Other realizations of rhotics

Rhÿs (149) notes that the medial cluster /nr/ may be articulated as [nz] or [ndr]. The former may be a northern development (see also *HLSM* III: 18). Broderick (*HLSM* III: 17–8) also notes sporadic realization of intervocalic [r] as [ð] in *mairagh* ‘tomorrow’, (G. *amáireach*, *amárach*). Possibly *gooddin* (Cregeen) for Kelly’s *gurrin* ‘pimple’ (G.

²²⁴ Ó Maolalaigh (1997: 56–7) explores the possibility that */Ri/ never developed in the first place in some dialects.

²²⁵ Although a slender rhotic may be restored in paradigms by analogy (Ó Curnáin 2007: 222).

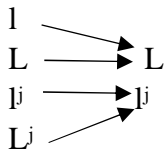
²²⁶ Cf. CM *arran* ‘bread’ (G. *arán*), *carragh* ‘scabby’ (G. *carrach*). The <rr> here indicates the shortness of the preceding vowel and it is not possible to be sure whether there was any contrast in the rhotics.

goirín) (§4.4.7.2) reflects this realization. This is perhaps a realization of /rʲ/ specifically.

4.3 Laterals

4.3.1 Introduction

For the most part, descriptions of the laterals in Late Manx suggest loss of the fortis-lenis contrast, with a reduction to a binary palatalization contrast (shown below). However, some of the descriptions point to a more complex picture than this.



4.3.2 Lateral contrasts in Late Manx

Rhÿs (145–7) notes ‘ambidental’, ‘alveolar’ and ‘mouillé’ (palatalized) laterals in Manx in the following items:

‘ambidental’: *laue*, ‘hand’, G. *lámh*
lhey ‘calf’, G. *laogh*
moal ‘slow, feeble, bad’, G. *mall*

‘alveolar’: *injl* ‘low’, G. *íseal*
vel ‘is’, G. *an bhfuil*
cummal ‘hold’, G. *congbháil*, ScG. *cumail*
elley ‘other’, G. *eile*
ainle ‘angel’, G. *aingeal*
inney-veyl ‘maidservant’, G. *inghean mhaol*

‘mouillé’:²²⁷ *lheie* ‘melt’, G. *leaghadh*
er-lheh ‘apart’, G. *ar leith*
cliaghtey ‘to be wont’, G. *cleachtadh*
fliaghey ‘rain’, G. *fleachtadh*

²²⁷ Also as a prosthetic consonant in initial /bj/ > [bʲ], /fj/ > [fʲ].

glione ‘valley’, G. *gleann*
fuill ‘blood’, G. *fuil*
sooill ‘eye’, G. *súil*
lhiastyn ‘owe’, G. *dleastanas*

The correspondence of the distribution of Rhÿs’s dental and alveolar laterals with the historical contrasts is not immediately obvious. He emphasizes the strongly dental character of λ [ɫ]:

I write it [the ‘ambidental’ lateral] λ [...] one is apt, while undoing the contact with the teeth, to produce a slight sound of δ , especially at the end of a word. Thus the combination $\bar{u}\lambda$ is pronounced almost as if written $\bar{u}\lambda\delta$ [u:ɫδ], and forms the Manx word for an apple [...] *ooyl* (Goi. *ubhal*²²⁸ [...])

(Rhÿs: 145)

In his notebooks, Rhÿs refers to the dental lateral as an ‘old-fashioned’ feature particularly noticeable in certain speakers:

the Mull of Galloway he usually call[s] *yn Vóul*²²⁹. He had an old fashion[ed] pronunciation probably for he pronounced the word for apple $\bar{u}\delta l$.

(John Boyd, Rhÿs notebook 6: 166)

Visited Police Constable Caley [...]: he is a native of Jurby and [...] remembers understanding Manx better than English, though he now prefers saying or relating things in English [...]. He says [...] **coul**⁶ [kouɫ] for *coll* hazel his broad *ls* sound very hollow and different from **l**¹ [l¹] or English *l* generally. I noticed this in his **ul**⁶ [u:ɫ] for *ooyl* ‘apple’ as contrasted with **ul**¹ [u:l¹] from *fuill* ‘blood’

(William Caley, Rhÿs notebook 6: 58–9)

²²⁸ The dental lateral is original (*eDIL* s.v. *uball*, *ubull*) although later spellings with *-ll* and *-l* are found and the usual modern Scottish spelling is *ubhal* (Ó Buachalla 1988: 42).

²²⁹ i.e. *maol*. The vowel of John Boyd’s *yn Vóul*⁶ [ən 'võuɫ⁶] (Rhÿs notebook 6: 166) may reflect the influence of the English form ‘Mull of Galloway’. Compare also ‘Mull Hill’ (older also ‘Mule Hill’, and contemporary local pronunciation [mju:l]) near Cregneash in Rushen, apparently also from *maol* (*PNIM* VI: 463). It is possible that the labial resulted in a degree of rounding of the vowel, at least perceptually.

Strachan (1897: 55) mentions a similar set of three laterals to that described by Rhÿs:²³⁰

In connexion with original broad vowels *l* has the thick sound found also in Irish and Scotch Gaelic, which Rhÿs describes and represents by λ . Where *l* seemed to me to be mouillé it has been represented by λ . This sound is clearest when it stands at the beginning of a word and is followed by a broad vowel. In some cases it was hard to decide whether *l* was mouillé or was simply an alveolar *l*.

(Strachan 1897: 55)

Notably, Strachan (1897: 55) contradicts Rhÿs's (146) comment on *elley* 'other' (G. *eile*):

elley 'other,' pronounced $\acute{e}l\acute{e}$ [ele], not $\acute{e}l\acute{i}\acute{a}$ [eljə] or $\acute{e}l\acute{o}$ [eliə]

(Rhÿs: 146)

In *ete* 'other' *l* seemed distinctly mouillé.

(Strachan 1897: 55)

Like Rhÿs and Strachan, Marstrander (55–6) reports three laterals, although some speakers have only two:

Woodworth, Kelly og Crebbin (Four Roads) skjelner bare mellom et velart og palatalt λ λ , begge artikulert på alveolene og brukt henholdsvis foran bakre og fremre vokaler. Derimot kjenner Christian, Taggart, Quane, Quale (Castletown) og Crebbin (Bradda Village) foruten alveolart *l* også et interdentalt *l* foran bakre vokaler. Dette *l* som kan betegnes λ er åpenbart den gamle fortis, men den har i mansk vunnet et større utbredelse enn i irsk. Det heter ikke alene $\lambda\bar{e}$, λag , $k'\bar{u}\lambda$, $t\bar{a}u\lambda$, $p\bar{a}u\lambda$, men også $k\lambda\bar{a}un$, $b\lambda\bar{e}$, $f\lambda\bar{a}u'n\bar{a}s$, $ko'\lambda ba\chi$, $d'z\bar{u}\bar{d}\lambda$; det heter $\acute{s}\bar{t}\lambda$ og $\acute{s}\bar{t}\bar{u}\lambda$, $f\bar{o}\lambda t$ og $f\bar{o}\lambda t$, men alltid *e'nal* og *-al* i alle infinitiver; det er intet fremlydsskifte $\lambda : l$. Mansken tilstreper åpenbart (som sydirskan) å innskrenke *l*-lydens antall til to: et velart *l* foran bakre og et palatalt λ foran fremre vokaler. Av de to velare *l*-lyd, avvek det interdental λ betydelig skarpere fra det palatale (alveolare) λ enn det (likeledes alveolare) *l*; det var bare rimelig at det blev valgt og grep ut over sit oprinnelige område.

[Woodworth, Kelly and Crebbin (Four Roads) differentiate only between a broad and slender [l] [l̥], both articulated on the alveolar ridge and before back and front vowels respectively. However, Christian, Taggart, Quane, Quale (Castletown) and Crebbin (Bradda Village) have in addition to alveolar *l* also

²³⁰ Although in the transcribed text λ does not appear.

an interdental *l* before back vowels. This *l* which can be transcribed λ [ɫ] is evidently the old fortis, but it has in Manx gained a wider distribution than in Irish. We have not only [ɫɛ:], [ɫag], [kʲi:ɫ], [təuɫ], [pəuɫ], but also [kɫəun], [bɫɛ:], [fɫəunəs], [koɫbax], [dʒi:dɫ]; we have [ʃi:ɫ] and [ʃi:l], [foɫt] and [folt], but always [enal] and [-al] in all infinitives;²³¹ there is no initial mutation [ɫ] : [l]. Manx is clearly striving (like southern Irish) to restrict the number of *l*-sounds to two: a broad [l] before back and a slender [lʲ] before front vowels. Of the two broad *l*-sounds, the interdental [ɫ] was significantly more sharply differentiated from the slender (alveolar) [lʲ] than from the (likewise alveolar) [l]; it was only natural that it was chosen and expanded beyond its original environment.]

(Marstrander: 55–6)

Jackson (107–11) and Broderick (*HLSM* III: 107) record only a two-way phonemic distinction, although both refer to traces of the earlier fortis-lenis contrast:

Some writers note the occurrence of strong forms, both broad and slender, i.e. of **L**, **N**, **L'** and **N'**, but I never heard them and doubt that they now exist, whatever **N'** may have been until recent times.

[fn.] Marstrander denies the survival of the strong forms as such, but sees a trace of **L** in the interdental variety he noted from some of his speakers for “broad” *l* [...], it evidently had no phonemic significance and bore no relation to the old system. I never heard this among my speakers, with whom “broad” *l* is alveolar.

(Jackson: 107)

In L[ate] S[poken] M[anx] /l/ and /n/ have lost their original velar quality, though there are still some traces of it in /l/, viz. [ɫ]; this varies freely with [l] and has no phonemic significance.

(*HLSM* III: 107)

However, Jackson (110–11) refers to the apparently greater frequency of plain sonorants representing original lenis slender /lʲ, nʲ/ as evidence of a survival of the fortis-lenis contrast until ‘recent times’:

Internally and finally **L'**, **N'** as well as **L** (***n** ? and **L**, **n**), stand for original “slender” strong *ll*, *nn* (or *l*, *n* in a dental group); and also for original weak single “slender” *l* and *n*. However, it is notable that **L** (and **L**, **n**) are somewhat rarer in the case of the originally strong sounds than in the case of the originally

²³¹ *laa* ‘day’ (G. *lá*), *lhag* ‘hollow’ or ‘weak’ (G. *lag*), *keeyll* ‘sense’ (G. *ciall*), *towl* ‘hole’ (G. *toll*), *poyll* ‘pool’ (G. *poll*), *cloan* ‘children’ (*clann*), *blaa* ‘flower’ (G. *bláth*), *flaunys* ‘heaven’ (G. *flaitheamhnas*), *colbagh* ‘heifer’ (G. *colpthach*), *jeeill* ‘harm’ (G. *díoghail*), *sheel* ‘seed’ (G. *siol*), *folt* ‘hair’ (G. *folt*), *ennal* ‘breath’ (G. *anáil*), *-al* verbal noun ending (G. *-áil*).

weak sounds, and it may be that a system of internal and final “slender” *l* and *n* = **l'** and **n'** (older **l'**, **n'**) versus internal and final “slender” *l* and *n* = **l** and **n** (older **l'** and **n'**) survived late and only broke down in recent times.

(Jackson: 110–11)

4.3.2.1 Merger of /L/ and /l/

The ‘old-fashioned’ ‘ambidental’ or ‘interdental’ lateral noted from some speakers by Rhÿs and Marstrander clearly represents the merger of the dental and alveolar broad laterals, with the result being dental, as in Scottish dialects where this merger has occurred (Wentworth 2002; Musil 2017: 11; Ó Maolalaigh forthcoming a: 321) and for the most part in Irish.²³² This is acknowledged explicitly by Marstrander (56), and is clear in the appearance of Rhÿs’s strongly dental **λð**, i.e. [ɫ̪], in G. *maol*, where alveolar /l/ would historically be expected. In some dialects or speakers this has further merged with the alveolar /l/ discussed below.

That in Early Manx /L/ and /l/ remained contrastive in medial and final position is shown by the different treatment of the stressed vowel /a/ before historical G. *l* and *ll*: there is categorical development of /a/ > /o/ in e.g. *mollaght* ‘curse’ (G. *mallacht*), whereas backing and rounding is only incipient in e.g. *thalloo* ‘land’ (G. *talamh*) (§2.1.1.2). The merger /L, l/ > /L/ must therefore have taken place between the seventeenth and nineteenth centuries.

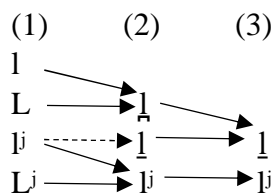
4.3.2.2 Alveolar /l/

Slender /L/ and /l/ had apparently also merged as a single palatalized lateral in most environments by the Late Manx period, according to the fieldwork sources discussed above (cf. Ó Maolalaigh [forthcoming a: 333–7] for similar developments in Scottish Gaelic). However, we must also account for a third lateral, a plain alveolar [l]. This is

²³² In Irish merger to a dental lateral is reported by Ó Cuív (1944: 46, 48), de Bhaldraithe (1945: 40–1), Breatnach (1947: 47), Mhac an Fhailigh (1968: 41), Ní Chasaide (1979), Ó Sé (2000: 17–8). However, Ó Curnáin (2007: 200–1) notes alveolar [l] representing both historical /L/ and /l/ in the majority of Iorras Aithneach speakers who have the merger.

most robustly attested in the suffixes *-al*, both verbal (G. *-áil*) and adjectival (G. *-amhail*), and, according to Marstrander, apparently in nouns such as *ennal* ‘breath’ (G. *anál*) as well. In data from *HLSM* II, [l^j] is usual in stressed reflexes of *-áil* and *-amhail*, but never occurs in the unstressed reflexes, except where this is fused into a monosyllabic form through fricative vocalization (*goaill* /go:l^j/ ‘take’, G. *gabháil* and *jeeill* /dʒi:l^j/ ‘harm’, G. *díoghbháil*), or secondary lenition (two instances of *credjal* ‘believe’; see also the development of the verbal noun suffix *-(a)in*, §4.4.7.1).

On the other hand, it appears that dental [l̪] does not occur in the *-al* ending either. Alveolar [l] also occurs consistently in the dependent present tense of the substantive verb *vel*, *cha nel* (Ir. *fuil*, ScG. *eil*, etc.) (*HLSM* I: 75–7, II: 66, 472). Rhÿs (146) emphasizes that [l] rather than [l^j] is present in *elley* ‘other’ (G. *eile*), although in the *HLSM* data, [l^j] is found in three out of the four instances given, and this is corroborated by Strachan (1897: 55). Other cases of alveolar [l] in Rhÿs are from historical broad /l/ and /L/ and presumably are from speakers who do not have the dental lateral. We must therefore presume a phoneme /l̪/ with a restricted distribution among speakers with a ternary lateral system. We can therefore sketch an evolution of the lateral system as such, with Late Manx speakers having either system (2) or system (3):



This Manx development is remarkable, since merger of broad and slender laterals is otherwise largely unknown in Gaelic dialects,²³³ although in the coronal nasals the parallel development /nⁱ/ > /n/ is widespread in Scottish Gaelic (Ó Maolalaigh 2001: 16). For a somewhat similar situation, we may compare the ‘limited **l** v. **L** opposition’ possibly present in some speakers of Iorras Aithneach Irish resulting from retention of ‘an alveolar articulation of morphologically depalatalised **l**’ [...] e.g. verbs in *-áil -a:l* > future *-álfaidh -a:l̪*’ (Ó Curnáin 2007: 201; cf. S. Ó Murchú 1989: 80). Phonemes

²³³ Ó Maolalaigh (forthcoming a: 329–30) gives a few examples of velarized laterals in Scottish Gaelic dialects in place of expected /lⁱ/ or /Lⁱ/, but specific etymological or analogical grounds (e.g. historically attested by *-forms* with /L/ or /l̪/, e.g. *broilach* / *broilleach*) can be suggested for most of them.

with such limited distributions are likely to be inherently unstable and liable to be reduced.

In relation to the development of unstressed *-al* it should be noted that post-tonic unstressed */a_li/ and */a_ni/ seem not to occur at all in the phonology (§4.4.7.3).²³⁴ A possible source for generalization of /l̥/ (=the historical broad lenis lateral /l/) in adjectives would be derivatives such as *gennallys* ‘gladness’ (G. **geanamhlas*), spreading to *gennal* ‘glad’ (G. *geanamhail*).²³⁵ On the other hand, Late Manx /l̥/ in three-lateral idiolects (in *-al*, *vel* and perhaps *elley*) can be seen as representing historical slender lenis /l̥i/, preserved in certain stereotyped circumstances when other instances of lenis /l̥/ had merged with /L̥i/. Loss of secondary articulations is perhaps inherently more likely in final position than in initial or medial position, and in unstressed syllables (cf. verbal noun *-yn* /ə_n/, G. *-(a)in*, §4.4.7.1) — although this is not necessarily expected to be the case with sonorants, where the acoustic cue to the secondary articulation is salient during the consonant itself, rather than simply during formant transitions in adjacent vowels as with stops.

That [l̥] in *-al* is not simply an allophone of /l̥/ in unstressed position is shown by the appearance of Rhÿs’s l̥ in some instances of *injlil* ‘low’ (G. *íseal*), and the names *Maghal* ‘Maughold’ and *Cranstal* (Rhÿs notebook 6: 165), which would give a contrast between unstressed /a_{l̥}i/ and /a_{l̥}/). Some apparent instances of /l̥/ for expected /l̥i/ may be the result of environment, as *millish* ‘sweet’ (G. *milis*) (Rhÿs notebook 6: 162; *HLSM* II: 299) where palatalization on- and off-glides might not be easily distinguishable from the adjacent high vowels in [mɪl̥iʃ].

²³⁴ Although there is one possible instance of /a_ni/ (§4.4.7.3).

²³⁵ There is orthographic evidence for maintenance of this alternation in e.g. the doubly-suffixed *eadolagh* ‘jealous’ (G. **éadamhlach*) vs. adjectives in simple *-oil* (G. *-amhail*) (but *cradoilagh* ‘mocking’ < G. *cnáid*; *gerjoilagh* ‘joyous’ < G. *gairdeach*), and in verbal nouns in *-ail*, derivative *-alys*, *-alagh*, e.g. *kiarail* ‘intend, care’ /kʲaːrɛ:l̥i/, *kiaralagh* ‘careful’ /kʲaːrɛ:lax/.

4.3.2.3 Initial lenition of laterals

There is little or no evidence as to whether and to what degree lenition of initial laterals may have been maintained in Manx. The variant spellings *lesh* and *liesh* for G. *le(is)* ‘with; with him, it’ given by Cregeen (s.v. *liesh*) may suggest coexistence of originally lenited and unlenited forms of this preposition. i.e. /l̥eʃ/ < */L̥eʃ/ and /l̥eʃ/ < */leʃ/. However, in the Bible *liesh* is restricted to *s’liesh*, *by-liesh*, *my-liesh* in the sense ‘own’ (e.g. *y vooinjjer by-liesh eh* ‘the owners thereof’, Luke 19. 33), and therefore maybe an orthographic attempt to differentiate senses, or reflect the fact that the cluster -s l- in *is leis* would be expected to have a fortis lateral after the sibilant, i.e. /sL̥j/.

4.3.3 Lateral contrasts in Early Manx

There is evidence for a maintenance of fortis / lenis contrasts /L ~ L̥j ~ l ~ l̥j/ in the Phillips orthography. For example the spelling <all> is used for both G. /aL/ and /al/, without indication of the later development /aL/ > /o:l/ (although the diacritic in *iáll* may represent a degree of vowel lengthening, i.e. [ja:L]). The fact that these lexical sets later diverge in their development (/al/ > /al/; /aL/ > /o:L/ > /o:l/) entails that the consonants were contrastive in Phillips’ time, prior to transphonologization into a contrast of the preceding vowel.

boayl ‘place’, G. *ball*. Ph. *ball*, *boll*
gial ‘white’, G. *geal*. Ph. *gall*
giall ‘promise’, G. *geall*. Ph. *iall* (2), *iáll*, *jall*
gioal ‘pledge’, G. *geall*. Ph. *giall*

It is less easy to demonstrate the persistence of the /L̥j ~ l̥j/ contrast in e.g. *keeill* ‘church’ (G. *cill*) and *mill* ‘honey’ (G. *mil*), given that only lengthening of certain vowels occurs before /L̥j/, rather than a change in vowel quality. The spellings of *keeill* with <í> may indicate lengthening:

keeill ‘church’, G. *cill*. Ph. *kíll* (2), *kíll*, *kill*
mill ‘honey’, G. *mil*. Ph. *mill* (2), *mil*

However, given the evidence for merger of broad /L/ and /l/ in 19th century Manx (§4.3.2.1) and the fact that this has been shown cross-dialectally to occur prior to merger of the slender laterals (Ó Maolalaigh 1997: 59), it follows that, if it is the case that /L/ and /l/ were contrastive around 1600, it is likely that /Lⁱ/ and /lⁱ/ remained distinct at this period, too, as /Nⁱ/ and /nⁱ/ certainly did (§4.4.6).

4.4 Coronal nasals

4.4.1 Introduction

The development of the coronal nasals is somewhat more complex than that of the laterals, but there is also more orthographic evidence, especially for the development of /Nⁱ/ and its interaction with original /ŋⁱ/ (< */ŋⁱqⁱ/). As with the laterals, there is some evidence which suggests an alveolar /ɲ/ with a limited distribution alongside dental /ɲ/ and palatalized /nⁱ/, although the evidence is less clear than in the case of the laterals.

4.4.2 Contrasts in coronal nasals in Late Manx

Rhÿs (133–5) notes three phones corresponding to the Gaelic coronal nasals (leaving aside [ŋ] and [ŋⁱ]), namely dental (‘ambidental’) **v** [ɲ], alveolar **n** [ɲ] and palatal or palatalized (‘mouillé’) **ñ** [nⁱ]. The ‘ambidental’ nasal is noted in *noa* ‘new’ (G. *nuadh*) and *kione* ‘head’ (G. *ceann*), where fortis dental /N/ is historically expected, and also in *lane* ‘full’ (G. *lán*), where the lenis alveolar /n/ would be expected. Rhÿs (133) also notes [ɲ] in Manx English ‘no’.

The ‘mouillé’ nasal appears for G. fortis and lenis /Nⁱ ~ nⁱ/, in e.g. *niart* ‘strength’ (G. *neart*), *veign* ‘I would be’ (G. *bheinn*, *bhínn*), *thallooin* ‘earth’ (gen.) (G. *talmhain*), *blein* ‘year’ (G. *bliadhain*), *yn irriney* ‘the truth’ (G. *an fhírinne*), *er n’yannoo* ‘have, has done, made’ (G. *iar ndéanamh*), *yn aspick* ‘the bishop’ (G. *an easpaig*) **yñ iaspick** [ə'nⁱaspik] (Rhÿs: 134–5).

Rhÿs's alveolar nasal, which 'is the sound of English and Welsh²³⁶ *n*; but it occurs oftener in those languages than in Manx' (ibid.: 134), has the most difficult distribution to explain. Rhÿs also notes alveolar [n̥] from original /N/ in *nearey* 'shame' (G. *náire*), *bannit* 'blessed' (G. *beannaighthe*), *sheelnaue* 'mankind' (G. *siol nÁdhaimh*), *bwoirryn* 'female' (G. *boireann*), and original /n/ in *inneen* 'daughter' (G. *inghean*) (with reference to the final *n*), *feeyn* 'wine' (G. *fíon*), *grian* 'sun' (G. *grian*). He records variation between [n̥] and [nʲ] in the dependent copula form (*cha*) *nee* (copula, G. *an é*, *chan é* etc.) **nī**, **hǎ nī** [(ha) 'n̥i:], but also **hǎ n̥iē**, **hǎ n̥iē̃** [ha 'nʲē:] 'heard [...] at Cregneish', and also notes [n̥] in *nee* 'will do' (G. (*do*) (*gh*)nī) (§4.4.4).

Strachan (1897: 55) notes only two coronal nasals, alveolar **n** [n̥] and 'mouillé' **ñ** [nʲ]. He refers explicitly to 'Rhÿs's second (alveolar) *n*':

Rhÿs's second (alveolar) *n* seemed to me to be sounded in *mennick* ['often', G. *meinic*], *činnə* [*chengey* 'tongue', G. *teanga*], *jinnax* [*jinnagh* 'would do', G. *déanadh*, *deineadh*], *jinnu* [*jannoo* 'do', G. *déanamh*], *Inid* [*Innyd*, 'Ash Wednesday', G. *Inid*], perhaps *henk* [*haink* 'came', G. *tháinig*], though there it may have been a little mouillé, *hannik* [*honnick* 'saw', G. *chonaic*], *finnish* [*feanish* 'witness', G. *fiadhnaise*]. But the two sounds were not always easy to distinguish.

(Strachan 1897: 55)

Marstrander (57), Jackson (107) and Broderick (*HLSM* III: 14–5, 106–7) note a two-way distinction between [n] and [nʲ], with no trace of the fortis-lenis contrast apart from diphthongization before historical */N/, and /ŋʲ/ from */Nʲ/. None of them mention the dental [n̥] noted by Rhÿs.

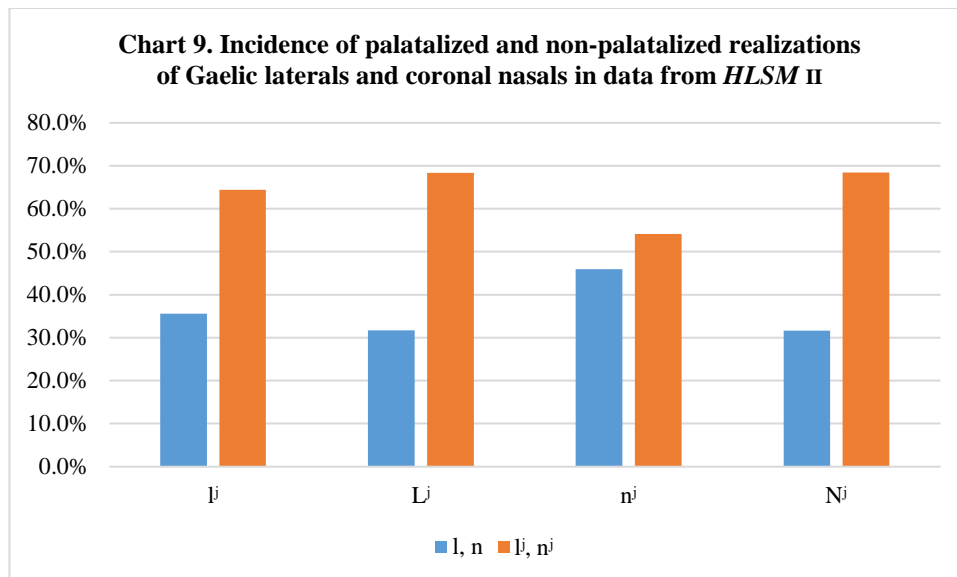
²³⁶ Presumably southern Welsh, as northern Welsh /n/ is often strongly dental (Ball and Williams 2001: 63).

4.4.3 Evidence for /nʲ/ > /n/

As discussed above, Jackson (110–1) suggests that plain [l] and [n] occur more frequently for the original lenis /lʲ/ and /nʲ/ than for fortis /Lʲ/ and /Nʲ/, and that this may be evidence for late survival of the fortis-lenis contrast. Data from Broderick’s dictionary (*HLSM II*) was collated to test Jackson’s hypothesis (Table 59, Chart 9).

Table 59. Incidence of palatalized and non-palatalized realizations of Gaelic laterals and coronal nasals in data from *HLSM II*²³⁷

	l, n	lʲ, nʲ	no. tokens
lʲ	35.6% (165)	64.4% (299)	464
Lʲ	31.7% (53)	68.3% (114)	167
nʲ	45.9% (206)	54.1% (243)	449
Nʲ	31.6% (49)	68.4% (106)	155



²³⁷ All transcribed individual items given after the headwords in *HLSM II* were included, from the main dictionary, the place-names and the addenda. Different transcriptions from the same speaker were counted separately, and where the same transcription is noted as being from *n* speakers, this is counted *n* times. Data from the example sentences were generally not included, as they generally duplicate instances given in the individual item transcriptions, but sub-headings (compound words, inflected forms etc.) were included. Items ending in unstressed *-al* (G. *-áil*, *-amhail*), which generally have unpalatalized [l] were excluded, as were items in *-yn* (G. *-(a)in*) except *geddyn*, *feddyn*. Only intervocalic medial and postvocalic final sonorants were investigated. The main transcriptions in *HLSM* are **n**, **nʲ**, **l**, **lʲ**. Other occasional transcriptions include e.g. **Nʲ**, **nʲj**, **nʲj**, **nʲl**, ^o**n** counted under [nʲ], **N** counted under [n], and a similar range of variants for the laterals. Realizations with **ŋ**^(o) were not counted in *rheynn* ‘divide’ (G. *roinn*) and *Nherin* ‘Ireland’ (G. *Éirinn*), which also have forms with [n] or [nʲ], and items with only **ŋ**^(o) were excluded entirely (e.g. *ching* ‘sick’, G. *tinn*).

Overall, these data show the considerable extent of depalatalization in the Manx of the terminal speakers, as noted by Broderick and Jackson – in all four cases over 30% of tokens show non-palatalized forms.

The percentages show there is little difference between the figures for reflexes of historical */lʲ/ and */Lʲ/. However, for */nʲ/ the percentage of tokens showing non-palatalization is considerably higher than for */Nʲ/. Moreover, a number of */nʲ/ items (with at least 5 tokens) which have exclusively non-palatalized realizations, namely the following:²³⁸

anney ‘commandment’, G. *aithne* (6 tokens)
ennym ‘name’, G. *ainm* (8 tokens)
accan ‘complaint’, G. *acaoine* (9 tokens)
hene ‘self’, G. *féin* (6 tokens)
imman ‘drive’, G. *iomáin* (5 tokens)
mwannal ‘neck’, G. *muineál* (9 tokens)
shen ‘that’, G. *sin* (12 tokens)

There are no such items for */Nʲ/, */lʲ/, */Lʲ/, apart from *skillin* ‘shilling’ (G. *scilling*, *scillinn*, 5 tokens). Another pair of related items which come close is *enn(ey)* ‘recognition’ (G. *aithne*), *ennaghtyn* ‘feel, perceive’ (ScG. *aithneachdainn*), which taken together have 7 tokens with [n], and 1 with [nʲ]. Both *anney* and *ennaghtyn* are spelled in Phillips exclusively with forms lacking an explicit indication of palatalization (*anny*, *an(n)aghyn*; *e(a)naghtyn*).

Accan and *imman* will be discussed below (§4.4.7.3). G. *sin* has numerous variant forms, including ones with final non-palatalized /n/ (*eDIL*).

It might be suggested that /nʲ/ was depalatalized in *anney* and *enney* (both G. *aithne*) owing to its adjacency to non-palatalized /h/ (of which there is no trace in the attested period of Manx, here or in any non-initial position), while the non-palatalization in *ennym* may be connected to its adjacency to non-palatalized /m/ (prior to svarabhakti, or in syncopated forms pl. *enmyn* ‘names’, verb *enmys*, *enmaghey* ‘to name’).

²³⁸ *Spain* ‘spoon’ might be included here (6 tokens with [n]), on the basis of ScG. *spàin*, Ir. variant form *spáin* (Ó Dónaill) (< Norse *spánn*, or Scots *spane*), but it is possible we have a form **spán* here.

On the other hand the adjacency to preceding front vowels in these items, and in *shen*, *hene* (see also *shin* ‘we’, G. *sinn*, below) may be a contributory factor, as in Scottish Gaelic (Ó Maolalaigh 1997: 63–4). One or both of these factors (adjacency to a historically plain consonant, and preceding front vowel) might explain other possible cases of depalatalization, such as *rhenniagh* ‘fern’ (G. *raithneach*, 5 [n], 1 [nⁱ]), *eunys* ‘joy’ (G. *aoibhneas*, *éibhneas*, 4 [n]) and *lhiennoo* ‘infants’ (G. *lein(i)bh*, 2 [n]). In the last of these the spelling is fairly firm evidence for depalatalized [n], since otherwise **lhienniu* might be expected (cf. *thenniu* ‘thaw’, ScG. *taineamh*; *terriu* ‘bulls’, G. *tairbh*).

In the case of *anney* ‘commandment’ (G. *aithne*), Cregeen’s rather opaque comment ‘sounded *Ahney*’ suggests something noteworthy about the pronunciation. The only similar comment of Cregeen’s is for *ennagh* ‘some, certain’ (G. *éigin(each)*), for which we find the comment ‘pronounced *Ehnnagh*’. No explanation is given for the value of this <hn(n)>, and Wheeler (2018) suggests in the case of *ennagh* ‘i.e. with slender /ni/’. However, it is more likely, in view of the other evidence presented here, that Cregeen is referring to depalatalization, i.e. a change [nⁱ] > [n], which would be of restricted distribution and thus of note. In *HLSM* II, *ennagh* has 3 tokens with [n] and 1 with [nⁱ].

For the development of G. *ui* in *mwannal* ‘neck’ (G. *muineál*), see §2.1.8.

There may also be depalatalization after /i:/. The CM spelling *sheeyney* ‘stretch, reach’ (G. *síneadh*) (*HLSM* II: [n] 1), with <y> which typically indicates a following broad or plain consonant (rather than e.g. **sheeiny*), may indicate a depalatalized form. The opposite development appears to have taken place in *speeiny* ‘peel, strip’ (G. *spíonadh*) (*HLSM* II: 1 [n], 3 [nⁱ]).²³⁹ The spelling variants *meen*, *meein* (both found in the Bible) ‘fine, soft, tender; dear’ (G. *mín*) may point to palatalized and depalatalized by-forms (1 [n], 4 [nⁱ], *HLSM* II).

There is further evidence in *HLSM* (II) of confusion between historical /i:n/ (*ín* etc.) and /i:n/ (*íon* etc.):

²³⁹ From *spíon* ‘thorn’ (< Latin *spina*) (*eDIL* s.v. *spín*), cf. ScG. variant *spín* (Dwelly).

Historical /i:n/:

- bwilleen* ‘loaf’ (G. *builbhín*) 5 [n], 6 [nʲ]
lhemeen ‘moth’ (G. *leaghman* > *-ín*) 1 [n]
meen, meein ‘fine, gentle’ (G. *mín*) 1 [n], 4 [nʲ]
reen, s’reen ‘tough’ (G. *righin, is righne*) 2 [n], 2 [nʲ]
saveen ‘slumber’ (G. *sáimhín*) 1 [n], 4 [nʲ]
sheeyney ‘stretch, reach’ (G. *síneadh*) 1 [n]
shilleen ‘slug’ (G. *seilchide* > *-ín*) 1 [n]
Trilleen ‘Pleiades’ (G. *Tréidín*) 1 [n]

Historical /i:n/:

- inneen* ‘daughter’, girl’ (G. *inghean*) 2 [n], 6 [nʲ]
berreen ‘cake’ (G. *bairghean*) 1 [n] (initial stress)
cooilleeney ‘fulfil’ (G. *coimhlíonadh*) 1 [n]
lhieneey ‘fill’ (G. *líonadh*) 4 [n]
lieen ‘net’ (G. *líon*) 4 [n], 1 [nʲ]
speineey ‘peel, strip’ (G. *spíonadh*) 1 [n], 3 [nʲ]
whilleen ‘as many’ (G. *a choimhlíon*) 1 [n] (initial stress)

There are also instances of the plural termination *-eenyn* with [nʲ] (4, all TC), which probably involves *-anna-* etymologically (§5.1.4), but [n] in *raanteenys* ‘surety’ (TC). In addition, Rhôs (Broderick 2019) has examples of *cooilleeney* and *whilleen* with [nʲ].

4.4.4 /N/ and /n/ > [ɲ], [ɲ]

As discussed above (§4.4.2), Rhôs reports both a dental and alveolar nasal. The distribution of these does not correspond with that of historical G. */N/ and */n/, however; for example, Rhôs reports dental [ɲ] in *lane* ‘full’ (G. *lán*), but alveolar [ɲ] in *bannit* ‘blessed’ (G. *beannaighthe*). Rhôs (134) attempts to explain the occurrence of [ɲ] in *nearey* ‘shame’ (G. *náire*) ‘pronounced *nĕrə*’ [ɲe:rə] and *inneen* ‘daughter’ (G. *inghean*) ‘pronounced *ɲĩĩn*’ [ɲĩ:ɲ] as being motivated by the synchronic quality of an adjacent vowel.

In some of the instances mentioned, it is to be noticed that the [alveolar] *n* occurs where the other Goidelic dialects postulate an ambidental nasal

associated with a broad vowel²⁴¹ whereas in Manx that vowel has been narrowed as in *nearey*, and *inneen*, so that here at least alveolar *n* appears as a compromise between **v** [ɲ] and **ñ** [ɲ̃].

(Rhÿs: 134)

However, it seems more likely that we have here a merger of /N/ and /n/, with the two realizations used indiscriminately, perhaps varying allophonically, or according to speaker and dialect. It is also possible that the two merged as dental [ɲ], with subsequent change to an alveolar realization. The influence of English alveolar [ɲ] may be relevant. The development would thus be similar to that of */L/ and */l/, except that the dental lateral [ɭ] seems to have survived longer, being reported by both Rhÿs and Marstrander (§4.3.2).

4.4.5 /n/ representing fossilized initial lenition

A trace of initial lenition of nasals is seen in the appearance of alveolar /n/ in *nee* ‘will do’ (G. *do ghní*), as opposed to *nhee* ‘thing’ (*ní*), and *niee* ‘wash’ (G. *nighe*) (Rhÿs: 134):

nee ‘will or shall do’, sounded *ní* [ɲí:] with an alveolar *n* [...]

[fn.] From the last three instances [*nee* (copula), *cha nee*, *nee* ‘will do’], all pronounced with *n*, must be distinguished *niee* to ‘wash’ (Ir. *nighe* [...]), and *nhee* [‘thing’] (Ir. *nídh*) [...]. The latter two are pronounced identically, **ñí** [ɲí:]. Four of these words occur in the following sentences: *Nee oos* [*sic*] *nagh jean eh niee son nhee erbee*. *Cha nee*. ‘Is it thou that wilt not wash it for anything in the world? No.’

(Rhÿs: 134)

However, *nee* (G. *do ghní*) may also be found with [n]:

nee ‘he will do’ (with Eng. *n*), but *neem* is **ñim** [ɲim] ‘I will do’

(William J. Caine, Rhÿs notebook 7: 198)

²⁴¹ This is correct with regard to initial *n* in *náire* /Na:riə/, but not final *n* in *inghean* /inɣəən/; Rhÿs does not seem to have fully understood the distribution of the Gaelic fortis-lenis contrasts.

Rhÿs does not report any cases of dental [ɲ] representing historical lenis /nⁱ/. As discussed above, /nⁱ/ appears to be depalatalized in a limited set of items. It is possible therefore that some speakers into the Late Manx period had a limited three-way phonemic contrast, similar to that apparently found in the laterals. Possible contrastive examples would be the following:

/nⁱi:/ *níee* ‘wash’, G. *nigh(e)*; *níee* ‘thing’, G. *ní*

/ɲi:/ *née* ‘will do’, G. *do ghní*

/ɲi:/ (also /ɲəi/) *nuy* ‘nine’, G. *naoi*

/banⁱə/ *bainney* ‘milk’, G. *bainne*

/anə/ *annee* ‘commandment’, G. *aithne*

/baɲəi/ *bannit* ‘blessed’, G. *beannaighthe*

As suggested above with regard to the laterals, the defective distributions of these three-sonorant systems in Manx may have contributed to their reduction to binary contrasts.

4.4.6 Reflexes of G. /Nⁱ/

The most notable survival of the fortis and lenis contrasts in Classical and Late Manx is the realization of historical /Nⁱ/ as a palatalized velar nasal /ŋⁱ/ (Rhÿs: 135–6; Marstrander: 57; Jackson: 111; *HLSM* III: 110). As noted by Rhÿs, this development appears to be only incipient in seventeenth-century Manx, judging by Phillips’ orthography:

The combination of *n* mouillé and *i* is liable to be changed into a palatal *ŋ* as in [Ph.] *shuinyn*, now *shinyn* ‘we, us’ (Goi. *sinne*) which is very commonly pronounced *shinyn* [ʃiŋən] (perhaps *shinyn* [ʃiŋən]); and I conclude that the same *n* mouillé, rather than the ordinary *n*, was the starting point of the change illustrated by such words as *kiinn*, *kiin*, *kin*, now written *king* and pronounced *kŋ* [kŋ] ‘heads’ (Goi. *cinn* [...]); *chiinn*, *chinn*, now written *ching* ‘sick, ailing’ (Goi. *tinn*); and *piin*, now *ping* ‘a penny’ (Ir. *píghin*, ScG. *peighinn* [...]); also *reyng*, *réyng*, *reng*, *réyn*, now *rheynn* ‘did divide’ (Ir. *doroinn*, ScG. *roinn*). Here, as in *væing*, the form favoured by the scribe of the Phillips Prayerbook has not prevailed, and other instances parallel to *væing*, as contrasted with *veign* [‘I should be’], occur commonly enough, as for instance at [Moore and Rhÿs 1895] p. 537, where we have near one another *ætlieing*, now *etlin* ‘I should

flee’, ’*urrying* ‘I should remain’ (Ir. *fhuirighinn*): the other pronunciation is evidenced in the same passages by *raghein* ‘I should go’ (Goi. *rachainn*), and *ienin*, now *yinnin* ‘I should make’ (Goi. *dhéanainn*).

(Rhÿs: 135–6)

Rhÿs (136–7) also remarks on the reverse development, /ŋⁱ/ > /nⁱ/, with the notable example of *chengey* ‘tongue’ (G. *teanga*):

In some instances **ŋⁱ** [ŋⁱ] is changed into **ñⁱ** [nⁱ], thus reversing, as it were, a change to which attention has just been called under the nasal mouillé. Take the following examples: [Ph.] *luinie*, now *lhuingey*, genitive of *lhong* (Ir. *long*, genitive *luinge* [...]) ‘a ship,’ in the phrase *kall luinie*, now *coayl-lhuingey* ‘shipwreck,’ where at the present day the pronunciation with **ŋ** is the only one to be heard in the Island [...]; and [Ph.] *chiange*, now *çhengey* ‘tongue,’ [...] which, however, occurs also written *my hinngé*. The O[ld] Ir[ish] was *tenge*, genitive plural *tengad* (Med[ieval] Ir[ish] *tenga*, Mod[ern] Goi[delic] *teanga*), but in spite of the *ng* the Manx pronunciation is mainly *tšēñiə* [tʃen^{iə}], identical wholly with that of *chene*, now written *çhenney* ‘fire’ (Goi. *teine* [...]), which has in consequence become obsolete as the ordinary word for fire in Modern Manx. It is right, however, to say that the pronunciation of *çhengey* ‘tongue’ with **ŋ** is by no means extinct, as I have heard it regularly used at Cregneish in the South; but Phillips’ spelling *hinngé* seems to suggest the other and more prevalent pronunciation.

(Rhÿs: 136–7)

The development of fortis /Nⁱ/ to /ŋⁱ/, with no such change in original lenis /nⁱ/, and the lack of indication of the /ŋⁱ/ realization in Phillips’ orthography, shows that there must have been a contrast /Nⁱ ~ nⁱ/ in Early Manx, and perhaps later. See for example the following near minimal pair:

/nⁱ/ > /nⁱ/ *kynney* ‘kindred, tribe’, G. *cinéadh*,²⁴² Ph. *kieny* (3), *kiěny* (2), *kiney* (2), *kĩňny*, *kyne*, *kyney*

/Nⁱ/ > /ŋⁱ/ *chingey* ‘sick’ (pl.), G. *tinne*, Ph. *chinny*

The development /Nⁱ/ to /ŋⁱ/ is almost categorical after in /i/ in fully stressed syllables (Table 60).

²⁴² The CM reflex with <nn> /nⁱ/ rather than <ng> /ŋⁱ/ shows that this represents the historical G. form *cinéadh* (*eDIL* s.v. *ciniud*), as opposed to ScG. *cinéadh*, which may be influenced by *cinneadh* ‘growing, growth’, and/or reflect the ScG. split /nⁱ/ > /Nⁱ/ or /n/ (Ó Maolalaigh 2001: 16); cf. Borgstrøm (1941: 38).

Table 60. *inn* /'iNʲ/ > /iŋʲ/, /inʲ/

item	Phillips	CM pronunciation	etymology	English
bing; bingys	bín; binniys, binnyys (2), binnis, bínnys	/biŋʲ/	binn; binneas	sweet-sounding, melodious; melody
bing		/biŋʲ/	ScG. binn	jury
ching; chingys	chinn (3), chiñ (2), chinny; chinnyys	/tʃiŋʲ/, /tʃiŋʲəs/	tinn; tinneas	sick; sickness
ingan		/iŋʲan/	inneóin	anvil
innagh		/inʲax/ ²⁴³	inneach	woof (of cloth)
king	kinn (4), kiin	/kʲiŋʲ/	cinn	head (gen., pl.)
lhing		/lʲiŋʲ/	linn	period, age, time
lhingey		/lʲiŋʲə/	linne	cavity between rocks in river
shin	shuin (7), shin	/ʃin/ ²⁴⁴	sinn	we, us
shiny ²⁴⁵	shuiniyn (4)	/ʃiŋʲən/	sinne	we, us (emph.)
shlingan		/ʃlʲiŋʲan/	slinneán	shoulder-blade

Apart from *shin* ‘we’ (G. *sinn*) (see below §4.4.6.2 for discussion), the only exception is *innagh* ‘woof’ (G. *inneach*). Here the development of a velar nasal is perhaps blocked by the presence of the following velar fricative; we may compare the blocking of the change /sk/ > /st/ by a following dental stop (Lewin 2015b: 72). Two other items have variants with /iŋʲ/ from *-uinn* and *-ainn*:

Table 61. Other instances of /Nʲ/ > /ŋʲ/

item	Phillips	CM pronunciation	etymology	English
cruin, cring, cruing (Cr.)	krūin, krunn (2), kruinn, kruin, krūyn, kruyn (2), krynn, krun	/krunʲ/, /kriŋʲ/	cruinn	round, close, compact
rheynn, ring (Cr.)	reyn, ráeyn (2), reynn, renn, reñ, rêyng, reygn, ræing, reng, ren, reyng, ræyng, ræyn, (impv. pl.) reŋji, reynnigi, (fut. 1sg.) renniym	/re:nʲ/, /riŋʲ/ ²⁴⁶	rainn, roinn	division, divide

²⁴³ **inqx** TC, HK (*HLSM* II: 225).

²⁴⁴ **ʃin**, **ʃin**, **ʃen** (*HLSM* II: 403).

²⁴⁵ Likewise *ainyn* /iŋʲən/ ‘at us’ (G. *againne*), *dooinyn* /diŋʲən/ ‘to us’ (G. *dúinne*) etc. (*HLSM* I: 61).

²⁴⁶ **reid'n'** TT, **riŋ** JW, **rai'n**, **re:n** TM, **rød'n'** TC (*HLSM* II: 366–7).

4.4.6.1 /Nⁱ/ in final unstressed syllables

Spellings with <ng>, apparently indicating [ŋⁱ], are also found in final unstressed syllables, both in Phillips and eighteenth-century sources, although the standard Classical Manx orthography mostly favours *-in*, and the Late Manx fieldwork data generally has [inⁱ, in], with one instance of [ŋ]. In Phillips, as noted by Rhŷs (see above), the conditional/imperfect 1sg. ending G. *-(a)inn* can be spelled with <ng> (Thomson 1953: 50):

ætlieing ‘I would fly’, G. *eitlighinn*
urring ‘I would remain’, G. *fhuirighinn*
væing ‘I would be’, G. *bheinn*

but: *gy niinshiyn* ‘I would tell’, G. *insinn*
vêin (3), *vêinsh*, *væynsh* ‘I would be’, G. *bheinn(se)*
leshshin, *lessyn* ‘I should’, G. *dleas-*
ienīsh, *ienin* (2) ‘I would do’, G. *déanainn* etc.
rağhēin ‘I would go’, G. *rachainn*, *raghainn*
odin ‘I could’, G. *fhéadainn*
ioinsh ‘I would get’, G. *gheibhinnse*

The place-names *Mannin* ‘Isle of Man’ and *Lunnin* ‘London’ appear as *Mannyng*, *Lunnyng* in certain eighteenth century texts, notably on title pages such as that of Matthew’s Gospel of 1748 and *Yn fer-raauee Creestee* (1763) which is *prentyt ayns Lunnyng* ‘printed in London’ and the Epistles and Revelation (1767), *prentyt ayns Mannyng* ‘printed in the Isle of Man’. In *HLSM* there is one instance of *Nherin* ‘Ireland’ (G. *Eirinn*) with **ŋ**ⁱ, alongside six instances of [nⁱ]. The spelling *conning* ‘rabbit’, found in the Bible and manuscript, also suggests [ŋⁱ] in a form representing *coinín* > **coinin* > **coininn*, with fortis /Nⁱ/ owing to MacNeill’s Law (see e.g. Ó Buachalla 1988).²⁴⁷

The reverse change is attested in *chengey* ‘tongue’ (G. *teanga*). The regular development of this seems to be attested in Phillips *chiange* etc. (i.e. /tʃaŋə/, with the

²⁴⁷ We may tentatively conclude that Manx follows Irish dialects in observing MacNeill’s Law, as opposed to Scottish Gaelic (Ó Buachalla 1988: 42), given that no evidence has come to light of Nalbin ‘Scotland’, (G. *Albain*, but ScG. *Albainn*), with [ŋⁱ], as opposed to *Mannin* (G. *Manainn*), *Lunnin* (ScG. *Lunnainn*) and *Nherin* (G. *Éirinn*).

usual development of *ea* > /a/) (Rhÿs 136–7), whereas the forms with /enⁱ/ in the later language must represent a by-form **teinge* (cf. EIr. forms *teng*, *teing*, *ting*, *eDIL*, *LEIA* s.v. *tengae*). As noted by Rhÿs (136), the same change is apparently evident in Ph. *luinie*, later *lhuingey*, genitive of *lhong* ‘ship’ (G. *long*). The later restoration of /ŋⁱ/ here may be explained by analogy with the nominative form, or adoption of a pronunciation with /iŋⁱ/, rather than /uŋⁱ ~ unⁱ/ (cf. *cruinn*, *cring* above).²⁴⁸

These developments point to towards merger of original /Nⁱ/ and /ŋⁱ/ (the latter originally restricted to a small number of items, from earlier [ŋⁱgⁱ]), with a [ŋⁱ] realization of the merged phone following /i/, and [Nⁱ ~ nⁱ] elsewhere. The later predominance of /nⁱ/ rather than /ŋⁱ/ in final unstressed syllables may represent a general change /ŋⁱ/ > /nⁱ/, /ŋ/ in this position, also when the /ŋⁱ/ is original, as in *farling* ‘farthing’ (G. *feóirling*), LM **fa:rl’ən** HK, **fa:’lən** JW (*HLSM* II: 158), and *aghin* ‘petition’ (G. *athchuinge*), although in the latter case the orthography indicates /Nⁱ/ or /nⁱ/ as early as Phillips (Thomson 1953: 147), likewise in Ph. *farsyn* ‘manifest’ (G. *farsaing*) (ibid.: 211), an item not found in later texts.²⁴⁹ Compare unstressed *-(a)ing* in Scottish Gaelic, which is realized as *-(a)inn* /əNⁱ/ in most dialects (*SGDS* III: 346–7), and similarly in many Irish dialects (*LASID* I: 183).²⁵⁰

²⁴⁸ The original velar nasals for reasons of space are not discussed separately here, but are assumed to have generally followed the widespread Irish development /ŋg/ > /ŋ/, /ŋⁱgⁱ/ > /ŋⁱ/ (Quiggin 1906: 106–8; Ó Cuív 1944: 120; Breatnach 1947: 141; de Búrca 1958: 132; Wagner 1959: 31–2; Henderson 1974: 146–7; Ó hUiginn 1994: 561; Ua Súilleabháin 1994: 489; *GOI*: 94). Retention of /ŋg/, /ŋⁱgⁱ/ is the rule in most Scottish Gaelic varieties (e.g. *SGDS* III: 336–7, IV: 266–7; v: 146–7, 322–3), and is found also in certain Irish dialects (de Bhaldraithe 1945: 39; Ó Sé 2000: 17–8; Ó Curnáin 2007: 198). In Manx there may also be retention of /ŋg/ in certain items such as *bangan* ‘branch’ (G. *beangán*), **banġan** (J:NM), but also **bāġan** (TT), **bġan** (JW) (*HLSM* II: 23). See Jackson (105–6), *HLSM* (III: 105–6).

²⁴⁹ Ph. *aghyin*, *aghein* etc. This item is often confused with *accan* ‘complaint’ (§4.4.7.3) in Early and Classical Manx texts (Thomson 1981: 122), and the form **a:yan** (JW) (*HLSM* II: 6, s.v. *aghin*) may in fact represent *accan*.

²⁵⁰ And also with loss of the nasal as *-(a)ig*, cf. Dillon (1962: 579).

4.4.6.2 Other developments of /Nⁱ/

sliennoo ‘surname, to surname’, G. *sloinneadh, slonnadh; sloinneamhain*

The spelling of this in Phillips *slonniu, slonniú* suggests the expected development /sloNⁱu/. The Classical Manx spelling *sliennoo* however, and Late Manx transcriptions **ʃl'enu** TC, **ʃl'ínu** TT, *sliennooit* ‘surnamed’ **ʃl'enuəʔ** TC (*HLSM* II: 415), point to an irregular development to a form /slieⁿu/, perhaps influenced by /eⁿəm/ *ennym* ‘name’ (G. *ainm*), and *lhiennoo* ‘children’ (G. *leinbh*). The non-palatalized [n] may go back to the by-form *slonnadh* (*eDIL* s.v. *slondud, sloinded*), however.

shin ‘we’, G. *sinn*

In contrast to the emphatic form *shiny* /ʃiŋⁱən/, there is no evidence of the simple pronoun *shin* being realized as */ʃiŋⁱ/. This is likely because pronouns are usually lightly stressed. Indeed, transcriptions in *HLSM* (II: 403) show a form which is consistently non-palatalized, suggesting that this item has fallen in with historical lenis /nⁱ/ and follows those items such as *hene, anney* with the development /nⁱ/ > /ɲ/ discussed above (§4.4.3).

4.4.7 Unstressed final /an/, /ən/, /ənⁱ/

Final unstressed syllables of the shape /Vn⁽ⁱ⁾/ are generally written *-yn, -in* and *-an* in the Classical Manx orthography. The diachronic derivation and phonological signification of these orthographical terminations are somewhat complex and merit detailed discussion.

Table 62. Summary of developments of post-tonic unstressed /Vn⁽ⁱ⁾/

orthographical form	pronunciation	principal origins
<i>-yn</i>	/ən/, occasionally /ən ⁱ /	-(e)an, -(e)ann, -(a)in
<i>-in</i>	/ən ⁱ /, /ən/	-ín, -ean, -eann, -(a)in, -(a)inn
<i>-an</i>	/an/ (marginally /an ⁱ /?)	-(e)án (/éan), -(e)ann

There are three particular complexities which require consideration:

- *-yn* seems predominantly to represent /ən/, but this includes a large number of items, mainly verbal nouns, where other Gaelic dialects have Ir. *-(a)in(t)*, ScG. *-(a)inn* (§4.4.7.1).
- *-an* is robustly attested as representing /an/, but this includes not only reflexes of *-án* but also a number of items where /ən/ (< G. *-(e)ann*) would be expected (§4.4.7.3).
- *-in* represents mainly /ən̪/ [in̪], but also a fair number of items with /ən/, especially after slender consonants (§4.4.7.2); a further illustration of the ambiguity of representation of palatality in the Manx orthography (§1.6.4.6).

In more detail the three orthographical terminations represent the following synchronic and diachronic forms:

-yn /ən/

- the regular plural suffix (ScG. *-(e)an*), and complex variants thereof, *-(a)ghyn*, *-(i)nyn*, *-eeyn*, *-(t)eenyn*, e.g. *muckyn* ‘pigs’ (G. *muc*), *meeaghyn* ‘months’ (G. *mí*), *joughinyn* ‘drinks’ (G. *deoch*), *glionteenyn* ‘valleys’ (G. *gleann*).
- verbal noun suffix (G. *-(a)in*) and complex *-aghtyn* /axtən/, (G. *-(e)achtain*), e.g. *clashtyn* ‘hear’ (G. *claistin*), *ennaghtyn* ‘feel’ (ScG. *aithneachdainn*).
- various items in G. *-(e)an*, *-(e)ann*, e.g. *moidyn* ‘maiden, virgin’ (G. *maighdean*); *fyrryn* ‘male’ (G. *fireann*).
- certain items with expected G. *-(a)in(n)*, and where it may not be clear whether Manx has /ən/ or /ən̪/, e.g. *cossyn* ‘win, earn’, stem of *cosney* (G. *cosain*, *cosnadh*), *geddyn*, *feddyn* ‘get, find’ (ScG. *faotainn*) (some realizations with final [n̪] in *HLSM*), *screeuyn* ‘writing, letter’ (G. usu. *scríbhinn*, but original nominative *scríbhheann*, EIr. *scrí bend*).
- a handful of items with expected G. *-án*, e.g. *er-shaghryn* ‘astray’ (G. *ar seachrán*), *nieceaghyn* ‘washing’ (G. *nigheachán*).

-in /ən̪/, /ən/

- /ən̪/, unstressed reflex of diminutive suffix *-ín*, e.g. *drillin* ‘spark’ (G. *drithlín*), *caillin* ‘girl’ (G. *cailín*), *kibbin* ‘peg, stake’ (G. *cipín*), *gurrin* ‘pimple’ (G.

goirín).

- /ən̪/, a small number of verbal nouns in G. *-(a)in* which appear to retain final /n̪/, e.g. *fakin* ‘seeing’ (G. *faicsin*, ScG. *faicinn*), *toilchin* ‘deserve’ (G. *toilleamhain*, ScG. *toilltinn*).
- /ən̪/, other items in original *-(a)in*, e.g. *shiaghtin* ‘week’ (G. *seachtmhain*), *Nalbin* ‘Scotland’ (G. *Albain*).
- /ən̪/, items in original *-(a)inn*, *-(a)ing*, e.g. *cuishlin* ‘vein’ (G. *cuislinn*), *Mannin* ‘Isle of Man’ (G. *Manainn*) (see also §4.4.6.1), *yllin*, *uhllin* ‘stackyard’ (G. *iothlainn*), *skillin* ‘shilling’ (G. *scilling*, *scillinn*).
- /C̪ən̪/, /C̪ən̪̪/, orthographic <i> indicating preceding slender consonant; it is not always clear whether or not *n* is palatalized, e.g. *claiggin* ‘skull’ (G. *claigeann*), *egin* ‘compulsion’ (G. *éigean*, *-in*, ScG. *éiginn*), *mwyllin* ‘mill’ (G. *muileann*).
- /Cən̪/, no obvious rationale for orthographic <i>; e.g. *cheddin* ‘same’ (G. *céadna* > **céadan*), *eddin* ‘face’ (G. *éadan*).

-an

- /an/, diminutives and other nouns in original *-án* (inc. < EIr. *-én*), e.g. *beggan* ‘little’ (G. *beagán*), *quailan* ‘pup, whelp, cub’ (G. *cuileán*), *arran* ‘bread’ (G. *arán*).
- /an/, unstressed reflex of other original terminations of the form /V:n̪/, with depalatalization, e.g. *imman* ‘driving’ (G. *iomáin*), *accan* ‘complain’ (G. *acaoinne*), *ingan* ‘anvil’ (G. *inneóin*), *follan* ‘wholesome’ (G. *folláin*).
- /an/, various items in original *-(e)an*, *-(e)ann*, assimilated to the /an/ class rather than showing expected */ən̪/, e.g. *crackan* ‘skin’ (G. *craiceann*), *ollan* ‘wool’ (G. *olann*), *astan* ‘eel’ (G. *eascann*), *doghan* ‘disease’ (G. *dochann*) (Table 64).

4.4.7.1 verbal nouns in *-yn*, *-in*

The verbal noun ending G. *-(a)in* (Mod. Ir. often *-(a)int*; ScG. *-(a)inn*), originally the dative form of verbal nouns in EIr. *-(i)u*, e.g. *aicsiu* ‘seeing’ > (*f*)*aicsin* (Stüber 1997:

231–2), usually appears in Classical Manx orthography as *-yn*, and judging from the Late Manx phonetic data is overwhelmingly realized with non-palatalized [n].

The main exception is *fakin* ‘see’ (G. *faicsin*, ScG. *faicinn*), which is consistently spelled as such in the printed texts (also *fackin*), even where other verbal nouns regularly have *-yn*, and for which there is ample evidence of [n^j] (*HLSM* [n] 5, [n^j] 3, also Rhÿs [Broderick 2019 s.v. *fakin*]). Another item where the *-in* spelling survives even in the most orthographically standardized texts is *toilchin* ‘deserve’ (ScG. *toilltinn*), but this is not attested in *HLSM*. Some earlier and less-standardized eighteenth-century texts have more widespread use of *-in*, but it is unclear whether this represents an earlier /ən^j/ or simply less discriminate use of <y> and <i>. ²⁵¹

Out of 19 verbal nouns in *-yn*, *-in* in *HLSM* only two are solidly attested with [n^j], namely *fakin* and *feddyn*, *geddyn* ‘get, find’ (Sc *faotainn*) ([n] 5, [n^j] 8). ²⁵² This may have to do with the fact that these are frequently-occurring irregular verbs; in the case of *fakin* at least it may also be connected with the contraction to a monosyllabic form [fain^j] (Rhÿs: 120, 122). It seems that word-final changes in palatality are more common in unstressed syllables than in stressed monosyllables.

Depalatalization of this ending is also found in certain Scottish dialects (*SGDS* II: 416–7, *cluinntinn*; Borgstrøm 1940: 68; Oftedal 1956: 252). Whether this is a secondary development from /N^j/, or a reflection of the split development of G. lenis /n^j/ to both /N^j/ and /n/ in Scottish dialects (Ó Maolalaigh 2001: 16), is unclear. In Manx the development was perhaps supported by the analogy of verbal nouns with original /n/ (including those with G. *-achán* > Manx /axən/, see below), and those possessing related forms with historical /n/, e.g. *lhiastyn* ‘owe’, noun *lhiastynys* ‘debt’ (G. *dleastanas*).

Depalatalization is also found in a couple of other items which are not verbal nouns, including *Boaldyn* ‘May-day’ (G. *Beal(l)taine*, ScG. *Bealltainn*; *HLSM* [n] 3) and

²⁵¹ Cf. plurals *foilchin* ‘faults’ (later *foiljyn*) and *noijin* ‘enemies’ (*noidjyn*), where the ending was certainly /ən/, in *CS* (Lewin and Wheeler 2017).

²⁵² There is also one attestation of [n^j] in *bentyyn* ‘touch, belong’ (ScG. *beantainn*), alongside three with [n].

perhaps *screeuyn* ‘writing, letter’ (G. *scríbhinn*), which may have been interpreted as plural ‘writings’ (although it has itself a plural *screeunyn*), and/or associated with the verbal nouns in *-yn*, unless it represents original nominative *scríbhheann*, EIr. *scrí bend* (*HLSM* [n] 3, but pl. **skru:n’ən** NM).

4.4.7.2 *-in*

Where *-in* represents the unstressed reflex of G. diminutive *-ín*, there appears to be a tendency towards depalatalization in Late Manx, although the evidence is sparse (Table 63). There are enough cases of [nʲ] from different speakers and items to suggest this is not a general merger with /ən/, however.

Table 63. Unstressed reflexes of G. *-ín*

	CM pronunciation	etymology	English	<i>HLSM</i>
caillin	/kalʲəni/	cailín	girl	in’ HK
gibbin	/gibəni/	goibín	sand-eel	iN JTK
gurrin (K.), gooddin (Cr.)	/gurʲəni/	goirín	pimple	ən’ TT, ən JW ²⁵³
kibbin	/kiʲbəni/	cipín	peg, stake	ən HK, J:JK
perkin	/perʲkʲəni/	ScG. <i>poircean?</i>	porpoise	ən TK, JW
skurrin	/skurənʲ/	ScG. <i>sgurran?</i>	rump, back	in’ TC

Similarly original *-(a)in* in items such as *shiaghtin* ‘week’ (G. *seachtmhain*) have several depalatalized realizations (7 in *HLSM* II: 400) but are also found with palatalization (**t’fə:xtən’** HK, **saxtin’** EKk). The same is true of those with original *-(a)inn* (§4.4.6.1), such as *aalin* ‘beautiful’ (*HLSM* II: 1 [n] 3, HK; [nʲ] 3, JW, NM, TT).

In some cases where a final broad *-n* would be historically expected, there is robust attestation of [nʲ], which can be readily explained as generalization of a feminine oblique case form, as in *dorrin* ‘storm’ (G. *doineann*) (**in’**, **ən’** TC, HK, JW, *HLSM* II:

²⁵³ The latter is under *gurrin* in *HLSM* (II: 215), but given there are no attested forms with a clear vowel [a], and no orthographic forms with <an>, it is likely that this is simply a non-palatalized realization of *-in* (< G. *-ín*).

128),²⁵⁴ and probably *egin* ‘force’ (G. *éigean* ‘ā, f.; later also o, m.’ *eDIL* s.v. *éicen*; ScG. *éiginn* f.) which is feminine according to Cregeen (**əɲ** HK, **əɲ** JW, *HLSM* II: 149, s.v. *er-egin*).²⁵⁵ In other cases *-in* appears to represent palatalization of the preceding consonant, but not the *-n*, as in *mwyllin* ‘mill’ (m., G. *muileann*) (**əɲ** JK, W:N, J:EK, JTK, but one instance of **in** TC, *HLSM* II:), *cadjin* ‘common’ (G. *coitcheann*) (**əɲ** TC, TT), *claig(g)in* ‘skull’ (G. *cloigeann*, ScG. *claigeann*) (**klagəɲ** TC, *HLSM* II: 82).²⁵⁶

Certain other items have *-in* following a broad consonant, and apparently with broad [n], for no obvious reason; including *cheddin* ‘same’ (G. *céadna* > **céadan*) and *myrgeddin* ‘likewise’ (G. *mar an gcéadna*); *eddin* ‘face’ (G. *éadan*, ScG. *aodann*);²⁵⁷ *sheeabin* ‘soap’ (ScG. *siabann*). When further endings are added, *in* can be especially ambiguous, as in *Manninagh* ‘Manx(man)’: here the orthographic *-in* presumably represents the final /nⁱ/ (historical /Nⁱ/) in *Mannin* ‘Isle of Man’ (G. *Manainn*) (§4.4.6.1), but is carried over into the derivative, which however has only [n] (*HLSM* II: 289) and probably represents G. *Manannach*.²⁵⁸

4.4.7.3 *-an*

Transcriptions in *HLSM* show that the clear vowel /a/ is generally well-preserved in *-an* (< G. *-án*), although reduced realizations with [ə] occur, and the CM orthography has a consistent one-to-one correspondence between /an/ and <an>, as

²⁵⁴ According to Cregeen this noun is masculine (no evidence either way has come to light in texts), but it is feminine in other Gaelic varieties (*eDIL* s.v. *doinenn*, Dinneen, Ó Dónaill s.v. *doineann*, Dwelly s.v. *doineann*, *doireann*).

²⁵⁵ In *shegin dou* ‘I must’, also frequently spelled *sheign*, the form is frequently reduced to **jein**, **sain** etc., with the *n* frequently depalatalized, probably as a result of consistently preceding /d/, although one palatalized form is attested in *HLSM* (II: 395), alongside 7 with [n].

²⁵⁶ But possibly with feminine declension (‘o, n. and [m.] Later also ā, [f.]’ *eDIL* s.v. *cloicenn*). Cregeen does not give a gender for this item; there is one case of lenition in *na’n chlaigin* ‘than the skull’ (2 Kings 9. 35), but *na’n* here is possibly treated as regular preposition + article, causing lenition.

²⁵⁷ This noun is given as feminine by Cregeen, a designation which is supported by some agreement evidence (Wheeler 2017: 24), so an oblique form **éadain* could be posited (cf. *airh* ‘gold’, f. =**óir*, §4.2.1.3); but the data from *HLSM* (II: 141) and Rhôs (Broderick 2019 s.v. *eddin*) has only non-palatalized [n]. Phillips has mostly *-yn* (14 instances), one instance of *-in*, but the spellings of the plural *ydyniyn* and *edyniyn* may be equivalent the ScG. plural *aodainnean*.

²⁵⁸ As in *Éireannach* ‘Irish’, *Albanach* ‘Scottish’ etc.; ScG. *Manainneach* (found alongside *Manannach*) is probably a modern reformation.

shown in the examples in Table 64. There are also items where G. *-an*, *-ann*, *-aing* (> Manx */ən/) would be expected, but where *-an* /an/ is clearly attested (Table 65).

Table 64. Some examples of Manx *-an* < G. *-án*

	Phillips	CM pronunciation	etymology	English	HLSM
arran	an (5)	/aran/	arán	bread	an HK, NM, a ^h n EL qn WQ, HK, EK ^h
beggan	an (3)	/began/	beagán	little	qn JW, an JK
ellan	(pl.) ellanyn (2)	/el ^h an/, /al ^h an/	oileán, EIr. ailén	island	an JW, JTK, NM, JW, qn JK, TC, an JK
partan		/partan/	partán	crab	an EC, an NM, pl. pa:rtərən, pə:tərən NM
roddan		/rodan/	ScG. rodan	rat	qn JW, an W:S, ən J:EK, qn JW, an NM
sporrán		/sporan/	sparán, sporán	purse	an JW, qn HK
thurran		/turan/	? torrán, túr + án	haystack	qn HK, JW, an EL, an TT

Table 65. Unhistorical *-an*

	Phillips	CM	etymology	English	HLSM
astan		/astan/	eascann	eel	ən NM, an TK, ən WQ
crackan	yn (2)	/krak ^h an/ (§2.1.6)	croiceann	skin	ən TC, JK, JTK an TC, qn WQ
doghan		/doxan/	dochann	disease	an JW, qn TT, an TC
foghan	yn	/foxan/	fochann	young corn in blade	
ingan		/iŋan/	EIr. ingen (ar méraib) ²⁵⁹	issue, young, offspring (of	

²⁵⁹ That is to say, a legal term *ingen ar méraib* ‘nail on fingers’ metaphorically denoting (possibly with reference to a manner of calculating kinship by use of the hands [McLeod 2000]) ‘descendants beyond the son of the great great grandson, i.e. collateral kin beyond the third cousins’ (*eDIL* s.v. 2 *ingen*; Patterson 1990: 138–40; McLeod 2000: 6–8), sometimes found without *ar méraib* (*eDIL*). This would agree with Kelly’s etymology ‘Ir. *ionga*’. Judging from the standard dictionaries (Dinneen, Ó Dónaill, Dwelly), which lack this sense of *ionga*, it has not survived in the other modern Gaelic languages. In Manx it appears to have undergone a semantic shift from referring to distant progeny of humans to referring primarily to the young of animals; note e.g. the differing translations of ‘fruit’ in Deuteronomy 30:9: *As nee’n Chiarn oo y vishaghey ayns ooilley obbraghyn dty laue, ayns slught dty chorp, ayns ingan dty vaase, as ayns dty vess hallooin son dty vie* ‘And the Lord thy God will make thee plenteous in every work of thine hand, in the fruit of thy body, and in the fruit of thy cattle, and in the fruit of thy land, for good’, where *ingan* refers to animal young but *slught* (G. *sliocht*) to human

				animals)	
lieckan	(pl.) liettanyn	/liekʲan/	leiceann	cheek	ən, ɢn TC, an HK
loaghtyn (Bible, Cr.), loghtan (K.)		/loxtən/ /loxtan/	ScG. lachdann	brown, tawny	an JK
oalan (K.), oalyn, olan (<i>PNIM</i> III: 123)		/o:lan/, /o:lən/	G. abhlann, cf. ScG. abhlan	wafer	
ollaghan		/oləxan/	ealchaing, ScG. ealachainn	treadle of spade	
ollan	ayn, án	/olan/	olann	wool	an JK
sollan		/solan/	salann	salt	aN NM, an NM, JK, JTK, ən NM, TC an JW, W:N ɢn HK

Cases of unhistorical clear vowels in final syllables are attested in Scottish dialects, e.g. *oisean* /ɔʃan/ (Ó Maolalaigh 2001: 9) for historical *oisinn* ‘corner’, and with other final consonants, e.g. *galar* ‘disease’, *iodhal* ‘idol’ etc. Ó Maolalaigh explains cases such as *oisean* as resulting from ‘truairliú agus analach [...] leis an deireadh díspeagtha *-ean/-ein*’.²⁶⁰ Similar analogical substitutions are also attested in Irish (Ó Curnáin 2007: 124–7). This likely explains the Manx cases given above.

It is perhaps no accident that several of the items given above refer to small animals (*astan*, *ingan*; cf. *braddan* ‘salmon’, *scaddan* ‘herring’, *partan* ‘crab’ etc.), parts of

offspring. For the ending *-an*, distinguishing this item from *yngyn* ‘nail’, see the discussion in the present section. One might otherwise suspect that *ingan* is to be equated with *oikan* ‘infant, baby’ (Cr. also *inkan*, *oinkan*) (G. **naoidheacán*, Ph. pl. *nikanyn*, *ikanyn*), where variants with a medial nasal consonant (‘on the south side of the island’, Cregeen s.v. *oikan*) can be explained by rhinoglottophilia (§5.6) and/or the influence of the original initial *n-* (Lewin 2019a: 87). *Ingan* would then represent voicing of the stop in the medial cluster /ŋk/ > /ŋg/. Telling against this interpretation is the fact that *ingan* ‘young of animals’ (often in an uncount sense) and *oikan* ‘human infant’ are clearly distinguished in the texts and the dictionaries; moreover, the rhinoglottophilia account requires voiceless /k/ (although secondary voicing is not necessarily precluded). However, the form *chied oingyn maaish* ‘firstling that cometh of a beast’ (i.e. ‘first young of cattle’) in the manuscript of Exodus 13:12 (printed *chied ingan maaish*) may attest to confusion or fluctuation between these two items and also a reflex of *ionga* with historical /-ən/ rather than /-an/ (actually the manuscript appears to have *oingan* with *y* written over *a*, and then the whole word rewritten *oingyn* in the original hand, without subsequent emendation within the manuscript).

²⁶⁰ ‘contamination and analogy with the diminutive ending *-ean/-ein*’.

larger wholes (*crackan, lieckan, foghan, ollaghan*), or substances often divided into small parts or portions (*ollan, sollan, foghan*). With the exception of *ollaghan* and perhaps *doghan*, all of them also refer to concrete and natural entities (or in the case of *loghtan*, attributes). We may contrast three items showing the opposite development, historical G. *-án* > Manx *-yn*, all of which are more abstract concepts and may possibly have been influenced by the class of verbal nouns in *-yn* (possibly also *seaghyn* ‘sorrow, affliction’, §3.9.7).²⁶¹

Table 66. Unhistorical *-yn* < G. *-án*

	Phillips	CM	etymology	English	HLSM
gweeaghyn	yn (2)	/gwi:axən/	guidheachán	curse	ən TC, JW
nieceaghyn, niaghyn		/n̥i:axən/	nigheachán	washing	ən TC, W:N, W:S
er- shagh(y)ryn; shaghrynys; shaghrynagh	an (5), yn (2), án	/er̥iːʃax(ə)rən/	seachrán	astray; confusion; stray	ən TC, W:N, JW, EK _h , TT

Some of the data from Phillips (<yn> in *foghan, crackan*; <an, án> in *shaghryn*) indicate that these developments were not complete in Early Manx. The confusion between these terminations was possibly aided by the breakdown of the /N ~ n/ contrast (in *-ann, -án*), which may post-date Phillips (§4.4.4).

There are also a few items in final /an/ deriving from terminations with historical */n̥i/. For the most part, this is depalatalized in the Manx realizations.

Table 67. *-an* < G. /V:n̥i(ə)/

	Phillips	CM pronunciation	etymology	English	HLSM
accan	an (5), æ̃in	/akan/	acaoine, ScG. acain	complain, complaint	ən TC, NM, JTK, W:S, a:n JW ɔn TC
follan	ayn	/folan/	folláin, ScG. fallain	wholesome	ən TC, ɔn JW
imman	an (5)	/iman/	iomáin, ScG. iomain	drive	ən, ən TC
ingan		/iŋ'an/	inneóin, ScG. innean, innein	anvil	ən TC, aN' JK, ən W:N

²⁶¹ *Nieceaghyn* may indeed function as a verbal noun (HLSM II: 324), alongside *níe* (G. *nighe*).

On the whole these items seem to have been assimilated in Manx to the /an/ class. Since there are, in addition, no known plurals or genitives of these at any period with /anⁱ/, one might posit a constraint against post-tonic unstressed */anⁱ/ in Manx (cf. the apparent constraint against post-tonic unstressed */alⁱ/, §4.3.2.2), although against this we have the isolated example of *ingan* ‘anvil’ from JK with N’,²⁶² and Phillips’ spelling with <æin> might be taken as representing final /nⁱ/.

Suffixed plurals such as *bradanan* ‘salmon’ (rather than slenderized *bradain*) are typical of eastern Scottish dialects, according to Ó Maolalaigh (2003b: 158), who notes that there is some evidence of non-inflection of *-án* in Early Irish (*GOI*: 178; Carney 1964: 155), as well as occurrence of nominative plurals in *-ána*, representing spread of accusative plural forms (see *eDIL* s.v. *bratán*). Ó Maolalaigh posits that plurals in *-ain* did in fact develop in Eastern Scottish Gaelic, but that the contrast *-an* and *-ain* was neutralized by the extensive merger of original broad and slender lenis /n, nⁱ/ in these dialects. As discussed above (§4.4.3), depalatalization of original lenis /nⁱ/ does not seem to be so widespread in Manx, but is found in certain environments, including after /a/ in *anney* ‘commandment’ (G. *aithne*), so it is possible that there was depalatalization in final unstressed /anⁱ/.

We should also note the general decline of final slenderization in nominal inflection in Manx, especially in the genitive singular, with only a handful of examples remaining, such as *baaish*, genitive of *baase* ‘death’ (G. *bás*).²⁶³

4.4.7.4 Stressed reflexes of G. *-éan*, *-án*

As observed by Ó Maolalaigh (2001: 31), Manx overall patterns with Irish rather than Scottish Gaelic in the development of the diminutive suffix *-ín* (Manx *-een*, *-in*), which Ó Maolalaigh suggests may derive from an earlier suffix **-éin*. In Scottish Gaelic, on

²⁶² John Kneen, the *Gaaue* (‘blacksmith’) (Broderick 2018a: 131–3), who might be expected to have been familiar with this word. On the other hand, Kneen gives the impression to me of being a less careful speaker than some of the other *HLSM* informants, and the level of confusion and hypercorrection in the terminal speakers means that individual instances of (non-)palatalization cannot be taken as conclusive (Broderick 1999: 85–90).

²⁶³ There are, however, more cases of retention of slenderization in plurals, including /n/ > /nⁱ/ as in *eayn* ‘lamb’, pl. *eayin* (G. *uan*, *uain*); but cf. *raunyn* ‘seals’ (Lamentation 4. 3; Cregeen; *HLSM* II: 361) for G. *rón*, pl. *róin*.

the other hand, there is no raising of the vowel in this suffix and it falls in with reflexes of *-án, é(a)n*.

In one respect, however, Manx may preserve an archaism not otherwise preserved in Gaelic dialects, namely the apparent survival of a termination /'e:n/ in certain items, which in Irish falls in with *-án* (e.g. EIr. *ailén* ‘island’ > Mod. Ir. *oileán*).

Table 68. Manx *-ean* /e:n/ < G. *-éan* (Mod.Ir. *-eán*)

	Phillips	CM pronunciation	etymology	English	HLSM
binjean (Cr., K.)		/bin ⁱ 'dʒe:n/	EIr. bintén, < G. binid	curds and whey	
cheinjean		/tʃen ⁱ 'dʒe:n/	teinteán, EIr. *teintén	bonfire	
jeeigean (Cr.)		/dʒi(:)g ⁱ 'e:n/	G. díog, díg, EIr. *dígén	rill	
jiulean		/dʒu ⁱ 'le:n/	deibhleán, EIr. deidblén	small tenant farmer ²⁶⁴	
soilshean	áyn, éyn, eyn, en	/sol ⁱ 'fe:n/	soillseán, EIr. *soillsén	shine ²⁶⁵	ɸ: ^ɔ n JW, WQ e: ^ɔ n SK, e: ^ɔ n NM, e:n J:EK, ɸ:n TC

There is a similar orthographical contrast in the verbal noun suffix *-ail* (mostly after broad consonants), *-eil* (mostly following slender consonants) (G. *-áil*) and the diminutive *-age*, *-aig*, *-aag* (after broad consonants), *-eig* (after slender consonants) (G. *-óg* > Manx **-ág*). Here forms **-éil*,²⁶⁶ **-éag* may conceivably have developed by analogy with *-án*, *-én*.

²⁶⁴ See Thomson (1988: 142), Wheeler (2018 s.v. *jiulean*).

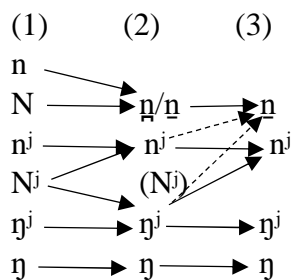
²⁶⁵ The use of this as a verbal noun ‘to shine’ seems to be peculiar to Manx, and appears to be a semantic development of the diminutive *soillseán* ‘a torch, a taper, a ray of light’ (Dinneen) found in other dialects.

²⁶⁶ Note however Ó Cuív (1980: 127): ‘It is noteworthy that in some of the verbs the vn. ending follows a palatalised consonant. Hence the process of analogy has given a morpheme *-(e)áil*. [fn.] This may be contrasted with the termination *-eáil* (gen. of *-eál*) and related elements, reflexes of earlier *-éil*, *-él* etc. (< **-ethyl-* etc.). However, there is no doubt that a morpheme *-él* (with oblique form *-éil*) was used in the formation of verbal (or abstract) nouns for some centuries from the late Mid[dle] Ir[ish] period on.’ See further *ibid.*: 134.

4.4.8 Summary of developments in coronal and velar nasals

Figure 13 summarizes the developments in the system of coronal and velar nasals underway in Early and Classical Manx (1–2) and the point reached in Late Manx (2–3), based on the discussion above.

Figure 13. Summary of developments of coronal and velar nasals



As discussed above, some aspects of these developments, especially the distribution of dental [n̄] and alveolar [n̄], remain somewhat unclear, as we are largely reliant on the descriptions of Rhÿs, which only give a limited snapshot of the range of dialectal, idiolectal, lexical and diachronic variation and change which may have existed.

4.5 Preocclusion

4.5.1 Introduction

Preocclusion of stressed final nasals and laterals is one of the best-known features of Manx phonology and has attracted a certain amount of scholarly attention (§§4.5.2, 4.5.3), although there has been no consensus on its characteristics or origins. In writing the phenomenon is only attested in certain folksong manuscripts in idiosyncratic orthographies from the nineteenth century, although there is reason to believe it developed significantly earlier than this.

In the speech of the terminal speakers as represented for example in the Irish Folklore Commission recordings (Manx National Heritage 2003), preocclusion is very frequent with some speakers (such as HB, NM), especially with final [n], [n^j], and rare and/or very weak in other speakers (such as JK, JTK). It is usually quite weak and often

difficult to hear, and frequently absent entirely, even in speakers who often have it. It seems to be particularly prone to absence under weak phrasal or sentence stress and in rapid speech. Preocclusion appears to vary freely with lengthening of the sonorant (often with a shortened vowel), lengthening of the vowel (with the sonorant being short) and occasionally “postocclusion” (with [l]), all of which can be seen as strategies to enhance syllable weight (§4.5.5).

Some examples are given in the spectrograms below (Figures 14a–g), which were generated in Praat (Boersma and Weenink 2015). The numbers refer to the disc and track in Manx National Heritage (2003).

Figure 14a. [ʃe^dn] *shen* ‘that’ (G. *sin*) with preocclusion, HB (1:14)

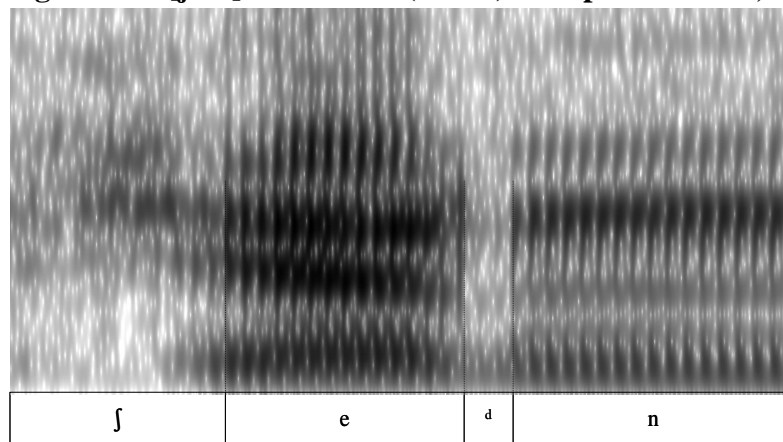


Figure 14b. [g^je^ːb^m] *geam* ‘calling’ (G. *éigheamh*) with preocclusion, HB (1:14)

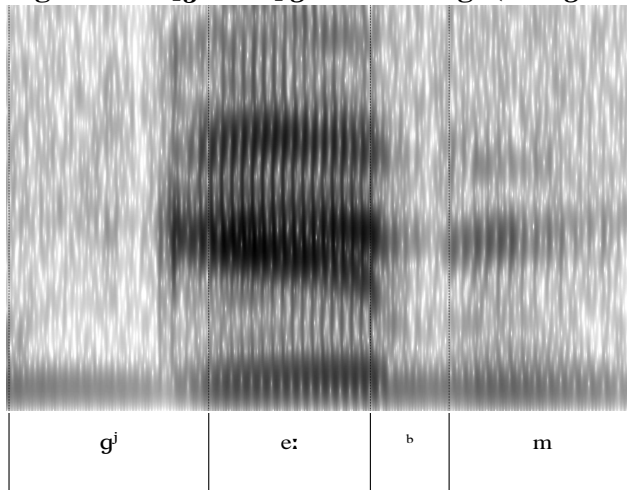


Figure 14c. [xi^dn] *keayn* ‘sea’ (G. *cuan*) with preocclusion, NM (2:9)

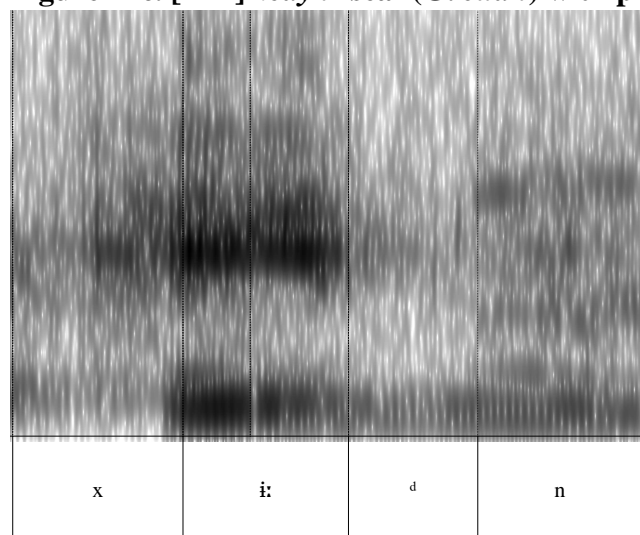


Figure 14d. [ve^dn] *ben* ‘wife’ (G. *bean*) with preocclusion, NM (2:10)

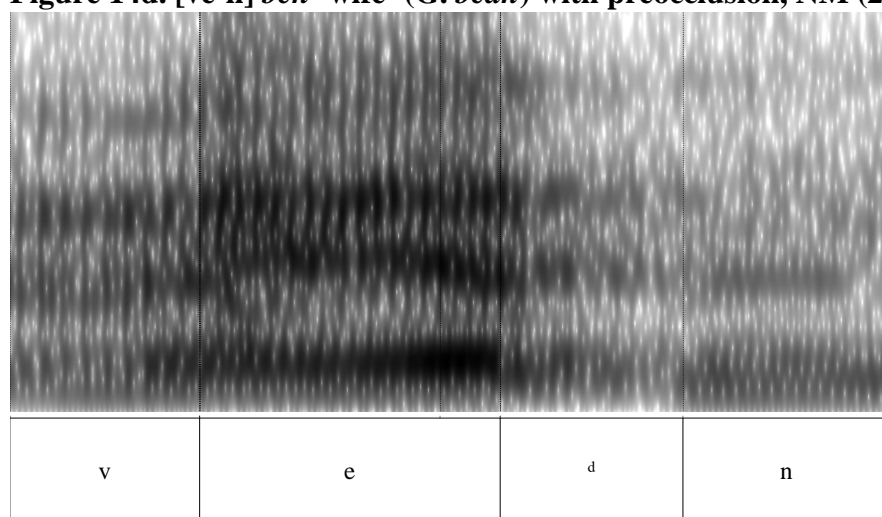


Figure 14e. [ju:l^d] *shooyl* ‘walk’ (G. *siubhal*) with “postocclusion”, NM (2:10)

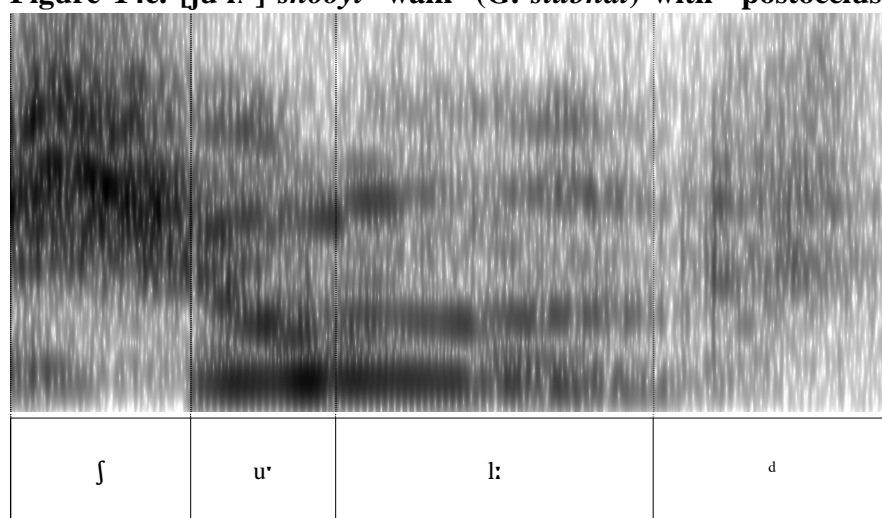


Figure 14f. [eʳsu^{(d)l}:] *ersooyl* ‘away’ (G. *ar siubhal*) with shortening of vowel and lengthening of sonorant, NM (2:19). The presence of preocclusion is doubtful.

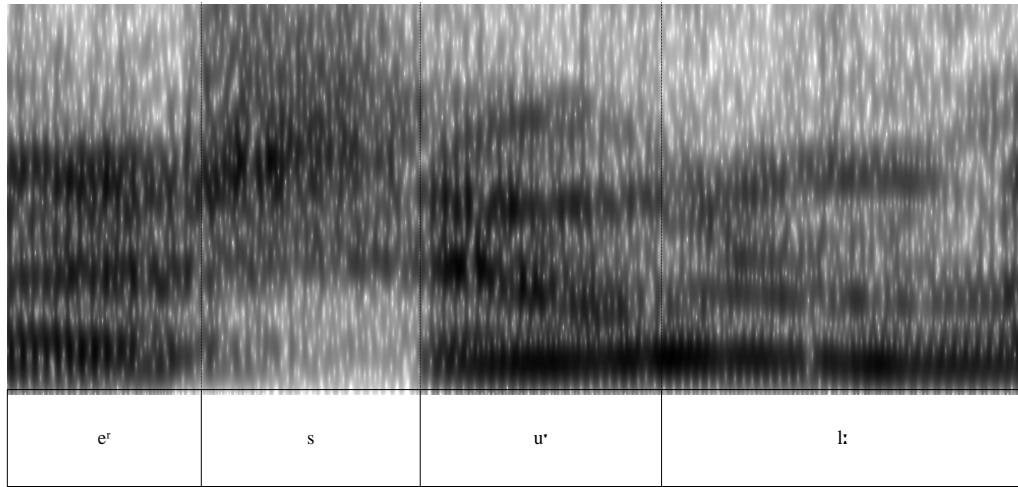
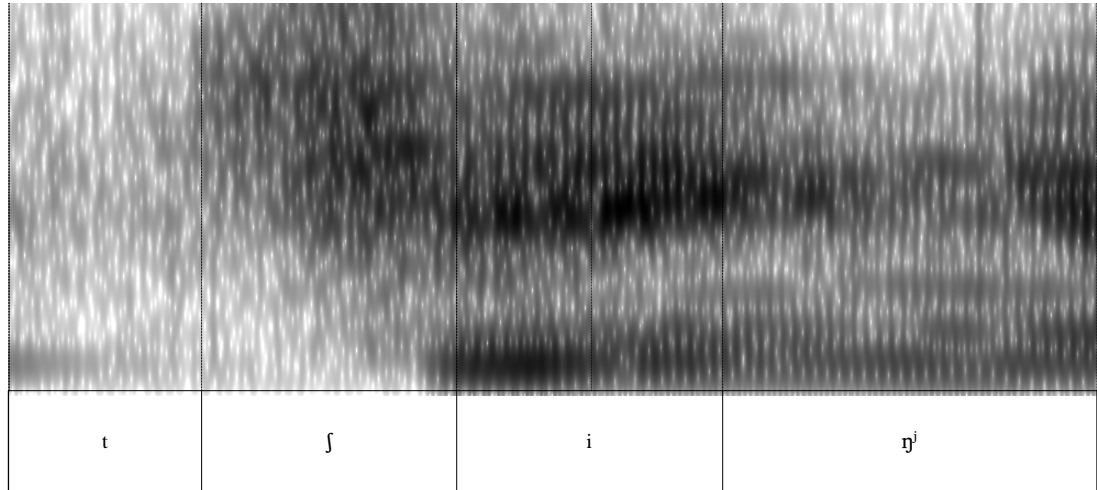


Figure 14g. [tʃiŋ^j:] *ching* ‘sick’ (G. *tinn*), NM with lengthened sonorant but no audible preocclusion, NM (2:9)



4.5.1.1 Cross-linguistic typology

Cross-linguistically preocclusion or pre-stopping does not seem to be an especially common development. It is found within northern Europe in North Germanic (Icelandic, Faroese, certain Norwegian dialects) (Sandøy 2005, Røstad 2011), Sámi (Sammallahti 1998) and Cornish (Chaudhri 2007). The distribution, realization and phonological function of preocclusion in these languages are quite different from one another, but they all seem to develop from historical long or geminate sonorants and/or sonorant clusters. This and other features have been argued to provide evidence for a northern European *sprachbund* (e.g. Wagner 1964). Iosad (2016b) argues on

chronological and historical grounds that direct contact influence of these languages on each other in respect of preocclusion and other features is implausible, but that more fundamental structural similarities between these languages — which may themselves reflect older language contact (cf. Salmons 1992) — ‘conspire to encourage the repeated genesis of shared features’ (Iosad 2016b: 15).

Outside northern Europe, pre-stopping (as it is conventionally known in this context) is particularly prevalent in Australian Aboriginal languages (Ladefoged and Maddieson 1996: 128–9; Loakes et al. 2008) and Austronesian languages (Jardine et al. 2015). The origin of Australian pre-stopping seems to be different to the northern European phenomena, and has been argued to be a strategy to preserve place of articulation distinctions in languages which typically have an unusually large number of places of articulation and few manners of articulation (Butcher and Loakes 2008; Loakes et al. 2008: 90).

4.5.2 Descriptions

The first detailed description of Manx preocclusion is that of Rhÿs (143–4):

I must mention a phenomenon of considerable importance in the present pronunciation of Manx. It consists in prefixing to a final nasal the corresponding voiced mute. Thus [...] *trome* ‘heavy’ (Med. Ir. *tromm*, Mod. Ir. and ScG. *trom* [...]) is pronounced in a way which sometimes strikes one as being **tróum** [t̪roum] and sometimes **trōbm** [t̪ro^bm] or **trúbm** [t̪ru^bm] with a sort of precarious *b*; and similarly with other words such as [...] *kione* ‘head’ (Goi. *ceann*) which becomes **kíōuv** [ki^ou^v] or **kíō^hdn** [ki^o:^hn], while the plural [...] *king*, is pronounced sometimes **kí^hŋ** [ki^hŋ]; *blein* ‘a year,’ becomes **blidñ** [bli^dn] and [...] *lhong* ‘a ship,’ becomes **lō^hŋ** [l^oŋ] or **lū^hŋ** [l^uŋ]. The same thing happened now and then with *rv* [r̪v] as in [...] *oarn* ‘barley,’ pronounced **or^dv** [or^dv] [...] (Goi. *eórna*); and with *rn*, pronounced **r^dñ** [r^dn], as in *cuirn* or *keirn* ‘the rowan or mountain ash’ ([...] Mod. Ir. *caorthainn* [...]). This modification began before the orthography of Phillips’ translation had been fixed upon, as one would otherwise have expected *tromm*, for example, or *trom*, rather than *troum*, *tróym*, or *trúm*. In all the cases mentioned the vowel was short and the nasal consonant as in *tromm* was long, so to say, so that metrically speaking **um** or **bm** is an equivalent for *mm*. So it is needless to say that the neatest cases of this phenomenon happen to be all accented final syllables, and those which have been here enumerated ended, etymologically speaking, in a mixed equivalent for *mm*, *vv*, *nn*, *ŋŋ*, or *ŋŋ*. But (2) the same thing has happened, probably later,

where the nasal consonant was short but preceded by a long vowel, and here the reinforcement of the consonantal element took place, metrically speaking, at the expense of the vowel: at any rate this may be supposed to be the tendency. Thus though [...] *thallooin* ‘earth’s’ ([...] Med. Ir. *talam*, genitive *talman*) retains the length of the vowel of its final syllable after that syllable is modified, so that the word sounds *tal̄l̄d̄n̄* [t̄aːˈl̄uːˌd̄n̄] with the stress on the last syllable, and [...] *bane* ‘white’ (Goi *bán*) is also pronounced with its *a* not perceptibly shortened in the South, but in the northern half of the Island the pronunciation in *bȳδv* [bəˌd̄v̄] with the vowel as short as may be. [...] it should be remarked that the less distinctly one hears the parasitic consonant the less is the quantity of the vowel tampered with.

(Rhÿs: 142–3)

Rhÿs’s discussion of the topic is notable for his suggestion as to the origins of Manx preocclusion (§§4.5.4.1, 4.5.5) and comments on its synchronic behaviour as an active prosodic or metrical phenomenon (§§4.5.5.2, 4.5.5.3); for the evidence provided that the phenomenon may be lexically conditioned;²⁶⁸ and for evidence of variation between idiolects and dialects. He notes preocclusion in most of the environments it occurs, including before labial, coronal and velar nasals and in rhotic-nasal clusters, and shows an intuitive understanding of the relationship between preocclusion and vowel and sonorant length. However, it is notable that he does not mention preocclusion with laterals, although there is evidence of this in his notebooks:

He pronounced *ooyl* ‘apple’ mostly *ūδλ* [uːˌd̄λ] sometimes *ūλδ* [uːˌλˌd̄], but in that case the *δ* was fainter: the pronunciation *ūδλ* I have heard of before as the habitual pron[unciation] of an old man in the neighbourhood of Ramsey.

(John Stephen, Rhÿs notebook 7: 196)

Rhÿs’s notes also contain some comments on idiolectal variation in preocclusion:

this man Brew had a constant tendency to pronounce every final *n* as *dn*

(James Samuel Brew, Rhÿs notebook 6: 73)

²⁶⁸ For example Rhÿs (143) claims that preocclusion occurs more often in *Jelhein* ‘Monday’ (G. *Dé Luain*) and *Jardain* ‘Thursday’ (G. *Déardaoin*) than in *Jecrean* ‘Wednesday’ (G. *Dé Céadaoin*) (Rhÿs: 143). However, preocclusion is well-attested in *Jecrean* in Rhÿs’s notes: in notebook 6 (p. 152) in a comparative table of items three out of four speakers have *dn̄* [ˌd̄n̄].

Strachan (1897: 55) notes preocclusion only before *n*, ‘sometimes [...] quite distinct, sometimes barely audible, and records that he ‘seemed sometimes to hear the same sound when English was spoken, e.g. *agüdn* for *again*’.

Marstrander (58) describes preocclusion before both nasals and laterals, and also notices it in Manx English in *stüdl* ‘stool’, *spüdn* ‘spoon’, *stíbm* ‘steam’. He notes that preocclusion occurs irrespective of sonorant quantity, although it is unclear whether this is a synchronic or a diachronic observation:

Utviklingen synes ikke å ha noe med konsonantens kvantitet å gjøre. Den forklares heller ikke ved en forsinket åpning av ganeseilet, da den jo også foreligger ved *l*.

[The development seems not to have to do with the consonant quantity. Nor is it explained by a delayed opening of the velum, since it also occurs with *l*.]

(Marstrander: 58)

Jackson (113–4) notes preocclusion in nasals only; he notes Rhÿs’s and Marstrander’s descriptions but states he did not encounter preocclusion with laterals or rhotic-lateral clusters himself. He notes preocclusion in Manx English with final /n/ only, as in ‘*seen* = *si^dn* and the like’.

Before *-n* or *-nn* of either quality when final in stressed monosyllables there has very commonly developed in Manx a kind of fugitive unexploded *d*. What seems to happen is that in producing the *n* the occlusion begins just before the velum is lowered, so that the sound is denasalized at the beginning. I write *ᵀn* for this. It is most certainly not a glottal stop, as it has been called.

(Jackson: 113)

Jackson notes a number of examples where he only heard preoccluded nasals, such as *bᵀn* *ben* ‘woman’ (G. *bean*), *fi:ᵀn* ‘wine’ (G. *fíon*), *dri:ᵀm* *dreeym* ‘back’ (G. *druim*), *ɔ:ᵀn* *oarn* ‘barley’ (G. *eórna*). However, he also notes some items for which he heard both preoccluded and non-preoccluded forms, e.g. *t^hrᵀᵀm*, *t^hro:ᵀm*, *t^hro:m* *trome* ‘heavy’ (G. *trom*), *eeym* ‘butter’ (G. *im*), and an item with only non-preoccluded forms: ‘in *ching* “sick”, [...] with original *-nn*, I heard only *ŋ*’ (Jackson: 115).

Wagner comments briefly on Manx preocclusion, noting similar developments ‘in Cornish, West Norse, Lapp, as well as in some Siberian languages’ (Wagner 1956:

109) and suggesting this is evidence of ‘a certain North Eurasian ‘Sprachlandschaft’ (he also notes preocclusion in Dublin English, which he attributes to ‘West Nordic’ influence). According to Wagner, preocclusion is restricted to southern Manx:

Im modernen Manx scheinen diese Formen auf die südlichen Dialekte beschränkt zu sein, während das Nord-Manxische Formen aufweist, die mit entsprechenden schott[isch]-gäl[ischen] Formen verwandt sind. Karte 89 meines LASI, welche die Manx-Formen für ir. *gann* „scarce“ illustriert, gibt eine Form *gauḟn* für den nördlichen Dialekt und eine Form *go:dn* für den südlichen.

[In Modern Manx these forms seem to be restricted to the southern dialects, while Northern Manx shows forms which are related to the corresponding Scottish Gaelic forms. Map 89 of my *LASID*, which illustrates the Manx forms for Irish *gann* ‘scarce’, gives a form *gauḟn* for the northern dialect and a form *go:dn* for the southern one.]

(Wagner 1964: 293)

Notwithstanding this claim, plentiful evidence is found of preocclusion in the north in the other accounts discussed here. Indeed, in Wagner’s northern form *gauḟn*, the otherwise suspicious [ə] may well represent weak preocclusion. However, it was noted above (§4.5.1) that two of Wagner’s three northern informants (Broderick 1999: 71), JK and JJK, mostly have very weak or absent preocclusion, which may explain Wagner’s claim. Unlike Jackson, Wagner (1956: 109) does note preocclusion with laterals, giving the example of *ju:dl shooyl* ‘walking’ (G. *siubhal*).

Broderick (*HLSM* III: 28–9) introduces preocclusion as follows:

In L[ate] S[poken] M[anx] there can occur usually in stressed monosyllables (but also in stressed final syllables of disyllables and stressed medial syllables followed by a short monosyllabic unstressed suffix — whether the stressed syllable be long or short) ending in a nasal or lateral a development known as preocclusion. That is to say, that just prior to the articulation of the nasal or lateral the corresponding (voiced) stop is realized, but with nasal or lateral release, i.e. [b^N] before /m/, [d^N] before /n/, [g^N] before /ŋ/, [d^L] before /l/.

(*HLSM* III: 28–9)

Broderick’s is the only primary description to note preocclusion in medial positions. He gives two examples of this (*HLSM* III: 29):

brynnagh ‘flattering’ /bre[d^Nn’ax/
lieenyn ‘nets’ /l’i[d^Nnən/
(*HLSM* III: 29)

According to *HLSM* (II: 49, 277) the realization **brəd’n’ax** *brynnagh* ‘flattering, comely’ is from JW, found alongside **brən’ərax** *brynnerragh* ‘act of flattering’ (ScG. *brionnal*, *brionnalachd*), while **l’i^dnən** *lieenyn* ‘nets’ (G. *líon*) is from NM, who has **l’i^dn’**, **l’i.^dn**, **l’i:^dn** in the singular. A further instance is **d’zə^dnax** *joanagh* ‘dusty’ (G. *deann*) (JW), cf. *joan* ‘dust’ **d’zə^dn** (JW) (*HLSM* II: 238).

Broderick suggests that the preoccluded sonorants are probably to be analysed as allophones in free variation with their non-preoccluded equivalents:

It is my view that [...] though in a given set of circumstances preocclusion can take place, nevertheless reflexes containing no preocclusion (in most cases) also occur, thus indicating that preocclusion plays no role whatever in the context of meaning and import. That is to say, that the preocclusive forms [bm], [dn], [gn], [dl] are special realizations of the corresponding phonemes (/m/, /n/ /N/, /l/), and in this regard I would view preocclusion in LSM as having allophonic rather than phonemic status.

(*HLSM* III: 31)

Williams (1994b: 714) comes to the same conclusion. However, Broderick also claims there is some evidence of incipient separation, including syllabification, and thus phonologization of the preocclusive stop:

it may be noticed that in his phonetic corpus of LSM Marstrander sometimes renders the preocclusive dental as a spirant, viz. /[ð]n/, which suggests that it was becoming separated from its homorganic nasal and the whole unit was developing into [ðən], as in [bɛ:ðən] ‘boats’ [*baatyn*, ScG. *bàtaichean*]. Indeed he sometimes writes as if the unit had already developed a centralized vowel, e.g. (without spirantization of the dental) [jɛdən] ‘that’, usu. [jɛn] [*shen*, G. *sin*]. That is to say, that the dental was now being released orally instead of nasally, i.e. as a separate segment. In other words a process of phonemicization was taking (or had taken) place.

(*HLSM* III: 31–2)

Broderick (*HLSM* III: 32–4) uses a comparison with English syllabic nasals in e.g. ‘button’ [bʌtɪŋ] and evidence from verse to argue that a monosyllable containing

preocclusion can be considered bisyllabic, although it is not clear why it cannot be considered one long syllable in the terms employed.

The vowel in [ʃedn] is short, and bearing in mind that in Manx a long syllable has the value of two short syllables, the short syllable here is, therefore, made up by the preocclusive element plus the nasal plosion. We can see the same in [dʒidn] ‘eager’ [...] which occupies a position of stress and therefore (in metrical terms) can have a long or two short syllables. In this instance the vowel is short, indicating that two short syllables are required to make up the quantity. The short vowel contributes to the first short syllable; the second is therefore made up by the preocclusive element plus the nasal plosive. That is to say, that (in Manx verse terms at any rate) preocclusion renders an additional syllable to the word (here a stressed monosyllable) so affected. [...] It is my view that the

same applies in ordinary speech, i.e. that preocclusion renders a (stressed) monosyllable [*sic*] disyllabic, and a disyllable trisyllabic.

(*HLSM* III: 33–4)

This argument does not seem to stand up to scrutiny. Even if some kind of exaggerated articulation were found in verse which could be interpreted, perceptually at least, as suggestive of an additional syllable (for which Broderick does not present evidence, although see the written data, §4.5.3), there is no reason to think this would be relevant to ‘ordinary speech’ where preocclusion seems in fact to have been fairly faint on the whole, and often absent or only barely perceptible. The English syllabic sonorants do not seem pertinent to the discussion, given the optional presence of a vowel [ə] as Broderick himself notes (*HLSM* III: 32), and the fact that words such as ‘button’ count without doubt as bisyllabic in all circumstances.

Broderick (*HLSM* I: 162–3) also comments on dialect differences in preocclusion:

An intrusive *d* can also appear before final *-l*, and a *g* before final *-ng*. These features seem to be peculiar to the South.²⁶⁹

(*HLSM* I: 162)

²⁶⁹ Broderick gives an exception *loʷŋ* from TC, but explains this by noting ‘[h]is father came from Lonan (ie. on the southside) from whom he likely inherited any southern forms in his speech’ (*HLSM* I: 162). Another counter-example is *kʰiʷl* (W:N) *keeill* ‘church’ (G. *cill*) (*HLSM* II: 245).

The intrusive *b* [before *m*] is common to both areas, but from the limited evidence available it seems to be more absent in the South.

(*HLSM* I: 163)

It has been noticed that there is significant variation and disagreement between the descriptions of Manx preocclusion in previous scholarship. The following claims have been made, and shown here to be inaccurate or incomplete:

- some descriptions do not note preocclusion with laterals (Rhÿs, Strachan, Jackson)
- preocclusion is claimed to be restricted to certain dialects (Wagner)
- preocclusion is claimed to be syllabic (Broderick)

In part at least these discrepancies between descriptions likely reflect the relative lack of salience of non-contrastive preocclusion, which has been noted in a cross-linguistic context:

Butcher and Loakes (2008) note that non-contrastive pre-stopped realizations are difficult to perceive auditorily, even by field researchers experienced in working with the languages in question. Our research anecdotally supports this observation. Members of our research team found non-contrastive lateral pre-stopping in Kaytetye difficult to perceive, but perceiving contrastive nasal pre-stopping was unproblematic.

(Harvey et al. 2015: 246)

It is likely that Manx preocclusion has always been non-contrastive inasmuch as even when it was restricted to stressed final fortis sonorants (§4.5.5), it would not have been the only, nor necessarily the primary, cue for the contrasts, which also involved differences of place and manner of articulation, and length.

4.5.3 Written evidence

A notable feature of Manx preocclusion is the lack of written evidence for it. Even though it was certainly prevalent throughout the island by the early nineteenth century at the latest, going on the evidence of Rhÿs and Strachan, and quite possibly centuries earlier than this, it is never represented in either of the two main orthographies, and is

rare in texts with non-standard orthographies. It is, however, indicated in certain nineteenth-century folksong manuscripts in non-standard orthographies.

Indication of preocclusion is especially prevalent in a song manuscript Manx National Heritage Library MD 900 MS 08307, edited by Broderick (2015). This manuscript is of uncertain provenance, but was most likely compiled between 1830 and 1840 (Broderick 1984a: 157). Preocclusion is represented in the manuscript as <dn>, <dyn>, <din>, <bm>, <bym>. There are at least²⁷⁰ 81 instances of indicated preocclusion in the text of MS 08307. There are also many occurrences of eligible items with no indication of preocclusion (e.g. *dhoan*, *dhon*, *woan*, *woan*, *aun* ‘brown’, G. *donn*, alongside *odn*, *woadn*, *woadyn*), and there are no cases of representation of preocclusion with the velar nasals or laterals.

Table 69. Representation of preocclusion in MNHL MD 900 MS 08307 (ed. Broderick 2015)

spelling in MS	CM orthography	etymology	English	no. of occurrences
kiodn, kiodyn	kione	ceann	head, end	7
koodn, ?choadyn	coon	cumhang	narrow	2
skoadn	s’goan, s’coan	is gann	hardly	1
creedn	creen	críon	ripe, withered	1
seidn, seidyn	shegin	is éigean	must	5
lhedn, laydn	lane	lán	full, many	2
frowdn	frown		frown	1
dhowdn	dowin	domhain	deep	1
vlowdn	blieaun	bleaghan	milking	1
odn, woadn, woadyn	dhoan, dhone	donn	brown	3
foadn	foyn (K.), foain (Cr.) ²⁷¹	fonn	sward, ground	1
voadn	boyn	bonn	heel	1
skidn, skydyn	skynn	scian	knife	1
speidn	spain	ScG. spàin	spoon	1

²⁷⁰ In a few cases the sense of the passage is unclear and so the reading of the word is not entirely certain; these are indicated with a question mark in the table below. A handful of other possible instances were so uncertain that they were omitted entirely.

²⁷¹ Moore (1896: 70–1) interprets this as *foaidyn* ‘sods’, but the metre clearly requires a monosyllable with preocclusion, rhyming with *boyn* ‘heel’, and it is probably to be equated with Kelly’s *foyn* ‘the grass or ground underfoot, earth’s mantle or covering’, Cregeen’s *foain* ‘the sward, the green grassy surface of the earth or ground; fo-ain, (under us)’, which is evidently G. *fonn* ‘base, foundation, soil, ground, land, territory’ (cf. Ó Dónaill, Dinneen, *eDIL*). Kelly’s spelling is probably more accurate; Cregeen’s <i> is unlikely to represent palatalization here, but rather reflects his predilection for inserting unwarranted <i> (§1.6.5), and in this case he is probably influenced by his proposed etymology, and perhaps the preceding entry *foaid* ‘sod’ (G. *fó(i)d*). The stanza does not occur in the version of the song given in Broderick (1980–2: 11–3) from the Clucas Collection. In John Nelson’s reading of Moore’s version he pronounces singular *foaid* ‘sod’ [fo:d] (Trebitsch and Remmer 2003: disc 2, track 19).

yoadn	joan	deann	dust	1
Jeleidn, Jeleidyn	Jelhein	Dia Luain	Monday	2
lhoodyn, lodyn, glodyn	glione	gleann	valley, glen	2
keedyn, keadyn, keeadyn, keedyn, keddyn	keayn	cuan	sea	11
peidyn	pian	pian	pain	1
shidyn	sheiltyn, shein	saoiltin	think	1
greedyn	green		green	1
bleadyn, vleadyn	blein	bliadhain	year	4
theidyn, huidin	thoin	tó(i)n	bottom	2
veadyn	mean	meadhón	middle	1
feedyn	feeyn	fíon	wine	2
pleadyn	plain		plain	1
ghloadyn, chloadyn, chloodyn, chloadyn, cloadyn	cloan	clann	children	5
headyn, peedyn	hene, pene	féin	self	1
lheedyn	lieen	líon	linen	1
voadyn	moain	móin	turf, peat	1
veedyn	?mee(i)n	mín	tender	1
vowdyn	?bouin	boghainn	waist	1
chodyn	chionn	teann	fast, tight	1
yeeadyn	eayin	uain	lambs	1
streidyn	stroin	sró(i)n	nose	1
roadyn	raun	rón	seal	1
leadyn	?lhean	leathan	wide	1
reidyn	?rheynn	roinn	divide	1
lhedyn	y Lhane	*lán < Norse lón	the Lhen ²⁷²	1
graibm	greme	greim	bite, morsel; grasp, grip	1
dreebm, gheebm	dreeym	druim	back	2
gaibm	eam	éigheamh	call	1
leabm, leabym	lheim	léim	jump, leap	2
roabym	roym	romham	before me	1

It is noteworthy that almost all instances of indicated preocclusion in this text are in stressed final syllables with a synchronically long²⁷³ vowel or diphthong — whether from an original long vowel or diphthong, as *lane* /lɛ:n/ (G. *lán*), fricative vocalization, as *lhean* /lʰie:n/ (G. *leathan*), *blieaun* /blʰiəunʲ/ (G. *bleaghan*), or original short vowel + fortis sonorant, as *kione* S /kʲo:n/, N /kʲaun/ (G. *ceann*). The only possible exceptions to this are *skynn* /skʲin/ ‘knife’, which seems to have a short vowel in Manx, although it has a diphthong *scian* in other Gaelic varieties (originally bisyllabic *sciän*, *eDIL*; cf.

²⁷² Brook forming the boundary between the parishes of Jurby and Andreas (cf. Rhÿs: 143); for etymology see *PNIM* (III: 146) and Marstrander (231–4).

²⁷³ I.e. underlyingly long; disregarding optional vowel shortening which is a result of preocclusion itself, and assumed to be non-categorical.

ScG. dat. *sgithinn*), and one or two items with original fortis sonorants which can have short vowels in Classical and Late Manx (e.g. *chionn* S /tʃon/, N /tʃaun/, G. *teann*). There are no cases of indicated preocclusion with a short vowel + historically lenis sonorant, such as *ben* ‘woman’ (G. *bean*), although this item appears frequently in the text. The implications of this will be discussed below (§§4.5.4.3, 4.5.5.2).

Preocclusion is also sometimes indicated in songs transcribed by John Clague (1842–1908), and edited by Gilchrist (1925) and Broderick (2018e). Examples include *hedyn* for *henn* ‘old’ (G. *sean*) (Broderick 2018e: 32), *a rowdle* for *er-rouyl* ‘mad, keen’ (etymology uncertain) (ibid: 38), *kiddlyn* for *?keayn* ‘sea’ (G. *cuan*) (Gilchrist 1925: 213), *cheady[n]* for *keayn* (ibid.: 214), *sheedyn* for *sheean* ‘noise’ (G. *sian*) (ibid.: 214). Broderick (2018e: 32) argues that spellings such as *hedyn* provide evidence for a bisyllabic realization of preocclusion:

Originally monosyllabic, preocclusion developed into a disyllable during the course of the 19th-century. This particular example was seemingly heard by Clague as disyllabic. [...] Clague evidently did not know much, or any, Manx at all when he first started collecting material (a point also noted by Gilchrist [1925]: ix), and so took down the text as he heard it.

(Broderick 2018e: 32)

In later texts by which time his knowledge of Manx has increased, representation of preocclusion is not in evidence in Clague’s texts, and the orthography is closer to the standard. Gilchrist (1925: ix–x) comments explicitly on preocclusion in the Clague collection, and in addition to noting its status as a native development of Manx, remarks on its appearance in the singing of ‘old sailors of English nationality’:

One point, however, may be noted. Prof. Strachan [1897: 55] speaks of a “d” sound some-times heard before final “n” of a word, as in “chea(d)yn”=sea. I am informed that “b” is sometimes similarly heard before “m,” as in “Tho(b)m=Tom. The same peculiarity used to be found in the singing of old sailors of English nationality. Captain Whall [1913: 43] calls it a “regulation pronunciation which has quite gone out.” He gives a verse of “The Female Smuggler” to illustrate it, which begins: “O come list a-whidle *adnd* you soodn shadll hear,” and in this instance of intruded sounds it should be noticed that they are not necessitated by any extra syllabic notes in the tune. W. Clark Russell gives similar examples of this sailor mannerism in singing.

(Gilchrist 1925: ix–x, original italics)

Although spellings such as *hedyn*, *kiodyn* etc. in these manuscripts could be taken to suggest a syllabic pronunciation with an intervening schwa, or else a syllabic sonorant as in Broderick's example of English 'button' (above), it is also possible that any perception of syllabicity comes from the perspective of English itself. We know that Clague at least was not a native speaker of Manx and may have only had a limited command of the language when he began collecting folksongs. It is unclear who wrote MS 08307, but this collector may have been from a similar background — at any rate the orthography employed might suggest an unfamiliarity with conventional Manx literacy. It should be noted that if preocclusion were indeed full syllabified, such that the preocclusive stops were analysed as intervocalic stop segments, we might expect indication in MS 08307 of secondary lenition with originally preocclusive stops. With original intervocalic stops we find e.g. *ovvyr* [ovər̥i, oβər̥i] for *obbyr* 'work' (G. *obair*), *bathyn* [bɛ:ðən] for *baatyn* 'boats', (ScG. *bàtaichean*). However, we do not find e.g. **leavym* for *leabym* (*lheim* 'jump', G. *léim*) (however, cf. Broderick's comments on Marstrander's transcriptions, §4.5.2). That preocclusion was especially exaggerated in singing for metrical reasons, such that it might be perceived as syllabic, is also possible, but given the complete lack of recordings of Manx traditional singing we can only speculate on this. There certainly seems to be no evidence of this in ordinary speech, and so little basis for Broderick's claims regarding syllabicity.

So far as is known, there are no cases of indication of preocclusion in the often highly non-standard orthographies of the carval manuscripts and the writings of Edward Faragher. This may be evidence that preocclusion was not particularly salient to native Manx speakers.

4.5.4 The origins of Manx preocclusion: previous hypotheses

Four hypotheses have been proposed by scholars for the origins of Manx preocclusion. Other commentaries are purely synchronically descriptive (§4.5.2) and do not deal extensively with questions of diachronic development.

4.5.4.1 Rhÿs (1894)

Rhÿs (142–3) (see above §4.5.2 for full quotation) suggests that preocclusion began as a reflex of geminate sonorants (i.e. [mm] > [ʍm] > [ʰm]), and later spread to the items with original lenis sonorants. He remarks that it can be understood as a further development of realizations more widespread in Gaelic dialects (Rhÿs: 143–4):

if one might venture to relegate to a second place the extreme form of the Manx modification [i.e. with preocclusion], treating it as a development of the stage represented by *trōʍm* [tr̥roum], for example, in the case of *trome*, one would find that it ranges itself with a dialectic peculiarity of the Gaelic of the South of Ireland. Thus *trōʍm* is the pronunciation actually current not only in Manx but also in a great part of the South of Ireland.

(Rhÿs: 143–4)

It is argued below (§4.5.5) that Rhÿs's analysis is substantially correct.

4.5.4.2 Chaudhri (2007)

In his thesis on Cornish historical phonology, Chaudhri (2007: 39–44) includes a discussion of Manx preocclusion as a point of comparison with the analogous development in Cornish. He notes that, unlike in Cornish, Manx preocclusion does not occur in medial position (but see §4.5.4.3), and affects both original short and long sonorants. He suggests that the length contrast in the sonorants had already disappeared by the time of preocclusion in Manx:

The reason given by Jackson [113–5] that pre-occlusion in Manx does not occur in non-final stressed syllables is that the affected consonant must be in absolute final position in the word. This may be because Manx, unlike Cornish, did not retain the phonemic oppositions /nn/–/n/, /mm/–/m/ by the time of pre-occlusion (whether or not this had earlier been the case) and the appearance of the long varieties of /n/ [nn] and /m/ [mm] was determined only by final position in a stressed syllable.

(Chaudhri 2007: 39–40)

The crucial difference is that Cornish must have retained the long phonemes /nn/ and /mm/ at least until the time of pre-occlusion. It did not therefore rely upon a process of gemination based on position. The parallel of Manx and Cornish pre-occlusion is by no means a direct one.

(Chaudhri 2007: 44)

Chaudhri thus posits a new gemination in Manx by which all stressed final nasal and lateral sonorants (all at this point short, whether or not they had earlier been geminate or non-geminate) were lengthened (i.e. (re-)geminated), as a precursor to preocclusion. With regard to *eeym* ‘butter’ (G. *im*) and *kione* ‘head’ (G. *ceann*), Chaudhri (2007: 40) comments that the relationship between preocclusion and vowel lengthening is not clear:

It is not clear whether this lengthening of the vowel is associated with pre-occlusion in this word or, if not, which change came first.

(Chaudhri 2007: 40)

In the case of words containing an original short vowel, it seems most likely that any lengthening of the vowel occurred earlier than pre-occlusion.

(Chaudhri 2007: 42)

Chaudhri (2007: 43) considers that preocclusion in Manx is determined only by position and has nothing to do with the quality (fortis or lenis; tenseness in Chaudhri’s terminology) of the sonorant.

In any case, pre-occlusion in Manx happened in words containing an original short vowel irrespective of whether the consonant was originally single or double. It happened equally in words containing an original long vowel. Whether or not a long vowel was originally long or short, it seems that there may possibly have been a tendency to shorten long vowels to compensate for the increasing tenseness of the following consonant, as Jackson suggested. Rhÿs considered that pre-occlusion occurred first after short vowels and later spread to syllables containing long ones; this appears to fit with his and Jackson’s hypothesis well [...]

The logical consequence of these observations is that pre-occlusion in Manx had no phonemic motivation but was instead determined only by word final position in a stressed syllable. This seems to be a good explanation for its comparatively wider operation, although it does not entirely explain why the additional changes /l/ [l] > [dl] and /ŋ/ [ŋ] > [gŋ] occurred only in Manx. It may

have served to emphasise the long nature of a syllable where the inherited vowels tended to be shortened, although the evidence is equivocal.

(Chaudhri 2007: 43)

Chaudhri's invocation of Rhÿs overlooks the fact that the latter explicitly links the genesis of preocclusion with original fortis sonorants (see §4.5.4.1).

Chaudhri (2007: 55) argues that stressed position in itself favours the development of preocclusion. Although the following comment is made in relation to Cornish, combined with the above remarks on Manx we may infer that Chaudhri thinks stressed position in and of itself is sufficient to motivate preocclusion in Manx, given that he supposes that, unlike in Cornish, there was no longer any fortis-lenis, tense-lax or geminate-non-geminate contrast in Manx at the time of the development of preocclusion:

It is reasonable to suppose on a general basis that phonemes are articulated with additional tenseness in a stressed syllable and moreover that they may receive heavier articulation when the vocalic element of the syllable is relatively short and the consonantal element is relatively long. This is a good description of the environment in which pre-occlusion is in fact observed.

(Chaudhri 2007: 55)

As discussed above, Chaudhri's (2007: 42) suggestion that '[i]n the case of words containing an original short vowel, it seems most likely that any lengthening of the vowel occurred earlier than pre-occlusion' seems to imply an earlier stage characterized by loss of gemination and lengthening of the short vowel, presumably by compensatory lengthening, followed by new gemination and subsequent preocclusion. This seems to be based on an overly simplistic view of compensatory lengthening / diphthongization and preocclusion as binary alternatives. It is possible that preocclusion and vocalic lengthening / diphthongization arose more or less simultaneously; it is normal that multiple cues for a phonological contrast should exist side by side, and that diachronic changes should involve gradual shifts in the prominence of different cues. Even in the most conservative Gaelic dialects which retain long sonorants, the vowel may be somewhat lengthened also, as noted by Jones (2010: 61) in Jura Gaelic:

The consonants /L/, /lʲ/, /N/, /nʲ/ and /R/ are given by Holmer (1938: 68) as occurring in lengthened form, represented orthographically by doubling. Holmer gives such words as *ceann*, *mall* and *barrachd* with these consonants denoted as long and the vowel immediately preceding them short. He contrasts this with the forms familiar in northern dialects where the consonant is short with the preceding vowel undergoing diphthongisation. In the data I have gathered there does in fact appear to be some lengthening of the vowel preceding the ‘doubled’ forms of /L/, /lʲ/, /N/, /nʲ/ and /m/ where this occurs in a monosyllable or in the stressed syllable of a polysyllabic word where the /L/, /lʲ/, /N/, /nʲ/ or /m/ forms a homorganic cluster with a following consonant as, for example in *beanntan* [bʲiːnːd̪ən] (‘mountains’). The syllable is long with partial lengthening of the vowel and lengthening of the consonant as well. I mark this phonetically as a half long vowel followed by a half long consonant.

(Jones 2010: 61)

As noted by Jones (2010: 62), this is implicit in the medieval Gaelic grammarians’ concept of ‘middle quantity’ (*síneadh meadhónach*) (Greene 1952), and the occasional marking of vowel length in such items as far back as the Old Irish period (*GOI*: 32):

Original short vowels are sometimes marked long when followed in the same syllable by unlenited *m*, *l*, *n*, *r* [...]. Accordingly they must have at least sounded longer than the normal short vowel. Most, though not all, of them are long in the modern dialects also.

(*GOI*: 32)

The examples given [in *GOI*] are of the type *ránn*, *tróm*, *báll*, [...]. Now all these [...] still have a short vowel in many of the modern dialects, e.g. Donegal, where the usual treatment is short vowel plus long consonant. That is what the traditional spelling points to and the type from which the forms found in the other dialects [...] are logical developments. There is of course no reason to believe that the vowels of these syllables sounded longer than the normal short vowels; it was the syllable itself which was half-long and therefore occasionally marked long. The syllable *ferr* was felt to be longer than *fer*, but not as long as *fér*.

(Greene 1952: 212–3)

If vowel and consonant length can co-exist simultaneously, and preocclusion is a development of the latter, then there is no obstacle to the initial restriction of preocclusion to long sonorants (and sonorant clusters). Chaudhri does accept that preocclusion may have spread from one environment to another (*ibid.*: 43), namely

‘pre-occlusion occurred first after short vowels and later spread to syllables containing long ones’.

In explaining why preocclusion does not occur medially, Chaudhri suggests that Manx ‘did not retain the phonemic oppositions /nn/–/n/, /mm/–/m/ by the time of pre-occlusion’ (since otherwise we might expect medial G. *-nn-* etc. to give medial [dn] as in Cornish). However, it is quite unremarkable for the fortis sonorants to develop differently in medial and final position in Gaelic dialects. In Manx itself there is typically lengthening or diphthongization, and sometimes modification of quality (rounding) before coda fortis sonorants (e.g. G. *ceann* ‘head’ > Manx *kione* /kʲo:n/, /kʲaʉn/, phonetically [kʲo(:)ᵈn], [kʲaʉᵈn]), but before medial fortis sonorants there is only modification of quality (e.g. G. *ceannach* ‘buy’ > Manx *kionnagh* /kʲionax/). In Gaelic dialects in general we can identify at least four stages, from the most conservative to the most innovative:

(1) Geminate sonorants retained both medially and finally, with no categorical vowel lengthening. Donegal dialects (Quiggin 1906: 77–8, 122; Wagner 1959: 17–26; Henderson 1974: 139–44), e.g. **kʲan:ɪ** *ceannuighthe* ‘bought’ (*LASID* IV: 143, point 83).

(2) Geminate sonorants retained finally but shortened medially, with no categorical vowel lengthening or diphthongization. Southern Scottish dialects (Holmer 1957: 87;²⁷⁴ Holmer 1962a: 21–4, 27–30; Ó Murchú 1989a: 107–10; Jones 2010: 62–3, 74–5), e.g. *ceann* ‘head’ **kʲɛnʲ**, *ceannaich* ‘buy’ **kʲɛʲnʲiç** (*SGDS* II: 326, 336, point 53, Islay).²⁷⁵

²⁷⁴ Holmer’s (1957: 87) descriptions of Arran Gaelic seem to suggest optional retention of intervocalic fortis sonorant length, perhaps with morphological conditioning.

²⁷⁵ Holmer (1938: 81) tentatively suggests that medial *nn* may be lengthened in Islay as transcribes it and *ll* as such, e.g. **ə-nɔ:l:ʲikj** *Nollaig* ‘Christmas’, **kʲjɛn:iç** *ceannaich* ‘buy’ (ibid.: 137, 197). Jones (2010: 74) casts some doubt on Holmer’s descriptions, and gives forms such as **kʲaʲniç** *ceannaich*. One wonders whether Holmer perceived sequences [ʲN] as a long sonorant; in my experience glottalization is often quite weak in Islay Gaelic. On the other hand, Ó Maolalaigh (2014b: 12) suggests that ‘Holmer’s description reflects the speech of older conservative speakers and that he ignored or failed to hear glottalisation in the speech of other speakers’. In general, Holmer’s discussion of this topic seems somewhat confused; so he claims that ‘[i]n Islay, Gigha, and certain parts of Skye, no difference is heard between the lenited and non-lenited n-sounds’. For what may be regarded as an intermediate stage

(3) Geminate sonorants shortened in all positions but (all or some) fortis-lenis contrasts retained through place of articulation (dental v. alveolar) and secondary articulation (velarization, palatalization); there may be vowel lengthening or diphthongization before coda fortis sonorants. Connacht (de Bhaldraithe 1945: 106–11; de Búrca 1958: 131–3; Mhac an Fhailigh 1968: 160–3; Ó Curnáin 2007: 210–22, 234–7), Clare (Holmer 1962b: 38–42, 55–6), northern Scottish dialects (Borgstrøm 1937: 90–95, 111–19; 1940: 38–46, 65–72, 142–8, 159–65; 1941: 24–29, 35–41, 77–82, 95–99; Oftedal 1956: 87–93, 120–29).

(4) Geminate sonorants shortened in all positions, fortis-lenis contrast in sonorants entirely lost; there may be vowel lengthening or diphthongization before original coda fortis sonorants.²⁷⁶ Most of Munster (Ó Cuív 1944: 119–22; Breatnach 1947: 140–3; Ó Sé 2000: 17–18), Late Manx.

These developments may be represented schematically as follows:²⁷⁷

	(1)	(2)	(3)	(4)
<i>ceannach</i>	/kʲaN:ax/	/kʲaNax/	/kʲaNax/	/kʲanax/
<i>ceann</i>	/kʲaN:/	/kʲaN:/	/kʲəuN/	/kʲəuN/

It is quite plausible that Manx was at stage (2) at the point when preocclusion first developed, and that original fortis sonorants were still geminate at this point (contrary to Chaudhri's claim) and thus liable to be affected by the initial development of preocclusion, whereas medial fortis sonorants had already been shortened, and so were unaffected by preocclusion, unlike in Cornish.

between (2) and (3) in the Gaelic of Colonsay (situated between the southern area typified by Islay and the more northerly dialect area typified by diphthongization in items like *ceann*), see Scouller (2017: 76).

²⁷⁶ Except for /ŋj/ as a reflex of /Nj/, see above.

²⁷⁷ The details are somewhat simplified, especially as regards vowel quality.

4.5.4.3 Ó Maolalaigh (2014b)

Ó Maolalaigh (2014b) briefly considers Manx preocclusion in a paper on ‘glottal and related features’ in the Gaelic languages. In unpublished lecture notes, he tentatively suggests that preocclusion resembles the phenomena of glottalization, h-insertion, devoicing and gemination in other dialects. He notes that Manx preocclusion can shorten a preceding long vowel, and proposes that ‘preocclusion following long vowels may be a secondary development’, implying that preocclusion began in stressed monosyllables with original short vowels.

It seems that pre-occlusion has the affect of shortening a preceding long vowel, which is reminiscent of the shortening of vowels before geminates in Donegal Irish. The development of pre-occlusion following long vowels may be a secondary development.

[...]

My suggestion is that pre-occlusion in Manx may be yet another reflex of glottalisation in the Gaelic languages.

Phonetically speaking, the preglottalisation of sonorants is similar to pre-occluded sonorants or prestopped sonorants in the occlusion or closing of the oral cavity. They are acoustically very similar, it seems to me.

(Ó Maolalaigh 2014b: 22–3)

Wagner (1956: 109) similarly saw the origins of preocclusion in glottalization:

The occlusive element of the sonores (**n**), as well as the pre-aspiration of the tenues must arise from a glottal stop.

(Wagner 1956: 109)

Ó Maolalaigh (2014b: 23) lays considerably weight on the two examples of medial preocclusion from *HLSM* cited above (*brynnagh* and *lieenyn*) (§4.5.2), suggesting that ‘[p]erhaps it was once more common intervocalically but has been lost’, without, however, suggesting a mechanism or motivation for this loss, or for its retention in these items.

The environments in which pre-occlusion occurs is [*sic*] very similar to that of glottalisation and gemination in ScG and Irish, i.e. it occurs in word final position and intervocalically following a short vowel. Unfortunately, I have only two examples of this in intervocalic position. Perhaps it was once more common intervocalically but has been lost.

(Ó Maolalaigh 2014b: 23)

It appears to be implicit in the following discussion from Ó Maolalaigh's (2014b: 24) conclusion that he considers the environment of short vowel + lenis ('light') sonorant to be the prototypical environment for preocclusion, from which it subsequently spread to other environments (short vowel + fortis sonorant, long vowel + lenis sonorant):

The joint evidence from Holmer and Wagner suggest that glottalisation may have occurred originally only with the light single sonorants.

The absence of glottalisation with tense sonorants originally, can be related to the fact that glottalisation is not associated with heavy syllables. We have seen that in the case of syllables with long vowels and epenthetic or svarabhaktic environments. We can extend that to syllables containing geminate tense double sonorants too, although there seems to have been fluctuation between tense geminates and tense non-geminates in intervocalic position.

Given the presence of glottalisation with heavy sonorants nowadays in ScG, it seems that gemination spread to these once they were reduced to non-geminate consonants. Perhaps the spread of glottalisation itself was a catalyst in the reduction of long tense sonorants – just as we have seen in the case of the shortening of stressed long vowels before geminate and pre-occlusive stops.

The most conducive environment for glottalisation, gemination and pre-occlusion is a preceding short vowel. Indeed, we have seen that gemination in Irish and pre-occlusion in Manx can have the effect of shortening preceding long vowels.

(Ó Maolalaigh 2014b: 24)

Ó Maolalaigh (2014b: 27) further presents the following reconstruction of preocclusion as a later stage in a series of developments of glottalization. This reconstruction is predicated on the same (possibly unsound) assumption made by Chaudhri that degemination in e.g. *cam*, *cill* occurred prior to the development of preocclusion (§4.5.4.2).

(5) Glottalisation of stops may result in pre-occlusion:

cam **kamm** > **kam** > **k'a^hm**, *cill* **kjilj**: > **kjilj** > **kjil**

(Ó Maolalaigh 2014b: 27)

Ó Maolalaigh's hypothesis that Manx preocclusion developed out of glottalization in similar environments to those found with the latter phenomenon in southern Scottish Gaelic dialects supposes that it was originally prevalent word medially. However, there is no evidence for this.

As Ó Maolalaigh notes, only two possible cases of medial preocclusion occur in *HLSM* (II: 49, 277, III: 29). NM's plural **l'i^hnən** *lieenyn* 'nets' (G. *líon*) may be influenced by preocclusion in the singular, or indeed by the /nt/ cluster of the historical irregular plural *lieenteenyn* (Bible, Cregeen); similarly JW's *joanagh* **d'zə^hnəx** 'dusty' probably reflects the monosyllabic stem *joan*. JW's **brəd'n'əx** 'flattering, comely' and **brən'ərəx** 'act of flattering' (the latter without preocclusion, it should be noted) are anomalous in other ways, as palatalization is not expected here (if the etymology *brionnal* is correct). It seems more likely that medial preocclusion here is a speech error (perhaps influenced by a semantically related item such as *taitnyssagh* 'pleasant', medial /t^hni/?), than that medial preocclusion was once widespread before its unmotivated loss. Indeed, if preocclusion ever had developed medially after short vowels, there would be motivation for retaining it in the interests of increased syllable weight, as with glottalization and gemination etc. in other dialects. In addition, medial preocclusion would be expected to be more prone to being reanalysed as medial clusters /d.n/ etc., with syllable boundary, given the pre-existing phonotactics of the language; in which case they would be unlikely to subsequently disappear.

As mentioned above, Ó Maolalaigh's (2014b: 27) reconstruction of the development of preocclusion with original fortis sonorants apparently suggests loss of gemination prior to the development of preocclusion. As discussed above in relation to Chaudhri's hypothesis, there is no reason to suppose this, and it will be argued that there is good typological reason rather to suppose that preocclusion developed from original final geminate sonorants (§4.5.5). The development of an oral stop from a glottal segment (buccalization), on the other hand, is reported to be typologically very rare (Trask 1995; La Voie 1996: 304; Hall 2009: 150–1).

If the evidence of MNHL MD 900 MS 08307 discussed above (§4.5.3), is taken to suggest that preocclusion, after developing in final geminate sonorants, spread first to long vowel + lenis sonorants, and only subsequently to short vowels + lenis sonorants (see §4.5.5.2), then the environments in which preocclusion originates and is initially favoured are quite the opposite of those in which glottalization and the other features discussed by Ó Maolalaigh (2014b: 14, 27) are most prevalent. Nevertheless, it may be argued that preocclusion ended up serving prosodic ends similar to those of glottalization and related phenomena (§4.5.5).

4.5.4.4 Broderick (2018e)

Similarly to Rhÿs (§4.5.4.1), Broderick (2018e: 13) in a brief comment suggests that preocclusion began with the original fortis sonorants, although he does not mention a link with the length of the original (geminate) fortis sonorants.

Preocclusion became quite prevalent in L[ate] M[anx] whereby original fortis /L/, /N/, /M/, /D/, in losing their fortis quality, would be preceded by the corresponding stop, viz. /dl/, /dn/, /bm/, /gn/ to differentiate them from their lenis counterparts.

(Broderick 2018e: 32)

It seems more likely that the development of preocclusion precedes the loss of the fortis-lenis contrasts (§4.5.5), rather than compensating for it as suggested by Broderick.

4.5.5 The origin and spread of preocclusion

4.5.5.1 Typological and phonetic considerations

Given the typological comparisons with other northern European languages mentioned above (§4.5.1.1), it seems that the most likely origin for preocclusion in Manx would be, as Rhÿs supposed, as a development of the original long sonorants /m:/, /N:/, /Nj:/, /ŋ:/, /ŋj:/, /L:/, /Lj:/ and the clusters /RN/, /RNj/, /RL/, /RLj/.

As far as the nasals are concerned, the initial phonetic cause of preocclusion would be misalignment between oral closure and opening of the velum, resulting in an interval where the oral occlusion has been made but the velum is still closed. The longer the sonorant is, the more time there is for this to occur and be perceived and conventionalized. In languages which have long nasal sonorants but without consistent preocclusion, preocclusion may nevertheless occur sporadically.²⁷⁸

An intrusive oral stop is also phonetically natural in the rhotic + nasal/lateral clusters where there is a transition from a purely sonorant consonant with no coronal contact to a nasal stop or lateral with complete or partial coronal closure.²⁷⁹ From this perspective the development is perhaps less natural in the long laterals /L:/, L:/, as observed by Chaudhri (2007: 54):

The nasals [n] and [m] possess close oral counterparts [d] and [b], whereas the articulation of the lateral [l] is relatively further removed from that of [d] than is true of [n]. The exact phonetic realisation of /r/ and /rr/ in Middle Cornish may have been flapped [r], trilled or tapped [R] or retroflex [ɽ]. However, all of these sounds would be articulated even less closely to a plosive counterpart such as [d]. This may explain why /nn/ and /mm/ were inherently more likely to be pre-ploded as [ᵈn] and [ᵇm] than /ll/ and /rr/. It is likely that the further type of pre-occlusion [ll] > [ᵈl] occurred in Manx, but not in Cornish, because the phonetic motivation for these changes was sufficiently greater that the articulatory distance between [l] and [d] could be overcome.

(Chaudhri 2007: 54)

Marstrand (58) takes the difference between nasals and laterals in this regard as evidence against oral-velar misalignment as an explanation for the initial development, but his analysis confounds different periods of the development, and overlooks the possibility that preocclusion could spread analogically from *nm* and *rl* to *ll*:

Utviklingen synes ikke å ha noe med konsonantens kvantitet å gjøre. Den forklares heller ikke ved en forsinket åpning av ganeseilet, da den jo også foreligger ved *l*.

²⁷⁸ Pavel Iosad, personal communication, has noted this in Welsh *honni* 'claim'.

²⁷⁹ Compare the development of medial *nr* > *nᵈr*, *nᵈr* and *l* > *lᵈr*, *lᵈr* in Cois Fhairge Irish (de Bhaldraithe 1945: 36–7), and Manx *maynrey* 'happy' (G. *méanar*) /mɛ:nrə/ > [mɛ:ndrə] etc. (§4.2.5) (Rhŷs: 149; *HLSM* III: 18).

[The development does not seem to have to do with the quantity of the consonant. Nor is it explained by a delayed opening of the velum, since it also occurs with *l*.]

(Marstrander: 58)

The fact that preocclusion with laterals is not noticed by some scholars (see §4.5.2), and seems to be less prevalent in general with laterals than nasals, may be evidence that the development was not so well-established with laterals.

4.5.5.2 Generalization and reanalysis of preocclusion

From the long sonorants and sonorant clusters, preocclusion would have spread to original short or lenis sonorants, perhaps in association with the mergers between fortis and lenis sonorants which seem to have taken place between the seventeenth and nineteenth centuries (§§4.3, 5.4). Unfortunately, given that preocclusion is not found written until after this spread had already taken place, there can be no firm evidence for this supposition. However, the evidence of MNHL MD 900 MS 08307 may provide a clue. The fact that preocclusion is not found in items of the *ben* category (original short vowel + original lenis sonorant) in this manuscript may represent an intermediate stage, where preocclusion has spread to the *lane* (G. *lán*) category (original long vowel + original fortis) but not to the *ben* category.

Possibly preocclusion was reanalysed as a marker of long (i.e. bimoraic) or heavy syllables — that is, vowel length/diphthongality, sonorant length and preocclusion became interchangeable and co-existing markers of syllable weight. Compare Iosad (2016b: 13), who comments briefly that moraicity is ‘possibly’ associated with Manx preocclusion; and also Chaudhri’s (2007: 43) comment that preocclusion ‘may have served to emphasise the long nature of a syllable where the inherited vowels tended to be shortened’. From here, preocclusion would finally spread to the *ben* category. This final stage may have been encouraged by the analogy of the small number of monosyllables with original final long sonorants in which the vowel had not been lengthened, such as /ka^[b]m/ *cam* ‘bent’ (G. *cam*), /tʃi^[g]ŋi/ *ching* ‘sick’ (G. *tinn*) (§§4.6.1.3, 4.6.1.12), including those in which short vowels had been retained or

restored by paradigmatic analogy, such as /tʃo^[d]n/ *chionn* ‘tight, fast’ (G. *teann*) (§4.6.4), as well as anomalous items such as *skynn* ‘knife’ (G. *scian*) which may have had a long vowel or diphthong earlier (§4.5.3).

The pressure of a ‘bimoraic norm’ in Gaelic (cf. Iosad 2016b) may further motivate the development of /be^[d]n/ etc. Sporadic gemination of consonants after short vowels in Manx (*HLSM* III: 27–8), as in other Gaelic dialects, may be a further manifestation of this tendency (Ó Maolalaigh 2014b: 21). As shown in the spectrograms above (§4.5.1), preocclusion seems to be interchangeable with sonorant lengthening, and occasionally “postocclusion” (cf. Rhŷs’s comment cited above on *ooyl* ‘apple’, G. *ubhal*, ‘mostly **ūδλ** [u:^dλ] sometimes **úλδ** [u:^dλ]’, notebook 7: 176), and these can all be seen as realizations of the same synchronic phenomenon.

4.5.5.3 Preocclusion as a synchronic prosodic process

There is evidence that preocclusion in Late Manx is synchronically a prosodic process which is implemented after other processes. Hence it may be found in polysyllables with unstressed final syllables where these are optionally reduced to monosyllabic realizations via secondary lenition of medial fricatives, as in *jeeaghyn* ‘looking’ (G. *déachain*):

/dʒi:xən/ > [dʒi:xən], [dʒi:γən], [dʒi:ən], [dʒi:^dn]
d’zi^dn HB, SK, **d’zi^dn** JK, **d’zi:ən** JTK, **d’ziən** JK, NM, **d’ziγən**, **d’zi:g’ən**
 NM, **d’zi:γən** JW (*HLSM* II: 229–30)

This may apparently be lexicalized, as in *shegin da* ‘must’ (G. *is éigean do*), often spelled *sheign* in eighteenth- and nineteenth-century texts, for monosyllabic [ʃein^d], [ʃei^dn^j] etc:

sei^dn’ HK, **sai^dn** NM, **bai^dn** NM, **ʃein** TC, **ʃi:n** JK, **sain** JTK, EL, **seɿn** JW, **sein**
 EK_h, **böin** RC, **brain** [*sic*] W:S (*HLSM* II: 28, 395–6)

Compare *er-egin* ‘by force’ (G. *ar éigean*) with retention of the bisyllabic realization and no preocclusion: **er** ‘e:γən’ (HK), **er** ‘e:γən (JW) (*HLSM* II: 149).

Anomalous preocclusion in normally unstressed final syllables may be further evidence of preocclusion as a live synchronic prosodic process, as in *arran* ‘bread’ (G. *arán*) (*HLSM* II: 11), *cassan* ‘path’ (G. *cosán*) (Rhÿs notebook 6: 133). With *cassan* in particular (expected /'kasan/ ['kazan], ['kaðan]) it seems possible that the informant was deliberately stressing the final syllable to draw attention to the contrast (in vowel quality) with *cassyn* ‘feet’ (/'kasən/ ['kazən], ['kaðən]) in response to Rhÿs’s questioning:

Dawson says **tē bíu er y chāðyn** [te: biu er ə xa:ðən] he is swift on his feet: but he calls a foot **cās** [kas], and **cāsádn** [ka'sa:ðn] for a footpath.

(John Dawson, Rhÿs notebook 6: 133)

4.6 Vowel lengthening and diphthongization before coda fortis sonorants

4.6.1 In monosyllables

In certain short vowel + fortis sonorant combinations in stressed monosyllables, the vowel may be lengthened or diphthongized, as found also in southern Irish and northern Scottish dialects (O’Rahilly: 49–52) (cf. §4.5.4.2). The evidence of Phillips shows that these developments before *m*, *nm*, *ll* were only incipient in the early seventeenth century, but they are complete by the time of the eighteenth-century texts. In some combinations there is a clear dialectal split between southern monophthongal realizations and northern diphthongal realizations (§4.6.1.34). The development of long vowels before final *rr* is common to all Gaelic dialects (O’Rahilly: 50), and as far as is known no dialects preserve a long rhotic */R:/. The vowel /ɛ:/ in the Manx development of *-(e)arr* shows it to be of some antiquity (§2.1.3.1). Thus the following four developments must have taken place in the order shown:

- (1) /e/ *ea* > /a/ (§2.1.3)
- (2) /aR:/ > /a:R/
- (3) /a:/ > /ɛ:/ (§2.2.2)
- (4) /ah#/ > /a:#/

4.6.1.1 *-ionn* /iN/ > /in/, /u:n/Table 70. *-ionn*

	Phillips	CM pronunciation	etymology	English
er-giyn		/er ⁱ 'g ⁱ in/	iar gcionn	next, following
erskyn	erskyn (3), aerskyn, erskin, er an skyn-syn,m er an skynsyn, er anskyn, er an skinn, er-y-skyn, er y-skynn	/er ⁱ 'sk ⁱ in/	ós cionn ²⁸⁰	above
fynn (K.); fyn-ruy (Cr.); Fyn (NBHR: 169)			fionn; fionnruadh; Fionn	white; (<i>fyn-ruy</i>) 'having brown hair or fur' (Cr.); Finn (MacCool)
lhune		/l ⁱ u:n/	lionn, leann	beer

The short vowel in *erskyn* and *er-giyn* (G. *cionn*) may result from weak stress (cf. Ó Curnáin 2007: 211), although this would not be the case in the rare item *fynn*, also name *Fyn*; here high register and low frequency may explain the conservative realization.

4.6.1.2 *-im* /im/ > /i:m/Table 71. *-im*

	Phillips	CM pronunciation	etymology	English
eeym		/i:m/	im	butter

4.6.1.3 *-inn* /iN/ > /iŋ/ (/in/)

See §4.4.6. All items have retention of short /i/.

²⁸⁰ See Thomson 1981: 50.

4.6.1.4 *-ill* /iL/ > /i:l/, /il/Table 72. *-ill*

	Phillips	CM pronunciation	etymology	English
keeill	kíll (2), kill, kíll	/kʲi:l/	cill	church
m(h)ill		/mil/	mill, milleadh	spoil

4.6.1.5 *-eam* /em/ > /am/Table 73. *-eam*

	Phillips	CM pronunciation	etymology	English
fam		/fam/	feam	stem of seaweed

Compare *famlagh*, *famyragh* ‘seaweed’ (G. *feamnach*).

4.6.1.6 *-eim* /em⁰/ > /em/, /im/, /e:m/ (?)Table 74. *-eim*

	Phillips	CM pronunciation	etymology	English	HLSM
crem (Cr.), cremagh (adj.); cremeyder ‘fault-finder’		?/krem/	creim	sore, ailment	
greime (Bible, Cr.), greim (Bible, Cr., K.), greimm (Bible)	grým, grym̄, gryem, grëym	/grem/, /grim/ ?/gre:m/	greim	bite; hold, grasp; stitch (in side)	(n., vn.?) grim : NM, grim J:TL, grɛ:bm TT, gre^bm JK, (vn.) grimal NM, gri:mə TT, grīmə TC, grāmə HK, (pret.) grēm TC, grim TT, (part.) grīmət’ JW

From the spellings and *HLSM* realizations there appear to have been multiple by-forms of *greme* etc. with short and long vowels,²⁸¹ and their lectal and paradigmatic distribution is not entirely clear. It may be significant that in the Bible the spelling *ghreimm* (suggesting a short vowel?) is restricted to the stem of the verb *greimmey* ‘seize’, whereas the noun is spelt *greme*.²⁸²

Compare also certain items in G. *-éim*, where there appears to be longstanding interchange with *-eim(m)*; cf. *ḷem*, *ḷem'* etc. *leum* in south-western Argyll (*SGDS* IV: 246), and shortening in Teelin Irish *b'em' béim*, *k'em' céim*, *l'em' léim* etc. (Wagner 1959: 12).

Table 75. -éim

	Phillips	CM pronunciation	etymology	English	<i>HLSM</i>
keim	kemm	/kʲe(:)m/	céim, E.Ir. céimm, ceim etc.	step, stile	køm , k'ɛ:m TC, kɛʰm HK, ke:m J:EK, (pl.) kømən kɛ:mən , k'ɛ:mən TC
lheim	liem, liēm, liǣm, (pret.) lǣym, (fut. 1sg.) liemmym	/lʲe(:)m/	léim	jump, leap, hop	l'eʰm JK, JTK, J:EK, (vn. <i>lheimey</i>) l'imə HB, (<i>lheimyragh</i> , - <i>ey</i>) l'ɛmərəx , l'ɛ:mərəxən , l'emərə TC

4.6.1.7 -eann /eN/ > /o:n/, /aʉn/, (/u:n/, /on/)

Table 76. -eann

	Phillips	CM pronunciation	etymology	English	<i>HLSM</i>
chionn	chiann, chiàn, chíän	S /tʃon/ N /tʃaʉn/	teann	tight, fast	S t'ʃɑⁿ TK, t'ʃɑⁿ NM; N t'ʃaun , t'ʃauN JTK
glione		S /glio:n/ N /glaʉn/	gleann	valley	S l'ɔⁿ EK _h , l'eN , l'ɑⁿN ,

²⁸¹ Although forms such as **grm**: (NM) could represent secondary shortening with (weak) preocclusion, i.e. [gri^bm] (§§4.5.1, 4.5.5.2).

²⁸² There are a number of other spellings of the noun in the Bible MSS, including *greim*, *greym*, *gream*.

					glen ²⁸³ NM, l'ò^dn , l^dn , l'ò^dn J:EK, ɣ'í^dn , gl'í^dn , l'ö^dn , l'í^dn TT, l'ö^dn JW , l'í^dn HK, gl^an TK, glen SK; N gl'øun , gl'öun TC, gl'aun , glⁿ , gl'eN , gl'εⁿ , gl^an , glⁿ , gl'en JK, JTK, l'aun HB, (Peel) gl'í^dn , gl'ò:n WQ, gl'ò^dn EC
joan	jan, jàn, jann	S /dʒo:n/ N /dʒaun/	deann	dust	S d'zò^dn JW N d'zauN JK, d'zøun TC
kione	kian (10), kiann, kiañ	S /kio:n/ N /kiaun/	ceann	head, end	S k'í^dn , k'ò^dn , k'ò^dn , k'ò^dn' NM, k'ò^dn EK ^h , k'ò^dn JW, HK, k'í^dn SK, k'ò^dn TL, k'í^dn J:TL, k'ò^dn J:EK, k'ò^dn , k'ò^dn W:S; N k'øun , k'öun TC, k'auN , k'εuN , k'í^dn' , k'ò^dn JK, k'aun JTK, HB, k'εun J:HB, J:JK, k'öun J:JK, k'òun , k'auñ W:N, kjəun Fa, k'ò^dn Myl

²⁸³ Forms with short /e/ such as **glen** (NM) may be pretonic forms in place-names, and/or influenced by English 'glen', as found in English forms of Manx place-names, e.g. Glen Chass, Glen Auldyn, etc. (see *HLSM* II: 502–3).

4.6.1.8 *-einn* /eNⁱ/ > ?/e:nⁱ/Table 77. *-einn*

	Phillips	CM pronunciation	etymology	English	HLSM
beinn		?/be:n ⁱ /	beinn	peak, top, pinnacle	be:N' JK

4.6.1.9 *-eall* /eL/ > /o:l/, (/ol/)Table 78. *-eall*

	Phillips	CM pronunciation	etymology	English	HLSM
broill (Cr.)		/bro:l/	breall?	part of tool ²⁸⁴	
foall (K., PC)		/fo:l/	feall	deceit	
gioal	giall	/gʲo:l/	geall	pledge	g'o:l' TC
giall	gial, giall, gall, iall (2), iáll, jall	/gʲo:l/, ?/gʲal/	geall	promise	(pret.) g'al TC, but vn. g'ʲo:ldən JW, g'ʲo:ldən J:EK
lhuss-ny-moal-moirrey (B.), lus ny moyl Moirrey (Cr.), luss-ny-moal-moirree (K.)		/lus nə mo:l ²⁸⁵ mo:ə/	ScG. lus nam meall móra		
moll, molley		/mol/	meall, mealladh	deceive	
poll, pohll, polley (Cr., K.)		/pol/	peall, pealladh	mat, stick together, entangle	

²⁸⁴ 'the part of a tool that bruises down by being hammered on, as on the upper end of a jumper, a chisel, or the point of a rivet. There is no corresponding word in English' (Cregeen). If the etymology is correct, this is presumably a further example of Cregeen's extraneous use of <i> (§1.6.5), perhaps under the influence of unrelated *brooillagh* 'crumbs, fragments' (Cregeen) (*G. brúireach*).

²⁸⁵ Rhŷs notes short **mol**, **mŷl** (Thomas Collister, Rhŷs notebook 7: 198), presumably owing to postlexical phrasal stress.

4.6.1.10 *-earr* /eR/ > /ɛ:r/Table 79. *-earr*

	Phillips	CM pronunciation	etymology	English
baare; baarey		/bɛ:r/; /bɛ:rə/	bearr; bearradh	shave, cut hair
giare; giarey	giarr (2), giar, iar	/gʲɛ:r/; /gʲɛ:rə/	gearr; gearradh	short; cut
kiare	kiar	/kʲɛ:r/	cearr	left
share, nhare, ba(a)re	sháyr (3), shayr (3), niarr, bâyr, b'áyr	/ʃɛ:r/; /nʲɛ:r/; /bɛ:r/	is fearr	better, best

4.6.1.11 *-eang* /eŋ/ > /eŋ/, /aŋ/Table 80. *-eang*

	Phillips	CM pronunciation	etymology	English
shang		/ʃaŋ/	seang	lean, emaciated
streng	stréin, (pl.) strengyn	/streŋ/	sreang	string

4.6.1.12 *-am* /am/ > /am/Table 81. *-am*

	Phillips	CM pronunciation	etymology	English
amm (Cr., SW), am (K.)		/am/	am	'stature, size, puberty' (Cr.), 'time, period, season, era' (K.), disposition, fit state (SW) ²⁸⁷
cam, camm	kamm	/kam/	cam	
mam		/mam/	Ir. mám, ScG. mam, E.Ir. mám, maam	handful; boil, blain

²⁸⁷ A rare word in Manx, apparently with specialized semantic developments. The usual word for 'time' is *traa* (G. *tráth*).

4.6.1.13 *-ann* /aN/ > /o:n/, /aun/, (/u:n/)Table 82. *-ann*

	Phillips	CM pronunciation	etymology	English	HLSM
ayn	ayn, áyn	S /o:n/, N /u:n/	ann	in him, it; there	S ɔ:n, ɔ:ɫn, ɔ:n NM; N u:n JTK, JK, u:ɫn HB
cloan	klaun (3), kláun (4), klaún	S /klo:n/ N /klaun/	clann	children	S klɔ:ɫn HK, klɔ:n, klɔ:ɫn NM, klo:ɫn JW, klɔ:ɫn TL
croan, cron (Cr.)	krañ, kran, krón	S /kro:n/ N /kraun/	crann	mast, pole, tree	S krɔ:ɫn NM, kradn HK; N krɔ:n TC
goan, goaun (both Bible), scoan	skaun	S /go:n/ N /gaun/	gann; is gann	scarce; hardly	S gɔ:ɫn, gɔ:ɫn, skɔ:ɫn NM, sko:ɫn JW, skɔ:ɫn EL; N gøün, skøun TC, gãuən W:N

Northern /u:n/ is presumably a secondary development under weak stress of */aun/.

4.6.1.14 *-ainn* /aNi/ > /e:n/, /aini/Table 83. *-ainn*

	Phillips	CM pronunciation	etymology	English	HLSM
bine	(pl.) beiny, n, banniyn, bainyn	/baini/	bainne, boinne	drop	baiɫn NM, bqiɫn', bqiin JW, bqi:iɫn' HK, bad'n' W:S, (pl.) bqi:in'ən HK
clein		? /kle:n/	clainn, cloinn (dat. clann)	kin	
rheynn, ring (Cr.)	reyn, ráeyn (2), reynn, renn, reñ, rêyng, reygn, ræing, reng, ren, reynng,	/re:n/, /riŋi/ (see also fn. 288)	rainn, roinn	divide, division, share	reid'n' TT, riŋ JW, raiɫn, re:n TM, rød'n' TC

	ræyng, ræyn, (impv. pl.) renji, reynnigi, (fut. 1sg.) renniym				
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4.6.1.15 *-all* /aL/ > /o:l/, (?/aʉl/)Table 84. *-all*

	Phillips	CM pronunciation	etymology	English	HLSM
boayl	ball, boll	/bo:l/	ball	place	bɔ:l JK, bɔ:l JTK, bɔ:l HK, bo:l JW, bʰɔ:l HB
coayl	kall (5), káll, kal, kàl, kiall	/ko:l/	call	lose	kɔ:l NM
doal	dall (3)	/do:l/	dall	blind	do:l JW, dɔ:l HK, JK, HB, NM
hoal, noal	háll, nall	/ho:l/, /no:l/	thall, anall	over	no:l JW, ə'nɔ:l , ə'nɔ:l EL, nɔ:l , ə'nɔ:l TC, nɔ:l W:S
moal	mall (2)	/mo:l/, ?/maʉl/	mall	poor, feeble, slow	mɔ:l TC, JW, mɔ:l , mɔ:l NM, mɔ:l JTK, mɔ:l HB, J:EK, maʉl J:JK, mɔ:l W:S, mo:l W:S

4.6.1.16 *-aill* /aL/ > /al/, /el/Table 85. *-aill*

	Phillips	CM pronunciation	etymology	English	HLSM
caill	gail, gháil	/kal/	caill	lose	kal' JW
keyll ²⁸⁸	kæil, kélliy	?/kel/	caill, coil, ScG. coille	wood, forest	køł' TC, kel' HK, ki:l, ky:l, ki:l' NM, kɪ:l' J:NM, xel' J:JK, kidl' W:S, (pl.) kel'an HK
sail	sáil	/sal/	sail	fat, brawn, grease, blubber	sɛ:l' TC

For *doail* 'blind' (n.pl.) (G. *daill*, *doill*) see §4.6.3.

4.6.1.17 *-arr* /aR/ > /ɛ:r/Table 86. *-arr*

	Phillips	CM pronunciation	etymology	English
baare	báyr	/bɛ:r/	barr	top, tip, point, crop
caayr (K.), cayr (Cr.)		/kɛ:r/	carr	wagon, coach, car, vehicle etc.
faare	farr, na fáyrsyn	/fɛ:r/	i bhfarradh ²⁸⁹	near

²⁸⁸ The spelling with <ey> and some of the attested realizations of this item in *HLSM* may suggest a form with assimilation to the /ə:/ set (<G. *ao(i)*), from an earlier (?allophonic) short [ə] realization – as also perhaps in *rheynn* 'divide, share' (G. *rainn*, *roinn*) (and other items?) (§4.6.1.14).

²⁸⁹ The loss of *-adh* here is unusual (§5.2). It possibly results from reanalysis of the combination of this preposition with the definite article, i.e. *i bhfarradh an* /faRə əN/ > /faRə#N/ > /faR#əN/ > /faR/ > /fa:R/ /fɛ:r/. This would mean that loss of final unstressed /y/ (</ð/) was early, preceding lengthening in monosyllabic /aR/ and /a:/ > /ɛ:/. The etymology of *farradh* (EIr. *arrad*), is obscure, although it probably involves the prefix *ar-* (*LEIA* s.v. *arrad*).

4.6.1.18 *-a(i)ng* /aŋg/ > /aŋ/Table 87. *-a(i)ng*

	Phillips	CM pronunciation	etymology	English
stang		/staŋ/	sta(i)ng	wooden horse, stock, whipping post

4.6.1.19 *-om* /om/ > /o:m/, ?/aʊm/Table 88. *-om*

	Phillips	CM pronunciation	etymology	English	HLMS
croym		/kro:m/	crom	v. stoop, incline; adj. stooped	S (impv.) kr̥o:m TT
lhome		/lo:m/	lom	bare	S lo:m JW, (<i>lhome-leeear</i>) l̥o:m 'li:r TT N (<i>lhome-</i> <i>lane</i>) lum le^dn , l̥om le^dn JK, (<i>lhome-</i> <i>lomarcan</i>) lo:m ' l̥oməkən
trome		/tro:m/ ²⁹⁰	trom	heavy	S tro:^hm , tro:m NM, tro:m JW, tr̥o:m EK ^h , t^hro:m J:EK, t^hro:^hm J:TL N trobm JK, trubm W:N, t^hr̥a^hm J:JTK

²⁹⁰ Rhÿs (143) notes an apparently diphthongal realization of this word as **tr̥óum** [tr̥oum], alongside **tr̥õbm** [tr̥õbm], **tr̥ũbm** [tr̥ũbm], but does not comment on its dialectal distribution. From his comments **tr̥óum** might also be interpreted as weak preocclusion or geminate [m:], however (§4.5.2). Rhÿs does not mention these forms in his discussion of the dialectal contrast between diphthongal and non-diphthongal realization of items in *-(e)ann* (Rhÿs: 160).

4.6.1.20 *-oim* /om^o/ > /em/Table 89. *-oim*

	Phillips	CM pronunciation	etymology	English	HLMS
breim		/brem/, ?/brim/	broim	fart	brim NM, (<i>breimeragh</i>) brimərax NM, brīmərax W:N, vremərax TC

4.6.1.21 *-onn* /oN/ > /o:n/, /aun/, (/on/)Table 90. *-onn*

	Phillips	CM pronunciation	etymology	English	HLMS
boyn, (pl.) boynyn, boynnyn (both Bible)	(pl.) böynyn	S /bo:n/ N /baun/	bonn	heel, sole	S bø^on TT, b^uo^on , bo^on NM; N bøun TC, (pl.) bøunən TC, baunən JK
doyn (Bible), dhoan, dhone (both Cr.)		/do:n/	donn	brown, bay	S dø^on TT, dø:n J:EK, J:TL; N dø^on TC, dø^on
drone, droyn (Cr.), dron, droun (K.)		/dro:n/ (K. <i>droun</i> = /draun/?)	dronn	hump; humpback	S dro^on JW, drø^on TT, (adj.) drø:nax TT N dro^on HK (adj.) drø:nax TC
tonn, toayn, touyn (Hymns)	tóyn, (pl.) tonnyn (3)	/ton/, /to:n/, /taun/	tonn	wave	tøn TC, (pl.) tønən TC

4.6.1.22 *-oinn* /oNⁱ/ > /e:nⁱ/Table 91. *-oinn*

	Phillips	CM pronunciation	etymology	English	HLSM
breinn	brú (2), bru, breyn (2), breÿn, brenn (3), brêin, brein, (gen.) brónniy, (pl. breniyn)	/bre:n ⁱ /	broinn (brú)	womb	vr̥e:n', (pl.) br̥e:n'ən TC

4.6.1.23 *-oll* /oL/ > /o:l/, /aʊl/Table 92. *-oll*

	Phillips	CM pronunciation	etymology	English	HLSM
couyl (Bible), coll, cohll (Cr.), coull (K.)		S /ko:l/ N /kaʊl/	coll	hazel	N k̥oʊl, k̥oəl TC
poyll		S /po:l/ N /paʊl/?	poll	pool	S po:l HK, (unstressed) pu.l, p̥oʊl, p̥ə NM, p̥aʊl M
towl	toll, tóyll	S /to:l/ N /taʊl/	toll	hole	S to:l JW, NM, t̥o:l EK̥h, t̥oʊl Mrs EK̥h to:l W:S; N toul W:N

4.6.1.24 *-oill* /oLⁱ/ > /oⁱ/Table 93. *-oill*

	Phillips	CM pronunciation	etymology	English	HLSM
toill	toilliu tolliu 2, tollíu, tollíu, toiliu, toilchin toilchyn (3), toilchiyn	/to ⁱ /	toill, tuill	deserve	toilliu t̥o ⁱ 'u, t̥o ⁱ 'u TC, til'u EK̥h

4.6.1.25 *-orr* /oR/ > /o:r/Table 94. *-orr*

	Phillips	CM pronunciation	etymology	English	HLSM
coayr (Bible, Cr.); coair, coyr, coir (Cr.); coair, corr (K.)		/ko:r/	corr	odd (number)	
coar, coayr (Bible, Cr.)		/ko:r/	corr	crane, heron, bittern	kə:r W:S, kə: JK, kə: TT
Ph. toïr	toïr	*/to:r/ ²⁹¹	torr	heap	

4.6.1.26 *-ong* /oŋg/ > /oŋ/Table 95. *-ong*

	Phillips	CM pronunciation	etymology	English
lhong	long (5)	/loŋ/	long	ship

4.6.1.27 *-um* /um/ > /um/Table 96. *-um*

	Phillips	CM pronunciation	etymology	English
cum, cummey		/kum/	cum, cumadh	form, shape
cum, cummal	kúĩ, gumm, ghumm, ghũ (2), ghúmm (2), ghum	/kum/	cong bháil, ScG. cùm, cumail	hold; dwell

²⁹¹ This item appears not to survive in CM and LM, except in the diminutive form *thorran* /toran/ ‘dung-heap’ (G. *torrán*).

4.6.1.28 *-uim* /u^hm/ > /i:m/Table 97. *-uim*

	Phillips	CM pronunciation	etymology	English
dreeym	drym, dryim, dryim, (pl.) drymmyn, drimmyn	/dri:m/	druim	back
sym		/sim/	suim	sum

4.6.1.29 *-unn* /uN/ > /u:n/Table 98. *-unn*

	Phillips	CM pronunciation	etymology	English
noon	núnn	/nu:n/	anunn	over

4.6.1.30 *-uinn* /uN^h/ > /un^h/, /in^h/, /iŋ^h/Table 99. *-uinn*

	Phillips	CM pronunciation	etymology	English	<i>HLSM</i>
cluinn, clynn	klüyn, klüŷn, kluŷn, kluin, kluíín, gluyn (2), gluinn, gluin	/klun ^h /, /klin ^h /	cluinn	hear	
cruin(n), (Bible, Cr., K.); cring, cruing (Cr.)	krüin, krunn, kruinn, kruin, krüyn, kruyn, krynn, krunn, krun	/krun ^h /, /kriŋ ^h /	cruinn	round	
cruinn		/krun ^h /, /kre:n ^h /?	crann (pl.)	masts	krɛ: ^h n ^h HK, krɛ: ^h n ^h NM ²⁹²

²⁹² These forms seem to represent *crainn* rather than *cruinn*.

4.6.1.31 *-uill* /uLⁱ/ > /u:l/Table 100. *-uill*

	Phillips	CM pronunciation	etymology	English	<i>HLSM</i>
buill		/bul ⁱ /	ball (pl.)	places	bu^l' NM, bɔ^l' HK, bɔ^l' JW, TC
puill	puill	/pul ⁱ /	poll (pl.)	pools	
tuill		/tul ⁱ /	toll (pl.)	holes	tû:l W:N

4.6.1.32 *-uing* /uŋⁱgⁱ/ > /wiŋⁱ/Table 101. *-uing*

	Phillips	CM pronunciation	etymology	English
quing	quing (3), kuing	/kwiŋ ⁱ /	cuing	yoke
mwing		/mwiŋ ⁱ /	mong, muing	mane

4.6.1.33 Summary

Table 102 summarizes the above developments of historical short vowels + fortis sonorants, showing the environments in which the vowel remains short, becomes long or diphthongal, and where both developments are found.

Table 102. Predominant CM/LM reflexes of stressed short vowels before final fortis sonorants

	m	N	N ^j	L	L ^j	R	ŋ	ŋ ^j
i	i:	i, u:	i	—	i:, i	—	—	—
e	a	o:, au	e:	o:, o	—	ɛ:	e, a	—
a	a	o:, au	e:	o:	a, e	ɛ:	a	—
o	o:	o:, o, au	e:	o:, au	—	o:	o	—
u	u, i:	u:	u, i	—	u	—	—	i

■ long vowel or diphthong ■ long or short vowel — no instances

4.6.1.34 Dialectal variation

There are clear north-south dialectal splits between in some of the vowel + fortis sonorant combinations (Rhÿs: 160; *HLSM* I: 161), as shown in Table 103:

Table 103. Dialectal splits in stressed short vowel + final fortis sonorant sequences

	south	north
<i>-eann</i>	/o:n/	/a _u n/
<i>-ann</i>	/o:n/	/a _u n/
<i>-onn</i>	/o:n/, /on/	/a _u n/, /o:n/. /on/
<i>-all</i>	/o:l/	/o:l/, (/a _u l/)
<i>-oll</i>	/o:l/	/a _u l/

Notice that *-all* and *-oll* are differentiated in the north but not in the south; otherwise (*e*)*a* and *o* fall together before *nn* and *ll*.

Northern varieties also show diphthongs in other items where there are long monophthongs in the south, as *doo* S /du:/, N /da_u/ ‘black’ (G. *dubh*), *ooh* S /u:/, N /a_u/ ‘egg’ (G. *ugh*), *jiu* S /dʒu:/, N /dʒa_u/ ‘today’ (G. *i ndiu*) (Rhÿs: 161; *HLSM* II: 121, 238, 341).

In the standard Classical Manx orthography (i.e. in the Bible) the orthography generally, although not exclusively, represents the southern / monophthongal forms (Table 104). In this connection we may note the southern origin of some of the key figures in the standardization of the Manx orthography, such as Philip Moore and John Kelly (both of Douglas), although further research on the orthographic variants in various texts (such as the Bible translation manuscripts and sermons) is needed in order to understand more fully how this southern bias came about.

Table 104. Representation of dialect variants in Bible orthography

Bible spelling	etymology	English	dialectal correspondence
chionn	teann	tight, fast	south
glione	gleann	valley	south
joan	deann	dust	south
kione	ceann	head, end	south
ayn	ann	in him, in it, there	? (see §1.6.3)
cloan	clann	children	south

croan	crann	mast, pole, tree	south
goan, goaun, s'coan	gann	scarce, hardly	south / north
boyn	bonn	heel, sole	south
doyn	donn	brown	south
tonn	tonn	wave	both?
couyl	coll	hazel	north
poyll	poll	pool	south
towl	toll	hole	? (spelling could indicate both)
doo	dubh	black	south
ooh	ogh, ugh, ubh	egg	south
jiu	i ndiu, ScG. an-diugh	today	south

4.6.2 Voiced homorganic rhotic clusters

We mostly found lengthening of short stressed vowels preceding voiced homorganic rhotic clusters *rd*, *rn*, *rl*, as is widespread in other Gaelic dialects (O'Rahilly: 50), although apparently retention of short vowels with /i/ and /u/.

Table 105. Vowel developments before *rd*, *rn*, *rl*

	Phillips	CM pronunciation	etymology	English	HLSM
<i>eard, eird</i>					
keird	duyne na kerdjy	/kie:rd/, /kie:rdʒə/	ceard, ceird	craft	k'ɛ:rd NM, k'ed, k'öd, kō:d JK, kō:d HB, (<i>fer-keirdey</i> , -ee) fɛɾ k'ödi J:NM, fer kō'd'ʒə EK _h
kairdee (Cr.), caardagh (K.)		/kie:rdi/	ceardcha, ScG. ceàrdach	smithy	k'ɛ:rdi TC, k'e:di, k'ɛ:rdi JK, k'a:rdi, k'ɛ:rdi NM, (pl.) k'ɛ:rdiɲ JK, k'ɛ:rdiɲ NM
<i>eird</i>					
maarderagh; maarderys	fer mardruoil, mardrys (5)	/me:rdəɾax/, /me:rdəɾəs/	meirdreach	fornicator; fornication	

<i>ard</i>					
ard	ayrd (38), áyrđ (6), ard (9), árd (3), (pl.) ardy, árdy	/a:rd/	ard	high	a:d J:EK, NM, E:d J:CW, ö:d J:TL, ö:đ TC, a:d NM
<i>aird</i>					
ard, ardjyn	arjyn (5), ártjyn	/a:rd/, /a:rdʒən/	aird	direction, region	ö:rd, a:đ HK, örd, řđ TCr, a:đ TM
gerjagh(ey)	gyrjaghy (7), gyrjaghe, gyrjaghey (4), gýrjaghey, gyrji (2), gyrjitt	/ge:rdʒaxə/, ?/gə:rdʒaxə/	gairdeach	comfort, joy	(gerjys) gö:d'ʒıs AK
syrjey, yrjid	syrje (3), na sýrje, nás ýrje, sirje, sýyrje, b'ýrje; (n.) ýrje	/sirdʒə/, /irdʒədi/ ²⁹³	airde	higher; height	ö:d'ʒəd' TT, örd'ʒəd' JW, HK, řđ'ʒəd', jörd'ʒəd TC
<i>ord</i>					
boayrd	boyrd (3), bóyrd (2), boýrd, board, bord (2)	/bo:rd/	bord	table, board	bö:đ W:N, vö:rd JK, b ^u :rd NM, bø:rd TC
oard, oayrd (Bible, Cr.)	ordyn	/o:rd/	ord	(sledge) hammer	o:đ, (pl.) o:đən HK
oardaghey	ord- (18), órd-	/o:rdaxə/	ordaghadh	order	
<i>uird</i>					
buid	buyrd	/bu:rd/	buid	tables, boards	
<i>*earn < earrann, ighearn, iarann</i>					
ayrn	ayrn (3), áyrn (2), arn, árn, æarn, (pl.) arnyn (3)	/a:rn/	earrann	part, portion	a:rn NM, HK, a:rn JW, a:n TM, NM, (pl.) a:nən TC,

²⁹³ In *syrjey*, *yrjid* we seem to have the morphophonemic alternation /a/ > /i/, as often in Manx (§2.1.9), with <y> representing short /i/. The medial cluster /rđd/ apparently has depalatalization of the rhotic (>/rdʒ/), with preceding /i/ treated like *io-*, with retracted allophone, and even the development of prosthetic glide [j] in TC's **jörd'ʒəd**. In the case of *gerjaghey* (G. *gairdeach*), we would expect /a/ or /e/ (with lengthening) rather than raising to /i/, but Phillips consistent <y, ý> suggests some retraction before depalatalized /r/; perhaps there is merger with *ao* /ə:/, so *gaird-* > **gáird* > **gaoird-*.

					(<i>ayrniagh</i>) q:rn̩ax , a:rn̩ən TC
chiarn	chiarn (7), chiárn, chíarn, charn, (pl.) chiarnyn, chárnyn	/tʃa:rn/	tighearna	lord	tʃa:rn̩ JW, tʃa:rn̩ NM, (voc.) xʃa:n̩ J:EK
yiarn (see also §5.3)	iarn (2), iærn	/ja:rn/	iarann, EIr. iarn	iron	ja:rn̩ TC, ja:dn̩ JK, HK, ja:n̩ JK, W:N, n'a:dn̩ HK, g'a:n̩ JTK
arn, *arn < arraing, arthain					
carn		/ka:rn/	carn	cairn, heap	ka:rnən TC
er-mayrn	er mayrn (3), er m'ayrn	/er̩ ma:rn/	ar marthain	left, remaining	er̩ mɑ:dn̩ HK, er̩ ma:rn̩ JW, ɛ̩ mɑ:dn̩ NM, er̩ ma:rn̩ TC
tayrn	tayrn (3), täỹrn, tarn, darniym, tarngi, tarni, harn, hayrn, háyrn	/ta:rn/	tarraing	pull, draw	ta:n̩ NM, TK, HB, ta:dn̩ JTK, ta:rən W:S
airn					
arn		/a:rn̩/	airne	sloe	
barnagh		/ba:rn̩ax/	bairneach	limpet, flitter	bö:rn̩ax HK
orn					
cayrn	karn, gharn	/ka:rn/	corn	horn, trumpet	ka:rn̩ , (pl.) ka:rnən TC
curn		/ku:rn/	corn	can	ku:rn̩ NM
doarn, doarney	dornyn (2), dorny, er nan orny, goyrn	/do:rn̩/, /do:rnə/	dorn, dornadh	fist	dö:dn̩ JK, dɔ:rən̩ , dɔ:rn̩ TC, (pl.) dɔ:rnən̩ NM
scoarnagh	skorniagh ²⁹⁴ (2), skornagh, storinagh (<i>sic</i>)	/sko:rnax/	scornach, scoirneach	throat	sko:rn̩ax , sko:rn̩ax NM, sko:rn̩ax W:S, sko:rn̩ax TC
sorn, surn (Cr.)		/so:rn/	sorn	fire-place in kiln	

²⁹⁴ = by-form G. *scoirneach*?

<i>oirn</i>					
moyrn	moyrn (2), môÿrn (2); mórniagh	/mo:rn ⁱ /, /mo:rn ⁱ ax/	muirn, moirn	pride; proud	mə:nax JK
taarnagh	tarniagh (3), tárniagh, (gen.) tarni, (pl.) tarniaghyn; (vn.) tarnaghy	/ta:rn ⁱ ax/	toirneach	thunder	tø:rnax, (gen.) ta:rni TC, tö:rnax JW, HK, to:njə [sic] W:S
<i>uirn</i>					
curnaght	kurnagh (3), kurnah, kurnaght, kurnyght	/ku(:)rn ⁱ axt/ ?	cruithneacht > *cuirneacht	wheat	kø:rnax TC, kə:nax, kö:rnax, korən'ax, kɔ:rn'ax JTK, kö:nax JK
durn (Bible), duirn (Cr., K.)		/du:rn ⁱ /	duirn	fist (pl., gen.)	
<i>earl</i>					
aarlo; aarlaghey	arlu (5), arlú (5); iarlaghy (2), arlyghey, arlii, arluít, arlaghy, arlyghy, arliaghy, arlaghey	/a:rlu/	earlamh, EIr. aurlam	ready; prepare, cook	ɛ:lu, ö:rlu NM, ö'lat' HK
<i>eirl</i>					
maarliagh	merliagh (5), merliygh, (pl.) merli (4)	/me:rl ⁱ ax/	meirleach	thief	mɛ:l'ax, mö'l'ax W:N, mɔ:l'ax TC
<i>orl</i>					
gorley (Cr. K.), goarley (Cr.), gallar (Cr.)		/go:rlə/	galar	disease	
oarlagh		/o:rlax/	orlach, ordlach	inch	
<i>oir</i>					
doarlish	dorlys, dorlysyn	/do:rləʃ/	doirling	gap in hedge	dɔ:rləʃ, dö:ləʃ JW, dö:lɪʃ,

					d̪il̪ JK, d̪o:l̪if JTK, d̪o:l̪if HK
*url < *iorl < iolar					
burley		/burlə/	biolar, biolra	gress	b̪ørlə TC
urley	yllrée, ýlrey	/urlə/	iolar	eagle	ö:l̪ə, (pl.) ö:l̪əx̪ən HK
uirl					
murlhin (Cr.), moorlin (K.)		/murl̪ən̪i/	Ir. muirleóg, murlóg, ScG. mùrlag, mùrlainn	hamper	m̪ö:l̪'in JTK

Note the indication of vowel length in e.g. *boayrd* /bo:rd/ ‘table, board’ (G. *bord*) in contrast to rhotic + unvoiced consonant clusters, such as *ort* /ort/ ‘on you’ (G. *ort*), *fort* /fort/ ‘ability’ (G. *feart?*), *gort* /gort/ ‘stale’ (G. *goirt*), which contrast with long /o:/ in *coyrt* ‘give, put, send’ (G. *tabhairt*), *loayrt* /lo:rt/ ‘speak’ (G. *labhairt*), *roayrt* ‘spring-tide’ (G. *rabharta*).

4.6.3 Other medial clusters

Lengthening and diphthongization may also take place before other, mainly homorganic, clusters involving sonorants, although it is not nearly as prevalent as in certain other Gaelic dialects (e.g. Ó Curnáin 2007: 210–22, 234–7).

Table 106. Vowel developments before other medial clusters

	Phillips	CM pronunciation	etymology	English	HLSM
oonlaghey		/u:nlaxə/	ion(n)ladh	wash	
Boaldyn		/bo:ldən ⁽ⁱ⁾ /	Beal(l)taine	May Day	b̪o:ld̪ən JK, b̪o:ld̪ən TM, v̪o:ld̪m' NM
boandey	boyndy (‘bond-servant’)	/bo:ndə/	Ir. banda, ScG. bannd	band (of iron etc.)	b̪o:nd̪ə TC, b̪o:nd̪ə TT
boandyrey, boandyrys	baintri (‘nourish’)	/bo:ndərə/	banaltra	nurse	b̪o:nd̪ər, b̪o:nd̪ər, v̪o:nd̪ər TC, b̪a:nd̪ərəs W:N, b̪o:nd̪ərəs NM,

					bɔ:ndərəs HB, bɔ̃:ndərə W: ?N
stoandey		/sto:ndə/	ScG. stannd	standish	
moandagh		/mo:ndax/ ²⁹⁵	man(n)tach	blunt, stammering	
aunlyn, oanlyn, oalyn ²⁹⁶ (Cr.), awnlin (K.)		/o:nlən ^(̊) /, /aʉnlən ^(̊) /	annlann	relish, 'kitchen' ²⁹⁷	əunlən' TC
oanluckey	anlaky, anlaghy, anlyky (2), anliky, (part.) ánlikit	/o:nlækə/	annlacadh, adhllacadh, EIr. adnacul	bury; burial, funeral	ɔ:nlækə , ɔ̃:nlækə TC, o:nlækə JTK, ɔ̃:nlækə NM, (part.) o:nlækət' JTK, ɔ̃:nlækət' JK, ɔ̃:nlækət' NM, o:nlækət , u:nlækət , ū:nlækət W:N
oaldey	(<i>moddey</i> <i>oaldey</i>) madiállty (2), (pl.) madiállty (2)	/o:ldə/	allta, allaidh	wild; (<i>moddey</i> <i>oaldey</i>) wolf	
moaldey		/mo:ldə/	ScG. màlda?	poor, mean	
foalsey		/fo:lsə/	fallsa	false	fɔ:lsə , fɔ̃:lsə HK
oalsum (Cr.), ousym (K.)		/o:lsəm/ /aʉ(l)səm/	Norse halsband > *allsam	tie on cattle	
coonlagh	kunlygh	/ku:nlax/	connlach	straw	ku:nlax JK, JTK, TL
coonrey	kúnre, kúnrey, kúynre	/ku:nrə/	cunnradh, connradh	exchange, barter	

²⁹⁵ But cf. *sondag* 'covetous' (G. *san(n)tach*), apparently with short /o/; and *fondagh* 'sufficient' (G. *foghantach*), **fɔ̃ndax** TC (HLSM II: 175) where /o:/ might be expected. The tendency to shorten stressed long vowels in polysyllables (§5.5.1) may explain these forms.

²⁹⁶ 'Though the former of these [*oanlyn*] may, perhaps, be the best orthography, yet see *aunlyn*' (Cregeen s.v. *oanlyn*, *oalyn*). Cregeen's preference for a spelling clearly indicating monophthongal /o:/ probably reflects his southern dialect.

²⁹⁷ 'relish or moisture that is taken with bread, potatoes, &c' (Cregeen), 'a kitchen, any kind of food eaten with bread, as butter, cheese, milk' (Kelly).

Note the diphthongal realizations in some of these items, pointing to the same dialectal variation as found in monosyllables (§4.6.1.34).

4.6.4 Paradigmatic uniformity

Historically, the restriction of lengthening and diphthongization to stressed positions preceding coda fortis sonorants resulted in alternations such as the following between monosyllabic radical forms with a lengthened vowel, and morphologically complex derivatives or inflections in which the original short vowel was maintained:

glione ‘valley’ S /gʲiːn/, N /gʲiːn̩/ (G. *gleann*)
gen. *glionney* /gʲiːnə/ (G. *gleanna*)

However, both lengthened and unlengthened forms may spread analogically, as found in some Irish dialects (Ó Sé 2000: 42; Ó Curnáin 2007: 212–3; Ó Direáin 2015: 43–4, 46). For example, the adjective *giare* /gʲeːr/ ‘short’ (G. *gearr*), with a long vowel, shows the expected alternation with plural *giarrey* /gʲarə/ (G. *gearra*), with a short vowel; but the verb *giarey* /gʲeːrə/, *giare* /gʲeːr/ ‘cut’ (G. vn. *gearradh*, stem *gearr*) apparently has generalization of the lengthened form (Thomson 1998: 86); similarly in *baarey* /bɛːrə/ ‘shave’ (G. *bearradh*).²⁹⁸ On the other hand, *tonn* /ton/ ‘wave’ (G. *tonn*) and *chionn* /tʃon/ ‘tight, fast’ (*teann*) appear to show generalization (or maintenance) of the short vowel on the pattern of plural *tonnyn* /tonən/ ‘waves’, plural adjective / verbal noun *chionney* /tʃonə/ ‘press’ (G. *teanna*; *teannadh*). In these cases spellings suggesting expected /toːn, taun/ and /tʃoːn, tʃaun/ are also found. Further examples are as follows:

Generalization of short vowel:

mill /mil/ ‘spoil’, vn. *milley* /milə/ (G. *mill*, *milleadh*), rather than */miːli/ (cf. *keeill* /kʲiːli/ ‘church’, G. *cill*)
moll /mol/ ‘deceive’, vn. *molley* /molə/ (G. *meall*, *mealladh*), rather than */moːli/, similarly *poll*, *polley* ‘matt, entangle’ (G. *pealladh*)

²⁹⁸ Forms from *HLSM* (II: 195–6): vn. *g’a:rə*, *g’a:ru*, *g’a:ro* JK, *g’e:rə* HB; *ga:rəsmqđ* JW *giarrys-mayd* ‘we will cut’.

Generalization of long vowel:

baare /bɛ:r/ ‘shave’ (G. *bearr*) > vn. *baarey* /bɛ:rə/ (G. *bearradh*), rather than */barə/

eeym /i:m/ ‘butter’ (G. *im*) > *eeym(m)ey* (Cr.) ?/i:mə/, rather than */imə/

lhome /lo:m/ ‘bare’ (G. *lom*) > *lhoamey* /lo:mə/, *lommey* /lomə/ (both Cr.), but *lomman* /loman/ ‘scorching wind’ (G. *lomán*), *lhommyrt* /lomərt/ ‘shear’ (G. *lomairt*)²⁹⁹

trome /tro:m/ ‘heavy’ > *tromey* /tro:mə/ pl., also *trommey* /tromə/ (Psalm 12:5)

doal /do:l/ ‘blind’ (G. *dall*) > *doaley* pl. (G. *dalla*), *doalley*³⁰⁰ ?/do:lə/ ‘to blind’ (Exodus 23:8, 32:32–33) (G. *dalladh*), but *dolley* /dolə/ ‘to blind, blot’ (Bible), *dollan* /dolan/ ‘fan’ (G. *dallán*)

croym /kro:m/ ‘bend, stoop’ > *croymmey* vn. (G. *cromadh*) /kro:mə/ (ø: TC, TT, o: TC, *HLSM* II: 109)

²⁹⁹ See also spellings *loamrey* (Cr. , Bible), *lomrey* (Cr.) ‘fleece’ (G. *lomradh*) ? = /lomrə/ or /lo:mrə/.

³⁰⁰ It is possible that <oa> here simply represents vowel quality, or recalls the spelling of the stem *doal*, rather than representing length, i.e. /dolə/ rather than /do:lə/.

Chapter 5 Suprasegmental phonology

5.1 Stress

In earlier periods lexical stress in Gaelic fell on the first syllable,³⁰¹ and vowels in any syllable, whether stressed or not, could be either long or short (*GOI*: 27, 31; O’Rahilly: 83–5; Ó Sé 1989: 148). This remains the case in some Irish varieties today, notably in most Connacht dialects (Ó Sé 1989: 148; Green 1997: 93).³⁰² However, long vowels in unstressed syllables are cross-linguistically dispreferred. This mismatch between stress and syllable weight has long been recognized by Gaelic scholars such as O’Rahilly (84–5):

Now in a language with strong stress, like Irish, words containing an unstressed long syllable [...] are more or less in a state of unstable equilibrium. Little will be required to upset the equilibrium, which once upset, will only be restored when one or other of two opposing tendencies has taken effect. Either [...] the long unstressed syllable will be shortened, or else the stress will be attracted to the long vowel.

(O’Rahilly: 84–5)

This intuition is captured by the ‘Weight-to-Stress Principle’ (Prince 1990), cited by Green (1997) in his analysis of developments in Gaelic prosody, which states ‘[i]f heavy, then stressed’ and contraposed, ‘[i]f unstressed, then light’ (Prince 1990: 358). Connacht Irish dialects continue to tolerate a violation of the Weight-to-Stress Principle, while in general (and leaving aside certain details), Munster dialects have shifted stress to non-initial heavy syllables, while Ulster and Scottish varieties have shortened non-initial long vowels and retained initial stress.

The situation in Manx is particularly complex in that both solutions are found: some words have stress-shift, while others have retention of initial stress with shortening of

³⁰¹ Disregarding elements such as the prefixes of deuterotonic verb forms in Early Irish (*GOI*: 27). Ó Sé (1989: 166–8) discusses evidence that Old Irish stress was considerably less prominent than in the modern dialects; as a result the Weight-to-Stress Principle may have been less relevant in this period.

³⁰² There is evidence that Connacht dialects may have had non-initial stress in the past (O’Rahilly: 99–100; Ó Sé 1984; 1989: 159–60).

unstressed long vowel. This is referred to by Thomson (1960: 122) and Broderick (*HLSM* III: 149) as ‘the problem of stress in Manx’. It has been observed since O’Rahilly (114) that these two developments are conditioned by the weight of the initial syllable: there is a strong tendency towards stress shift in items with historical long or ‘half-long’ vowels (including diphthongs), in the initial syllable, while items with short vowels in the initial syllable are likely to show initial stress with vowel shortening (see also Jackson: 20; *HLSM* III: 148–9; Green 1997: 90–1; Ó Sé 1991). This is well illustrated by the pair of items /muˈrɛ:n/ *moorarane* ‘many, much’ (G. *mórán*), with stress shift, and /ˈbegan/ *beggan* ‘little, few’ (G. *beagán*). In addition, many Anglo-Norman borrowings (such as *shirveish* ‘service’, G. *seirbhís*; *resoon* ‘reason’, G. *réasún*) have final stress, which may be original.

Ó Sé (1991) notes that these tendencies are not categorical, citing counterexamples with stress shift despite light initial syllables (§5.1.5.2), and suggests that the patterns observed represent the results of lexical diffusion. Ó Sé (1991: 162) also notes that ‘[w]ords in which a short vowel is followed by a cluster of sonorant consonant + voiced consonant (e.g. *ordóg* ‘thumb’) have tended to be treated in Manx like words with a long vowel in the first syllable (e.g. *fág(bh)áil* ‘leaving’)’.

In general, stress is transparently represented in the Classical Manx orthography. For example, the suffixes which have both stressed and unstressed reflexes are clearly distinguished:

G.:	Stressed:	Unstressed:
-án	-ane /ˈɛ:n/	-an /an/
-ín	-een /ˈi:n/	-in /ən/
-óg	-age, -aig, -eig, -aag /ˈɛ:g/	-ag /ag/
-amhail	-oil /ˈo:l/	-al /al/
-áil	-ail, -eil /ɛ:l/	-al /al/
-óir	-eyr /ɛ:r/	-er /er/

Cregeen indicates stress on most headwords in his dictionary, but as Wheeler (2018: ii) notes, ‘[t]here is a considerable degree of inconsistency in Cregeen’s marking of stress’, and stress is not infrequently marked in an unexpected position, usually on the initial syllable in words where the phonological structure and spelling, and recorded

fieldwork data, show forward stress. It is possible that some of this variability ‘may correspond to real variation in pronunciation’ (ibid.: ii), perhaps including (postlexical) stress retraction (§5.1.3), or that some unexpected stress markings are printing errors. Because of this uncertainty, Cregeen’s marking of stress is not used as evidence in the present discussion.

5.1.1 Previous accounts of stress shift and long vowel shortening

5.1.1.1 O’Rahilly (1932)

O’Rahilly (114) claims that non-initial stress was originally introduced into Manx (as in southern Irish dialects) with Anglo-Norman loanwords. He observes that ‘all such borrowings have a long vowel in the second syllable, and all, or practically all of them have (or had) in the first syllable either a long vowel, or else a ‘half-long’ vowel’. According to O’Rahilly, the addition of these items to the Manx lexicon motivated the analogical shifting of stress in native items (including earlier borrowings) of the same (heavy-heavy) pattern. Subsequently, ‘another phonetic law, by which long unstressed vowels were shortened, came into operation’ and ‘[t]he long terminations of those words which had escaped the accent-shift were accordingly shortened, as in Scottish Gaelic’.

Thirdly, ‘after the above changes had established themselves’ (O’Rahilly: 115), vocalization of fricatives could create new long vowels ‘in hitherto unstressed syllables’, and ‘the word in its new shape was brought into conformity with the stress-system of the language’. Although not stated explicitly, it is implied in O’Rahilly’s account that the first syllable conditioning was no longer operational at the stage when medial fricatives were vocalized — since otherwise the cited examples *annoon* ‘weak’ (G. *anbhfann*), *shilleeid* ‘slug’ (G. *seilchide*) etc. would have given something like */‘anan/, */‘feljəd(ə)/ rather than attested /a‘nu:n/, /ʃi‘li:d/ — and that by this period, post-tonic unstressed long vowels were no longer permitted in Manx phonology (‘the stress-system of the language’).

It will be argued below that much of O’Rahilly’s account is plausible, although internal phonetic factors may explain the stress shift in heavy-heavy better than the alleged impact of the Anglo-Norman borrowings, which may, however, have been a contributory factor. In addition, it is not necessary to invoke, as O’Rahilly (117) does, ‘the influence of Scottish Gaelic’ to account for post-tonic shortening.

5.1.1.2 Jackson (1955)

Jackson (20) notes the first syllable conditioning, which he calls ‘remarkable’. However, he does not offer an explanation of the phenomenon, or discuss the ordering of the changes, although he references O’Rahilly’s discussion. He also notes (76–7) that long vowels arising from vocalization of fricatives may attract stress, but does not discuss the ordering of this development in relation to other processes.

5.1.1.3 Ó Baoill (1980)

Ó Baoill (1980: 102) makes brief mention of forward stress in Manx in relation to the lack of epenthesis in items such as *colmane* ‘dove’ (G. *colmán*). He argues that stress shift precedes epenthesis, and draws conclusions about dating as follows:

It is a well known fact about the stress rule of Munster Irish that it must apply after the application of the rule of epenthesis in words like *feargach* and *Luimneach*. In this case the epenthesis rule blocks the application of the stress rule. I would suggest that the same procedure applies in the case of epenthesis in words like *colmane* and *carnane* in Manx [...] We may conclude from these relevant facts from Munster Irish and Manx that epenthesis occurs after stressed syllables only. If this ordering of rules is correct, then the stress rules, which place stress [...] on *-ane* in words like *colmane*, *carnane* and on *-aag* in *faasaag* in Manx, is very old indeed, and may go back at least to the Old Irish period and perhaps even further.

(Ó Baoill 1980: 102)

However, it is shown below (§5.4) that Ó Baoill’s arguments regarding Manx data are incomplete and that no conclusion can be drawn from internal evidence about the relative ordering of epenthesis and stress shift. In any case, Manx and Irish developments are not necessarily parallel, either structurally or chronologically.

5.1.1.4 Broderick (1986)

Broderick³⁰³ (*HLSM* III: 151–3) proposes an alternative explanation for forward stress, namely that it was a result of shortening of the vowel in the initial syllable:

The contention is that, rather than the first syllable in those words containing forward stress being shortened as a result of the stress-shift, the opposite is the case; that is, that the stress is advanced *because of* the shortening of the initial syllable. It is also a noticeable feature of Manx that stressed long vowels in monosyllables are usually, or can be shortened [examples given including *eeast* (G. *iasc*), *moain* (G. *móin*); *slane* (G. *slán*)] [...] It is [...] suggested that the proclivity of Manx to shorten stressed long vowels in monosyllables spread to the initial (original) stressed long vowel vowel in words of the *faagail* type [...] causing it to shorten [...] as a result of which the stress shifted to the long second syllable [...]

In the case of those words containing initial stress on an original short vowel, but whose second syllable, once long, has been shortened, as in *beggan*, *thunnag* etc., it may be asked why then did the stress not shift to the long vowel when it was long. The answer, perhaps, is that the long vowel here had already become shortened at the time of the stress-shift in disyllables of the *faagail* type.

(*HLSM* III: 151–2, original emphasis)

There are several difficulties with Broderick's account. Ó Sé (1991: 172) identifies one of them:

I am reluctant to follow Broderick's [...] explanation of the stress shift as resulting from shortening of stressed long vowels. It is indeed the case that Late Spoken Manx showed (often variable) shortening of stressed long vowels in monosyllables, as in *slane* (slen) [*sic*] 'whole' (Ir. *slán*), *eeast* [*jis. ji:s*] 'fish' (Ir. *iasc*), but I am not convinced that this development is old enough to have contributed to the stress shift, giving e.g. '*fágáil* > '*fǎgáil* > *fa'gáil*.

(Ó Sé 1991: 172)

In fact the eighteenth-century orthography clearly and consistently indicates long vowels or diphthongs in *moain*, *slane*, *eeast* etc., so the variable shortening observed in Late Manx must be a recent development, and, as Broderick himself notes (*HLSM* III: 151), it may be associated with preocclusion in items such as *slane*. Vowel shortening is longer established, and shown orthographically, in polysyllabic items

³⁰³ According to Broderick (*HLSM* III: 151), Heinrich Wagner 'told me he had come to a similar conclusion'.

such as *firriney* ‘truth’ (G. *fírinne*), *currym* ‘duty’ (G. *cúram*), and in certain categories of items such as frequently-occurring verb forms (§5.5.1). However, stressed vowel shortening is not sufficiently consistent to be considered a viable explanation for the regular pattern of stress shift observed in original heavy-heavy items, nor is there any evidence that it is old enough. We might note also that Late Manx also has a countervailing ‘proclivity’ to lengthen short stressed vowels (§5.5.2).

Furthermore, Broderick offers no explanation for why unstressed vowel shortening occurred in the light-heavy category (*beggan* etc.) without affecting heavy-heavy items (*faagail* etc.). His only argument for the earliness of the shortening is that suffixes with original /a:/ and /o:/ have /a/ in their shortened Manx form, which, according to Broderick (*HLSM* III: 153), ‘indicates that shortening of the second syllable took place in words of this type before OIr. *Á* (and *Ó*), became /e:/ [i.e. /ɛ:/] in Manx’. The latter claim is also made by Jackson (20). However, it is uncertain how old the fronting and raising of *á* is (§2.2.2). Phillips (and indeed the later orthography) represent this primarily as <a, aa> etc., which may have indicated something closer to [æ:, a:] in earlier periods. This less fronted realization seems to have survived even into the Late Manx of certain speakers or dialects (*HLSM* III: 123). In any case, it does not follow that the quality of the shortened /a/ must reflect the quality of the earlier long vowel. In both Manx and Scottish Gaelic shortened /a/ (in ScG. also /ɛ/) represents a variety of original vowels (cf. Ó Maolalaigh 2001: 8). There also seems to have been a constraint in Manx forbidding any vowel except /ə/ and /a/³⁰⁴ in unstressed closed syllables.³⁰⁵

Broderick (*HLSM* III: 153) claims that ‘[t]he addition of the Anglo-Norman/Middle English loanwords with forward stress would fit into this pattern, and perhaps help to establish it, but would follow rather than establish the stress-shift’. Broderick mentions the items such as *jarrood* (G. *dearmhad*) with secondary long vowels from fricative vocalization, but does not discuss how they fit into the chronology of the other developments, except to note that they pre-date Phillips (1610).

³⁰⁴ And perhaps /e/ in *-er* (G. *-óir*).

³⁰⁵ Compare Ó Dochartaigh’s (1987: 57) discussion of the relationship between vowel shortening and vowel quality reduction.

5.1.1.5 Ó Sé (1991)

Ó Sé (1991)³⁰⁶ agrees with Broderick in proposing that unstressed vowel shortening occurred before stress shift, but for different reasons. He notes that his ‘outline is of course speculative, but it is designed to take account of geographical and social factors, as well as using such insights as can be gained from quantification’. Ó Sé dates unstressed vowel shortening to the period between the ninth and thirteenth century when Man was politically, as well as geographically, close to western Scotland and Ulster:

It is reasonable to assume that Manx speech shared in linguistic changes taking place in the vicinity, and that unstressed vowel shortening arrived as part of a process of spread throughout the region; [Ó] Dochartaigh (1987: 34) shows it to have diffused across Ulster from northeast to southwest and it seems reasonable to regard it as a Scottish innovation which gradually spread south, into Ulster and Man, over a period of some centuries.

(Ó Sé 1991: 167)

For the relationship between the length of the stressed and unstressed syllable, Ó Sé (1991: 168) cites the case of Achill Irish (Ó Dochartaigh 1978; 1987: 32–4), which has been observed to show the opposite correlation to that found in Manx:

³⁰⁶ Ó Sé’s is the most detailed treatment of the topic to date, being based on a quantitative analysis of items from *HLSM* II. Some of Ó Sé’s analysis of individual items is faulty, however, as the following examples show (the list is not exhaustive). The items *folliaight* ‘secret’ (G. *foliaigheacht*) and *markiagh* ‘ride’ (G. *marcaigheacht*) should not be included in Ó Sé’s (1991: 177) ‘contracted’ category, as there is no evidence that *-aigheacht* ever gave */i:xt/ in Manx as it did in Irish. Rather the treatment is as in Scottish Gaelic, with retention of a syllable boundary /i.axt/ (Non-coalescence of the vowels here is probably due to the retention of /a/ before /x/, whereas *-(a)idh/ghe(a)-* elsewhere gives /i:/ which can attract stress, as in *Creesteenyn* ‘Christians’ /kri(:)sti:nən/ (**Críostaidheannan* > **Críostaíonnan*), but not *Creesteeaght* ‘Christianity; the eucharist’ /'kri:sti.axt/, G. *Críostaidheacht*). *Caaig* ‘jay’ (Ir. *cabhóg*, ScG. *cathag*) and *scaan* ‘ghost’ (G. *scáthán*) are included under vowel shortening rather than stress shift, but owing to coalescence of the two syllables the results of the two treatments would be formally identical, so these items should have been excluded (Ó Sé 1991: 178). *Tanroag(an)* ‘scallop’ is included under stress shift (Ó Sé 1991: 179), but in fact the basic form is *roagan* (Cregeen), with an obscure first element *tan-* (*HLSM* II: 442); it seems that we in fact have vowel shortening in the suffix *-án*, perhaps from **rothacán* based on *roth* ‘wheel’? *Thassane* ‘hiss’ is included as an exception (stress shift despite initial heavy syllable), on the basis of Ir. *tasán*, but cf. ScG. *tàsan* (Dwelly). *Seaghyn* ‘sorrow’ is explained as **saochán*, and thus an exception of the opposite kind, but may rather be derived from *suaith-* (§3.9.7), and is probably a regular development of an original trisyllable (§5.1.5.5).

words of the *beagán* ‘few’ type retain their second vowel long whereas the *mórán* ‘many’ type shorten it [...] Manx shows another way for shortening to spread, by an assimilative rather than a dissimilative relationship between the two syllables.

(Ó Sé 1991: 168)

Vowel length assimilation, however, is not a known phonological process. An alternative explanation for the Achill development would be that stress shift occurred in light-heavy items in order to resolve the violation of the Weight-to-Stress Principle, followed by stress retraction as in other Connacht dialects (O’Rahilly: 99–100; Ó Sé 1984; Ó Sé 1989: 159–60), while in heavy-heavy items there was no stress shift, but shortening of the unstressed long vowel. As for Manx, assuming that Ó Sé is right that vowel shortening in light-heavy items preceded stress shift in heavy-heavy ones, Green’s (1997) account, discussed below, provides a better explanation.

Ó Sé (1991: 169) claims that vowel shortening spread through the lexis by creating doublets, affecting first light-heavy items and later beginning to affect those in the heavy-heavy category:

By assuming short-term variability in the operation of unstressed vowel shortening we may find an explanation for the doublets, and for the fact that they involve only words with a heavy initial syllable, the shape which we associate with stress shift. I propose that unstressed vowel shortening spread by creating doublets, so *arán* > (*arán* ~ *arǎn*). As it diffused through the lexicon over time the earliest words to have been affected [...] lost their original forms (so only *arǎn* survives) but the more recently affected would retain a double form (‘*dornóg* ~ ‘*dornög*). Those doublets which survived in Late Spoken Manx (*caraig*, *dornaig* etc.) come from this overlap between the two sound changes.

(Ó Sé 1991: 169)

However, the restriction of doublets to original heavy-heavy items can be otherwise explained. Firstly, initial stress remains the most frequent pattern in Manx, so there is always potential analogical pressure to assimilate to this pattern (especially, perhaps, with less frequent or poorly remembered words). Secondly, some of the doublets noted by Ó Sé (1991: 177–8) contain transparently analysable morphemes which could easily be restored (e.g. *dornaig* ‘handle’ = *doarn* ‘fist’ + diminutive; *eeasteyr*

‘fisherman’ = *eeast* ‘fish’ + agentive suffix), with the unstressed version of the suffix substituted.

Thirdly, postlexical stress retraction in Irish dialects with forward stress is a well-documented phenomenon (Ó Sé 1989: 151; 2000: 52–55; Iosad 2013: 70–1) and could explain some of these cases. Indeed, Ó Sé (1989: 156) himself is careful to note this possibility when discussing the evidence of Lavin (1957) on stress in an East Mayo Irish dialect. This appears to be the case in some of the instances from *HLSM*: for example, in *yn dornaig y skynn shoh* [*sic*] ‘the handle of the knife’ **ən 'dörnɛg ə skin fɔ:** (*HLSM* II: 128), *dornaig* would be expected to have a secondary postlexical stress within the genitive phrase. The same speaker (TC) also has expected stress in the same word: **dör'nɛ:g, dør'nɛ:g**.

Orthographic evidence is decidedly against the co-existence of by-forms with initial stress: spellings such as *faasaag*, *caraig*, *eeasteyr*, *faagail* all clearly show final syllables with long vowels, and there are no known orthographic variants such as **faasag*, **carrag*, **eeaster*, **faagal*. Moreover, if the variants with initial stress were original, we would expect them to preserve the original quality and length of the vowel in the first syllable. However, the form of *caraig* ‘beetle’ (G. *ciaróg*) with initial stress given in *HLSM* (II: 59) is **k'arɔg** (alongside finally stressed **k'ə'rɛ:g**, both W:S), whereas, if a form with the original initial stressed syllable had survived without undergoing stress shift and initial syllable vowel reduction, we would expect a form **keearag*, CM **/'kʲiɔrag/*, LM **/'kʲi:rag/* (cf. ScG. *ciarag*).

It therefore seems clear that forms such as **k'arɔg** represent secondary, most likely postlexical, restressing of the initial syllable, rather than the result of an inchoate spread of Ó Sé’s proposed lexical diffusion of post-tonic vowel shortening into the heavy-heavy category.

According to Ó Sé (1991: 170), vowel shortening was halted by external sociolinguistic factors:

The social cause for unstressed vowel shortening being discontinued will have been the collapse of the Kingdom of Man and the Isles in 1266 A.D., providing a “catastrophic overturn of the social values that are helping the change proceed

in an orderly fashion” (Coates 1987: 194). Manx was subsequently cut off from linguistic changes affecting other areas of Gaelic speech.

(Ó Sé 1991: 170)

It is plausible that this historical turning-point would prevent new changes taking place in other Gaelic dialects from diffusing into Manx. It is unclear, however, why an ongoing change which was supposedly already well-established in the language would be halted in this way. On the contrary, given that unstressed long vowels appear to have been preserved longer in high-register literary varieties used or patronized by Gaelic-speaking elites, it is more likely that the removal of such elites would accelerate, rather than halt, the change (cf. O’Rahilly: 105; Ó Dochartaigh 1978: 332).

Ó Sé (1991: 171) claims that ‘stress shift in Manx will postdate the thirteenth century, and will therefore have coincided with increasing contact with English (containing a large Romance substratum by this stage)’. He suggests that ‘there is good reason to believe unstressed vowel shortening to be an internal development in Gaelic’ but that ‘it is not improbable that language contact did play a role in the stress shift’.

Regarding the ‘contracted words’ with original medial fricatives, Ó Sé (1991: 169–70) claims that they behave similarly to items with original long vowels:

This study casts some new light on the history in Manx of words like *bunadhas*, *geanamhail*, *peacamhail*, although only 25 such words occur in the sample. The fact that these contracted words do not pattern very differently from those with original long vowels suggests that vowel shortening did not greatly precede contraction. Some of them are attested in seventeenth century Manx with forms which have not survived [...] Phillips’ translation of the Book of Common Prayer (c. 1610) has *gan(n)oil*, *gniartuail* for *gennal*, *niartal* [...]. It is not impossible that most or all of these words were subject to variability of form at that time.

(Ó Sé 1991: 169–70)

However, it is not the case that the ‘contracted words’ pattern similarly to those with original long vowels; on the contrary, they are not subject to initial syllable weight conditioning, generally showing forward stress regardless of the weight of the preceding syllable (*bunnys*, G. *bunadhas*, and the adjectives in *-oil*, *-al*, G. *-amhail*,

are special cases, §5.1.4). Ó Sé presumably failed to perceive this owing to the smallness of his sample.

5.1.1.6 Green (1997)

Green (1997: 92) explains first syllable conditioning as follows:

At an early date, Manx promoted TROQ and demoted MAX(μ) [...] in the primary grammar (made up of native words), this had the effect of shortening the long vowel in *béga:n* [...]; but there was no effect on (H H) words like *bó:ka:n* [...], because they did not violate TROQ.

(Green 1997: 92)

This relates to ‘trochaic quantity’ (Prince 1990: 359; Hayes 1995: 79–85), the observation that in trochaic languages light-light (and heavy-heavy) trochees are better formed than light-heavy ones, which provides a motivation for reduction of light-heavy words to light-light without affecting the heavy-heavy category.

Green (1997: 92) assumes that Anglo-Norman borrowings were prespecified for final stress. He claims that stress shift occurred once vowel shortening in the *beagán* type had occurred, and was prompted by the analogy of the Anglo-Norman items:

Later, as happened in [Scottish] Gaelic, old (L H) words like *b'égan* were reinterpreted as underlyingly (L L). Once this happened, the only (L H) words in the language were the end-stressed Anglo-Norman words like *bod'é:l*. At this point, the *Cw* clusters [...] received an epenthetic *a*, and later, the sequence *awə* contracted to *u:*.

(78) $CwV > Cawə > Cu:$
d'árwad > d'árəwəd > d'áru:d ‘forgetting’ [*jarrood*, G. *dearmhad*]

The new (L H) words like *d'áru:d* took over the forward stress of the Anglo-Norman words, becoming *d'arú:d* and the like. Also, the native (H H) words like *bó:ka:n* took over the Anglo-Norman stress pattern, becoming *bo:ká:n*.

(Green 1997: 92)

Green (1997: 90–3) claims that items with historical medial fricatives are treated differently according to whether the fricative was originally intervocalic (e.g.

geanamhail, Manx *gennal*) or followed a consonant (e.g. *dearmhad*). A wider set of evidence casts doubt on this, however (§5.1.4).

Green's explanation for first syllable conditioning by appealing to cross-linguistic metrical preferences is phonologically plausible. A possible objection could be raised in relation to the fact that in Late Manx all unstressed historical long vowels are apparently shortened, including those in original initial syllables (O'Rahilly: 115; Jackson: 20; *HLSM* III: 148). Green's account would require two long vowel shortenings, first affecting light-heavy items (e.g. *arán* /'ara:n/ > /'aran/, Manx *arran* 'bread') and later affecting initial syllables after stress shift (e.g. *fuarán* /'fuəra:n/ > /fuə'ra:n/ > /fa're:n/ > [fə're:n], [frɛ:n], Manx *farrane* 'fountain, spring'). It might be argued that it would be more economical to posit only one vowel shortening, following stress shift. However, there is some evidence that initial syllables in stress-shifted items are treated differently to post-tonic syllables, and that vowel shortening may be a more recent development in the former environment (§5.1.3).

5.1.2 An explanation for stress shift targeting heavy-heavy items

A possible explanation for early stress shift targeting only heavy-heavy items may be found in the phenomenon of peak delay, whereby the pitch peak moves further to the right in longer words than in shorter words. As Iosad (2016a: 82) notes, '[i]n languages with peak delay, longer domains are associated with a later placement of the tonal peak; hence, disyllabic words would have associated their peaks further to the right compared to monosyllabic words'. One might reasonably suppose that longer syllables, and thus overall word length, would also result in greater peak delay, and thus that heavy-heavy items would show pitch peak further to the right than light-heavy items. There is also potential for a mutually-reinforcing relationship in that pitch rises are better perceived on longer vowels, and longer vowels are perceived as having rises. These factors could result in reanalysis of initially-stressed heavy-heavy words as having primary stress on the second syllable.

Both this account, whereby stress shift preceded post-tonic vowel shortening, and Green's proposal discussed above, which posits the reverse, seem plausible. Since both changes, and also vocalization of medial fricatives, took place before the seventeenth century and therefore before the beginning of the Manx literary tradition, it may not be possible to reach a firm conclusion on this matter.

5.1.3 Initial syllable shortening in items with forward stress

Pretonic vowels in old heavy-heavy words are noted as short in descriptions of Late Manx (O'Rahilly: 115; Jackson: 20; *HLSM* III: 148), and generally transcribed as such in *HLSM* etc., in contrast to the situation in Munster Irish where such vowels retain their length (e.g. Ó Sé 2000: 46–55), but the spelling evidence presents a mixed picture. Morphologically transparent forms with stressed endings usually retain the long vowel spelling of the stem, but this may be merely orthographic:

faagail 'leaving', G. *fág(bh)áil*. **fɛ'gɛ:l'** NM, HB, **fə'ga:l'**, **fa'ga:l'** JK³⁰⁷
(*HLSM* II: 154)

faag 'leave', G. *fág*, (impv.) **fɛ:g** TT, JW, *faagit* (part.) **fɛ:gət'** HK, **fɛ:git'** NM,
fɛ:git'³ AK, **fa:git'** JTK (*HLSM* II: 154)

mooarane (*mórán*) **mu're:n** JW (*HLSM* II: 305)

mooar 'big, great', G. *mór* **mu:r**, **mu:ə** TC, **mu:ə** JK, NM, **mu:** TK, TL, **mə:ər**
NM, **mɔ:r** J:TL, **mɔ:r**, **mɔ:ər** J:EK, J:JTK, J:HB, **mu:** W:S, pl. **mu:rə**
TC, NM (*HLSM* II: 305)

Items where the first syllable is no longer a recognizable independent element tend to be spelt without indication of vowel length, as in the following examples. Notice that original vowel quality tends to be indicated³⁰⁸ (although with some interchange between e.g. /u/ and /o/, /a/ and /e/; and /ia/, /ua/ > /a/; /ə:/ > /a/, /o/, /u/):

Trinaid 'Trinity', G. *Tríonóid*
smarage 'ember', G. *sméaróid*
saveen 'slumber', G. *sáimhín*

³⁰⁷ Also with stress retraction 'fɛgɛl', 'f'ɛ:yal (JTK).

³⁰⁸ Some deviations from this can be explained by the consonantal environment, e.g. *rollage* 'star' from G. *réaltóg*, where initial [rʲ] results in a back quality of the following vowel, represented by <o> (cf. *roie* 'run', G. *rith*; *roih* 'arm', G. *righ*) (cf. §4.2.4).

cronnane ‘purring’, G. *crónán*
suggane ‘straw rope’, G. *súgán*
sonnaase ‘arrogance’, G. *saobhnós* (§3.9.11)
caraig ‘beetle’, G. *ciaróg*
carrane ‘sandle’, G. *cuarán*

However there are other items such as *faasaag* ‘beard’ (G. *féasóg*), *peeaghane* ‘hoarseness’ (G. *piachán*), among others, where the spelling could reasonably be interpreted to allow for maintenance of length or diphthongization in the initial syllable, perhaps in careful speech. G. *féas*, **piach* have no attested independent existence in Manx. There are also examples of transparent formations with the semi-productive suffix *-oil* /'o:l̪/ (G. *-(e)amhail*, Ir. *-(i)úil*, ScG. *-ail, -eil*), such as *gloyroil* ‘glorious’ (G. **glóireamhail*, cf. Ir. *glórmhar*, ScG. *glòrmhor*), which might reasonably be expected to retain some length (and perhaps secondary stress?), i.e. [glo(:)'ro:l̪]. Items such as *thousane* ‘thousand’ (**təu'zɛ:n** EK_h, **təu'zɛ:n** NM, **tou'za:n** JK, *HLSM* II: 450), *sidoor* ‘soldier’ (G. *saighdiúir*), *lourane* ‘leper’ (G. *lobhrán*), *boirane* ‘troublesome person’ (G. *buaidhreán*), in which a diphthong is, or may be, retained in the initial unstressed syllable, show that bimoraic syllables were tolerated in this position, although they are not found post-tonically.³⁰⁹

The evidence presented here shows that pretonic original long vowels and diphthongs (a) retained their quality in the Classical and Late Manx periods to a sufficient degree to be recognized in orthography, and (b) may, in some cases at least, have (optionally) retained their duration.

This is in marked contrast to the treatment of post-tonic closed syllables, where all long vowels are reduced either to /a/ or /ə/ (and /e/?), the only vowels which can occur in this position. This differential treatment between pretonic and post-tonic original long vowels might point towards the two distinct shortenings required by Green’s hypothesis (§5.1.1.6), one preceding stress shift and the other following it.

³⁰⁹ However, these seem to have often been reduced to monosyllables and even schwa in production, e.g. *sidoor*, sə'dɔr TC (*HLSM* II: 407), *sidžüryn* [si'dʒɔrɐ̃] (Rhys 1911: 6: 58). Phi-ips' spings appear to represent both diphthongal and monophthongal realizations: *sajúr*, *sêidjúr*, (pl.) *sajúrjn*, *sajürjn* (3), *sejürjn*, *seidjürjn*.

On the other hand, the peak delay account of stress shift discussed above (§5.1.2), whereby 'HH words became H'H or L'H could perhaps involve an intermediate stage with secondary stress retained — or at least some form of prominence — on the initial syllable, i.e. ,H'H or ,L'H, which might explain retention of vowel quality and length in the initial syllable. At any rate, it is not implausible that there should be some difference in treatment between vowel shortening in a syllable originally stressed, and in a syllable which had never borne stress.

In addition, paradigmatic uniformity in alternations such as *faag* ~ *faagail* would provide a motivation for retention of vowel quality and length in the stem when unstressed. This motivation does not exist with regard to post-tonic original long vowels: although certain suffixes have developed stressed and unstressed by-forms such as *-án* > *-an* /an/, *-ane* /'ɛ:n/, there is no alternation between these in a single paradigm.

There is some evidence of complete loss of the pre-tonic unstressed vowel (Rhÿs: 15, 21, 43; O'Rahilly: 115), as found more widely in Irish dialects (Ó Sé 1984). In a handful of items loss of the unstressed vowel is shown in the orthography.

plaase 'palace', G. *pálás*

praase (HLSM II: 354), *puddase* (Cr.), *potase* (K.) 'potato', cf. Ir. *práta streipe* (Cr.) 'stirrup', G. *stíoróip* (O'Rahilly: 115)

farrane 'spring, fountain', G. *farrane*, **fŷrān** [fə're:ɲ], **frān** [frɛ:n] (Rhÿs: 15)
carrane 'sandle', G. *cuarán*, **cŷrān** [kə're:ɲ], **crān** [krɛ:n] (Rhÿs: 15, 21),
k'ərə:ɲn, **k'ɲre:nən** SK, **kə're:n** J:EK, **krē:nən** TC, **krɛ:nən** JTK
(HLSM II: 60)

Mylecharaine, surname, G. *Mac Giolla Chiaráin* ...**ch(ŷ)rāñ** [x(ə')rɛ:n] (Rhÿs: 15, 43), only without syncope in HLSM (II: 490): **moləka're:n** TT, **'malika're:ɲn**, **məɲkə're:ɲn** JW

5.1.4 Long vowels arising from vocalization of fricatives

It is clear that first syllable conditioning does not apply to the category of items where long vowels in non-initial syllables result from Ó Sé's (1991) 'contracted words', since in most cases these have forward stress regardless of the weight of the initial syllable.

The general development of such items may be outlined as follows, with svarabhakti assumed in original clusters such as /rv/, /rjç/:

G. *dearmhad* > Manx *jarrood* ‘forget’
/ˈdʲer(ə)vəd/ > [ˈdʲarəwəd] > /dʒaˈru:d/

G. *airchis* > Manx *erreeish* ‘compassion’
/ˈarj(ə)çəf/ > [ˈarjəjəf] > /eˈri:ʃ/

The following is an exhaustive list of ‘contracted’ items with forward stress the etymology of which can be securely determined.³¹⁰

Historical light³¹¹ initial syllable:

annoon /aˈnu:n/ ‘weak’, G. *anbhfann*
anugh (Ph.) /iˈnu:x/ ‘timely’, G. *ionbhadhach*
arroogh, *erroogh* /aˈru:x/ ‘chimb’, G. **earrbhach*, ScG. *earrach*, EIr. *errbu*
(*eDIL*)
berreen /beˈri:n/ ‘cake’, G. *bairghean*
karús, *karus*, *karryús*, *karryûs* (Ph.) /kaˈru:s/ ‘Lent’, CM *Cargys* /ˈkargəs/, G.
*Carghas*³¹²
erreeish /eˈri:ʃ/ ‘compassion’, G. *airchis*
elúyn (Ph.) /eˈlʲu:nj/ ‘nurture’, G. *aileamhain* (CM *ellyn*; §5.1.4.1)
ferroogh /feˈru:x/ ‘eyelid’, G. *forbhrú* etc.³¹³
inneen /iˈnʲi:n/ ‘daughter, girl’, G. *inghean*
jarrood /dʒaˈru:d/ ‘forget’, G. *dearmhad*
kiannoort /kʲaˈnu:rt/ ‘governor’, G. *ceannphort*
kynoauin (K.) /kʲiˈnʲo:nj/ ‘fate’, G. *cinneamhain*
muinneel /muˈnʲi:l/ ‘sleeve’, G. *muinchille*
parús, *parus* (Ph.) /paˈru:s/ ‘paradise’, G. *parrthas*, *parrdhas*³¹⁴

³¹⁰ *Pandoogh* (Cr.), *pantoogh* (K.) ‘pant’ probably has /-u:x/ on the pattern of *buirroogh*, *mhinnnoogh*, *strinnoogh*. *Khennoogh* (Cr.) ‘carping, cavilling’ might be similarly explained as a derivative of G. *cáin*. *Ladoose* (K.) ‘thrift, industry, economy’ may correspond to Ir. *ladas* ‘self-will, obstinacy’ with /u:s/ on the pattern of *tarroose* (PSD: 15) ‘industry’, from *tarroogh*. An item of similar shape, *khyrloghe*, translating ‘brokenhanded’ (Leviticus 21. 19), ‘unsound, carious’ (Cr.), ‘benumbed with cold, torpid’ (K., s.v. *kyrloghe*) is probably a compound containing *lámhach* (first element *corr-*, *cearr-*, *crith-*?).

³¹¹ It might be pointed out that the svarabhakti assumed in earlier forms of these words would give an initial heavy syllable (cf. *calmane*, G. *colmán*), i.e. [ˈdʲarəv]əd]. But it is unclear how the weight conferred by this could be retained once the svarabhakti vowel + fricative had coalesced as a new long vowel [dʲaru:d].

³¹² See fn. 94.

³¹³ See O’Rahilly 1942b: 216–7.

³¹⁴ CM *pargys*, *pargeiys* (Thomson 1995: 115).

shilleeid (Cr.), *shelleed*, *shilleed* (K.), /ʃe'li:di/ 'slug, snail', G. *seilchide*
strinnoogh /stri'nu:x/ 'snore', G. *srannfach*, *srannfadhach*
tarroogh /ta'ru:x/ 'thrifty, industrious', G. *tarbhach*, *tairbheach*
thallooin /ta'lu:n/ 'earth, land' (gen.), G. *talmhain*

Historical heavy initial syllable:

buirroogh /bu'rju:x/ 'roar', G. *búirfeadhach*
brooightooil /brux'tu:li/ 'belch', G. *brúchtghail*
carnoin (Cr.) /k'ar'no:n/, *kiornane* (K.), 'large beetle', G. *cearnabhán* etc.³¹⁵
fegooish /fe'gu:ʃ/ 'without', G. (f)éagmhais
jymmoose /dʒi'mu:s/ 'wrath', G. *díomdha* + *as*
imnea /im'n'e:/ 'concern, anxiety', G. *imnidhe* etc.
jeanúgh, *jeanugh* (Ph.) /dʒe'nu:x/ 'maker' G. *déanmhach*, *déanmhaidh* + *ach?*
kegeesh /ke'g'i:ʃ/ 'fortnight', G. *cóicthigheas*
lannoon /la'nu:n/ 'twin', G. *lánamhain*
mennuigh (K.), *mhinoogh* (Cr.) /me'nu:x/ 'yawn', G. *méanfach*, *méanfadhach*
sheeloghe /ʃi'lo:x/ 'generation', G. *síolbhach*
smooirooil (Cr.) /smu'ru:li/ 'smile, smirk, titter', Ir. *smúraíl* (ÓD)

Similar developments can also be seen in Manx surnames (e.g. *Kerruish* /kie'ru:ʃ/, G. *Mac Fhearghais*, Quilliam 1989: 65) and place-names (e.g. *Barrule* /ba'ru:l/, Norse *varða-fjall*, *vörðu-fjall*, *PNIM* III: 307, IV: 62). There is also a stressed plural termination *-(t)eenyn* which can be traced to medial fricative vocalization:

Creestee /'kri:sti/ 'Christian', G. *Críostaidhe*
Creesteenyn /kri'sti:nən/ 'Christians', G. *Críostaidhe* + *anna* + *an*

annym /'anəm/ 'soul', G. *anam*
anmeenyn /an'mi:nən/, G. *anam* + ?*adha* + *anna* + *an*

The reconstruction is conjectural however, and there is likely to have been a degree of reanalysis and restructuring, cf. the complex array of plural suffixes and extensions and combinations thereof found in Connacht Irish dialects (e.g. Ó Curnáin 2007: 659–

³¹⁵ Cregeen's form points first to shortening of *-án* to /an/, as regularly in trisyllables, i.e. */k'k'arnəvan/, followed by vocalization and stress shift to /k'ar'no:n/. Kelly's form suggests either a contracted form **cearnán*, with stress shift as in other heavy-heavy items, or modification of the termination /'o:n/ to /'e:n/ by analogy with other diminutives in *-ane*. Both forms are attested in *HLSM* (II: 60): **ko'nɛ:n**, **k'ó'nɛ:n** TC, **kə'no:n** W:S.

881). This termination is found in the following nouns (all in Cregeen and/or the Bible):

annym ‘soul’, G. *anam*, pl. *anmeenyn*
Creestee ‘Christian’, G. *Críostaidhe*, pl. *Creesteenyn*
gioal ‘pledge, mortgage’, G. *geall*, pl. *gioalteenyn*
glione ‘valley’, G. *gleann*, pl. *glionteenyn*
jaghee ‘tithe’, G. *deachmhadh*, pl. *jagheenyn*
keeill ‘church’, G. *cill*, pl. *kialteenyn* (G. *ceall-*)
lieen ‘net’, G. *líon*, pl. *lieenteenyn*
raane ‘surety’, G. *ráth*, ScG. *ràthan*, pl. *raanteenyn*

According to Cregeen, some of these have a variant plural ending *-(t)eeyn*, which presumably represents unstressed /-ti.ən/. Note also other derivatives such as *raanteenys* ‘suretiship’, *jagheenys* ‘to tithe’.

A similar formation is *naboohnyn* /na'bu:nən/ ‘neighbours’ (also *naboohn*),³¹⁶ sg. *naboo* /'nɛ:bu/ (ScG. *nàbaidh*), also *naboohnys* ‘neighbourhood’.

Finally, there is the adjective-forming suffix G. *-amhail*, which has two reflexes in Manx, stressed *-oil* /'o:lɪ/ and unstressed *-al* /al/. The following list is restricted to words appearing in the Bible:

***-oil* (also *-o(i)lagh*)**

historical heavy initial syllable: *baasoil* ‘deadly’ (G. *bás*), *breeoil* ‘powerful, effectual’ (G. *brígh*), *craidoilagh* ‘mocking’ (G. *cnáid*), *eadolagh* ‘jealous’ (G. *éad* + *amhail* + *ach*), *feohdoil* ‘hateful, abominable’ (G. *fuath*), *floaoil* ‘fluent’ (Eng. *flow*), *foayroil* ‘favourable’ (G. *fábhar*), *gerjoil* ‘joyful’, *gerjoilagh* ‘comfortable’ (G. *gaird-*), *gloyroil* ‘glorious’ (G. *glóir*), *graihoil* ‘loving’ (G. *grádh*), *graysoil* ‘gracious’ (G. *grás*), *laoil* ‘daily’ (G. *lá*), *reeoil* ‘royal’ (G. *rí*), *sayntoilagh* ‘covetous’ (G. *sainnt*), *schleioil* ‘skilful’ (G. ?*gleo*), *sheeoil* ‘peaceful’ (G. *síth*), *slayntoil* ‘wholesome’ (G. *sláint*), *staydoil* ‘stately’ (G. *stáid*), *trocoil* ‘merciful’ (G. *trócaire*)

historical light initial syllable: *boggoil* (G. *bogadh*), *chymmoil* ‘compassionate, pitying’ (G. *time*), *creeoil* ‘heartly, courageous’ (G. *croidhe*), *ennoil* ‘beloved’ (G.

³¹⁶ TC’s form **na:bunən** must be a blend of the two variants; whereas the same speaker has the expected forward stress in **na'bu:nəs** ‘neighbourhood’ (*HLSM* II: 318).

aithne), *messoil* ‘fruitful, fertile’ (G. *meas*), *paittoil* ‘pestilential’ (G. *pait*), *peccoil* ‘sinful’ (G. *peaca*), *raahoil* (G. *rath*)

polysyllabic stems: *onnoiril* ‘honourable’ (G. *onóir*), *spyrrydoil* ‘spiritual’ (G. *spiorad*)

-al

historical heavy initial syllable: *booisal* ‘thankful, pleasing’ (G. *buidheachas*), *cairal* ‘just, righteous’ (G. *cóir*), *kenjal* ‘kind’ (Eng., cf. Ir. *cineálta*), *pleasal* ‘pleasing’, *pooaral* ‘powerful’

historical light initial syllable: *aghtal* ‘clever, capable’ (G. *acht*), *baghtal* ‘clear, evident’ (G. *beacht*), *blaystal* ‘tasty’ (G. *blasta*), *costal(agh)* ‘costly’, *cronnal* ‘evident, conspicuous, famous’ (G. *cron*), *dunnal* ‘courageous, valiant’ (G. *duine*), *gennal* ‘merry, glad’ (G. *gean*), *meshtal* ‘drunk’ (G. *meisce*), *niartal* ‘mighty’ (G. *neart*)

The unstressed form *-al* is not found in Phillips, where *booisal*, *dunnal*, *gennal*, *meshtal*, *niartal* all appear with stressed *-oil* (Thomson 1953: 33–4).³¹⁷ Although there may be some tendency towards *-oil* with heavy initial syllables and *-al* with light initial syllables, there is no consistent pattern, and the evidence of Phillips seems to suggest forward stress with *-oil* across the board as with other ‘contracted’ words, with forms such as *niartal* being later developments. The division between *-oil* and *-al* may have developed by analogy with the reflexes of the verbal noun ending *-áil*, stressed *-ail*, *-eil* /'ɛ:l/, unstressed *-al* /al/, where the long vowel is original. It may be significant that the adjectives with *-al* can in general be characterized as more everyday, register-neutral lexis, whereas many of those with *-oil* appear to belong to a more literary higher register, including terms of religious significance such as *peccoil*, *gloyroil*, *feohdoil* etc., and several (*gloyroil*, *onnoiril*) appear to be new formations in Manx unattested in other Gaelic varieties (*glórmhar* is Ir./ScG. for ‘glorious’, for example). *Onnoiril* and *spyrrydoil* have stress on a third syllable, whereas there is usually shortening in such cases (§5.1.5.5). It appears that *-oil* and *-al* remained as semi-productive suffixes

³¹⁷ But Ph. *duynalys* ‘humanity’, CM *dunnalys*, alongside adjective *duinôil*; Ph. *gannylys*, *ganlys* ‘gladness’, CM *gennalys*, alongside adjective *ganoil* etc.

in Manx and therefore these items cannot be taken as evidence of the general pattern in words containing secondary long vowels from vocalized fricatives.

Green (1997: 90–3) claims that items with historical medial fricatives are treated differently according to whether the fricative was originally intervocalic (e.g. *geanamhail*, Manx *gennal*) or was part of a consonant cluster (e.g. *dearmhad*). The former type, in this account, developed an unstressed long vowel (>*/'gjeno:lɪ/) at an early stage, and thus were treated like words with historical post-tonic long vowels. This implies that such items would be subject to initial syllable conditioning, and that the initial stress in *gennal* is explained by the lightness of the initial syllable (as with the *beggan* type). However, this overlooks the evidence regarding the *-amhail* suffix discussed above. Besides these adjectives, other items with the *geanamhail* pattern are rare, and two of them (*bunnys* < *bunadhas* and *ellyn* < *aileamhain*) appear to support Green's claim. However, as discussed below, these may be special cases (§5.1.4.1). On the whole, then, it appears there is no strong evidence for a difference in treatment between the *geanamhail* and the *dearmhad* types.

5.1.4.1 Exceptions

The two exceptions to the general rule that 'contracted words' show stress shift regardless of initial syllable weight (apart from *-amhail* adjectives) are *bunnys* 'almost; most' (G. *bunadhas*) and *ellyn* 'behaviour' (G. *aileamhain*).³¹⁸ Both of these cases can be explained by lexicalization of post-lexical light stress and/or stress retraction in collocations. As an adverb 'almost', *bunnys* would often have light sentential stress, and as a noun 'majority' it would often be followed by a genitive or prepositional phrase bearing greater stress:

³¹⁸ For this etymology see Thomson (1953: 205), Ó Maolalaigh (2006: 72). Broderick (*HLSM* II: 145) derives it less plausibly from *ealadhain* 'art, craft, skill' which would be expected to give */al-/ or */ol-/ (§2.1.3) rather than /elɪ-/. The only attested transcribed form is **ul'on** (JTK), which has the expected slender /l/ but apparent confusion in the initial vowel. The semantic development from *aileamhain* 'nurturing, upbringing' to 'good / bad manners, behaviour' also seems more straightforward.

ˌbunnys ny Cree' steenyn (SW: 178)
 yn ˌbunnys dy Chree' steenyn (SW: 183)
 'most Christians'

The noun *ellyn* 'behaviour, manners' is rarely found outside the collocations *ellyn mie* 'good behaviour' and *drogh-ellyn* 'bad behaviour'. Certainly in the first of these, and possibly the second, heavier stress on the adjective would be expected, i.e. ˌellyn 'mie. Phillips has the latter phrase as *ellyn mei* (Moore and Rhÿs 1895 I: 452), showing the prosody of the later form, as well as *elúyn* on its own translating 'nurture' (Moore and Rhÿs 1895 I: 414), which appears to show the expected development with forward stress on a long vowel /e'li:ni/. It is possible that there had been a semantic split between these two forms, and that they were no longer recognized as the same lexeme.

5.1.5 First syllable conditioning: further details

5.1.5.1 Heavy sonorant clusters

Ó Sé (1991: 162) describes the following category of initial syllables as counting as heavy and causing stress shift:

Words in which a short vowel is followed by a cluster of sonorant consonant + voiced consonant (e.g. *ordóg* 'thumb') have tended to be treated in Manx like words with a long vowel in the first syllable (e.g. *fág(bh)áil* 'leaving'). Vowels preceding such syllables were regarded as half long (*síneadh meadhónach*) by mediaeval Irish grammarians (Greene 1952). Clusters which are not voiced throughout do not have this lengthening effect on the first syllable (e.g. *altóir*).
 (Ó Sé 1991: 162)

However, it appears that some combinations of sonorant + (historically) voiceless consonant can also count as heavy and cause stress shift. Ó Sé includes some of these in his 'VRC' ('Short vowel + cluster of sonorant consonant and voiced consonant') category, presumably on the strength of the Classical Manx spelling, namely *chyndaa* 'turn' (G. *tiontódh*),³¹⁹ *undaag(agh)* 'nettles' (G. *neanntóg*).

³¹⁹ Medial voicing may be early here; Phillips has <nd>, and cf. ScG. *tionndadh*.

cheinjean ‘bonfire’, G. *teinteán*
chyndaa ‘turn’, G. *tiontódh*
gamshoge (K.) ‘buffoon’, G. *gaimseog*
injeig ‘paddock, enclosure’, G. *inseog*
minjeig ‘bundle of heather; she-goat, young hind’, G. *minnseóg*
molteyr ‘deceiver’, G. *mealltóir*
undaagagh, ondaagagh ‘nettles’, G. *neanntóg*
pundaig (Cr.) ‘hard stem of grass’, cf. Ir. *puntán*

Stress shift is also found irregularly after certain other clusters:

cartage ‘gadder’, G. *cart* ‘tan, scrape clean, clear away’ + *óg?*
gorteog (K.) ‘stingy woman’, G. *goirteóg* (perhaps after Shaw 1780)
fockleyr ‘dictionary’, G. *foclóir*
kercheen ‘underling’, G. *ceirt* ‘rag’, *ceirtín* (*eDIL*), cf. *ceirteachán* (ÓD)
kishteig, kishteen (K.) ‘casket’, *cisteóg, -ín*
raghtaneys (Ecclesiasticus 10. 21), ‘roughness’, G. *r(e)acht* + *án* + *as*
shughlaig (Cr.), *shughlage, shulchaag* (K.) ‘sorrel’, cf. G. *sealgán* etc., ScG.
sealbhag, samhrag

But the same clusters may also be followed by vowel shortening:

braghtan ‘bread with butter etc.’, G. *breachtán*
partan ‘crab’, G. *partán*
carthan ‘tick’, G. *(s)c(e)artán*

5.1.5.2 Exceptions

Initial stress and post-tonic vowel shortening in heavy-heavy items:

aashag ‘seat to rest on, a seat made of matted straw’, G. *áis* + *óg*
milljag (Cr.) ‘a sweet drink, ale before the hop is added, mead’, G. *milseóg*
muiltchin (Cr.) ‘two year old mutton’, *muiltin* (K.) ‘eunuch’, G. *muiltín*
neaynin (K.) ‘daisy’, G. *nóinín*
runtag (Cr.) ‘round lump of a thing’, Manx *runt*, Eng. ‘round’ + *óg*
scoidan (Cr.) ‘sheet of sail’, G. *scód*, ScG. *sgòdan*
skeaban ‘(small) brush’, G. *scuabán*
stramlag (Cr.) ‘crankled or awkward thing’, G. *sraimleóg*
strumpag ‘strumpet’, cf. ScG. *strùmpaid*
teaystag ‘dumpling’, G. *taos* + *óg*
tholtan ‘ruin’, G. **tolltán*

Some of the above exceptions may be late formations from semi-productive use of the unstressed diminutive suffixes (as also with some of the occurrences of stressed terminations below, cf. Blankenhorn 1981: 245), or may represent stress retraction, or uniformity with the transparent stem (*teayst* ‘dough’, *skeab* ‘brush’). *Strumpag* is evidently adapted from English ‘strumpet’.

Exceptions – stress shift in light-heavy items:

cliegeen ‘jewel’, G. *cleitín*
falleays (Cr., K.), *falleish* (Bible) ‘gleam of light’, EIr. *folés*, ScG. *faileas*
fynneig ‘whiting’, G. *fionnóg* (HLSM II: 181)
fedjeen ‘feather of arrow’, G. *eite* + *ín*
ke(e)illeig (K.) ‘pollock, whiting’, ScG. *caileag*?
lheiheidjagh ‘unwieldy’, G. *leibéiseach*
peajeog (Cr.), *pitteog* (K.), *piddeog* (Ecclesiasticus 31. 24) ‘miser, churl’, G.
piteóg
putage (K.) ‘pudding’, G. *putóg*
pyshage (K.) ‘mew of cat’, G. *pis* + *óg*
robaig, roibage (Cr.) ‘whisker’, G. *ribeóg*, ScG. *ribeag, roibean*

For lack of shortening in *-een* in *cliegeen, fedjeen, kercheen*, we may perhaps compare maintenance of length in this suffix in certain Ulster Irish varieties (Ó Dochartaigh 1984: 48–9).

The word *fynneig* ‘whiting’ (HLSM: 181), which does not appear in the dictionaries, is doubtful. It is from Ewan Christian of Peel, a ‘semi-speaker’ (Broderick 1999: 5) ‘who first learned Manx from two old ladies in the same street when he was about five years old, and later from farmers and fishermen in and around Peel’ (ibid.: 75). Christian was apparently well-acquainted with ‘the Manx names of various birds and fish’ (ibid.: 75), so his information may be genuine, but the form recorded **fi'n'e:g** with medial slender /nⁱ/ suggests *f(h)ynneig* (Cr.), *finneig* (K.) ‘pod, capsule, small skiff’, i.e. G. *fíneóg*, an item with an expected original heavy initial syllable.

The nouns *bwaane* (G. *bothán*) and *bwaag* (G. *bothóg*), which might have been expected to show vowel shortening (i.e. /boha:n/ > */bohan/ > */bo:.an/), as in *crooag* ‘maggot’, G. *cruimheóg* (/ˈkru̯iːoːg/ > /ˈkru̯iːag/ > /ˈkrū:.ag/), appear rather to have

early loss of intervocalic /h/ (</θ/), and retention of length on the suffix, with reduction of /o/ to non-syllabic /w/ (/ˈboha:n/ > /ˈbo.a:n/ > /bwɛ:n/).

5.1.5.3 Stress-shift in items with fricative vocalization in initial syllable:

There is forward stress in a number of items with original short vowel + fricative in the initial syllable; it is not certain whether this is because of the long vowel or diphthong resulting from the vocalization of this fricative, or because the original medial clusters (/ʃr/, /vl/ etc.) were heavy as in the sonorant-initial clusters discussed above:

abane ‘ankle’, G. *adhbhrann*, **adhbarn*, **adhbán* (§3.4.7.4)
arrane ‘song’, G. *amhrán*
farrain (Cr.) ‘wild parsnip’, G. *feabhrán*, *odhrán*
gollage ‘pitchfork; earwig’, G. *gabhlóg*
jiulean ‘small farmer’, G. *deidhbhleán*
lourane ‘leper’, G. *lobhrán* (but also *louyran* ‘small castling’, Cr.)
lhemeen, *lhemy*n (Cr.) ‘moth’, G. *leaghman* etc.
liebage (Cr.), *liabage* (K.) ‘flounder, fluke’, G. *leadhbóg*
onnane ‘thistle’, G. *fo(bh)thannán* etc.

5.1.5.4 Verbal nouns in *-ail*, *-eil*, *-al* (G. *-áil*)

In native items and older borrowings first syllable conditioning can be detected with the verbal noun forming suffix *-áil*,³²⁰ as shown in the following examples:

light initial syllables, *-al*:

brebbal ‘kick’, G. *breabáil*
chebbal ‘offer’, Eng. ‘chap, cheap’
toiggal ‘understand’, G. *tuigbheáil*
laccal ‘lack, want’
soghal ‘sob, groan’, Eng. ‘sough’
troggal ‘build, raise’, G. *tógáil*, ScG. *t(r)ogail*

³²⁰ For the history of this and related morphemes, see Ó Cuív (1980). See also §4.4.7.

heavy initial syllables, -ail, -eil:

baarail ‘spend’, Eng. ‘wear’
faagail ‘leave’, G. *fágbháil*
farraíl ‘fare’
pointeil ‘appoint’
sauail ‘save’, G. *sábháil*
waiteil ‘wait’

Later *-al* becomes the ‘the grand *Manksifier-general* of English verbs; as, *trying*, TRYAL; *fixing*, FIXAL, &c., &c.’ (Cregeen: ix, original emphasis), and is used productively in numerous loans irrespective of initial syllable weight:

dreamal, *campal*, *layal*, *spiceal*, *walkal*, *plantal*, *weighal* (all in Bible)

There is evidence of fluctuation between stressed and unstressed reflexes of this ending in manuscript and non-standard sources, as in *blakal* : *bla-caile* ‘stare’ (Thomson 1995: 131), K. *blakail* (usu. *blakey*, cf. G. *spléachadh*, ScG. *spleuchdadh*).

5.1.5.5 Items with original heavy third syllables

In general heavy third syllables do not attract stress, but show vowel shortening, irrespective of the weight of the preceding syllables:

bwinnican ‘egg yolk’, G. *buidheac(h)án*, with influence from *buinne*, ScG. *buidhean*?
feayragan ‘fan, parasol’, ScG. *fuaragan*
foillycan (Cr.), *folican* (K.) ‘butterfly’, G. *féileacán*
fynnican ‘egg-white’, G. **fionnacán*, cf. Ir. *gealacán*; ScG. *fionnagan* ‘crowberry’
Jurynan, *orynan* (Ph.) ‘Jordan’, G. *Eórthanán*, *Orthan(n)án* (cf. Thomson 1995: 127)
laaraghyn, *laueraghyn* (K.), but *loagh(t)rane* (Cr.), ‘handle of flail’, ScG. *làmhchrachan*, Ir. *lámhchrann*
lhaihaghan (K.) ‘lecture’, G. **léigheachán*
lheunican (Cr.), *lionican* (K.) ‘sty (on eye)’, ScG. *leamhnagan*, Ir. *sleamhnán* (ny) *lomarcan* ‘alone’, cf. G. *lomrachán*
Manninan, name of legendary figure, G. *Manannán*
monnaghan (K.), ‘a fat greasy fellow, a bloated monk’ (K.), *manachán*

níeaghyn, niaghyn ‘washing’, G. *nigheachán*
ommidan ‘fool’, G. *amadán*
oohagan (K.) ‘custard’, G. *ughagán*
panshaghan (K.) ‘paunch’, ScG. *painnseachan*
shommarcan (K.) ‘primrose’, cf *sumark* (Cr.), Ir. *samhaircín*, EIr. *sobaircín*
 ‘primrose’, *seamróg* ‘shamrock’, ScG. *samhaircean, seòbhrach*
 ‘primrose’
tuarystal, tooarystal ‘shape, appearance’, G. *tuarascbháil*
ynrycan, ynrican ‘only’, G. *aonracán*

Also all items with the agentive suffix *-eyder* /əderⁱ/, G. *-adóir*, such as *fuinneyder* ‘baker’ (G. *fuineadóir*), *kiaulleyder* ‘musician’ (G. *ceól + adóir*), *coyrleyder* ‘advisor, counsellor’ (G. *comhairle + adóir*), *ooashleyder* ‘worshipper’ (G. *uaisle + adóir*).

Some original trisyllables have bisyllabic forms by syncope:

cughlhin (Cr.) ‘cone’, ?*cochall + ín*
corlan, curlan ‘earthnut, pignut’, G. *cúlarán* etc., ScG. *cutharlan*
creoghan (K.) ‘gadfly; harsh creditor’, G. *cruadhachán*
earkan ‘lapwing’, G. *adharcán*
foldyr, foldyr ‘mower’, ScG. *fàladair*
loagan ‘stagger’, G. *lámhacán*, ScG. *làmhagan*
mwatlag ‘welk’, ScG. *maighdealag*, Ir. *maighdeog*
oghsan ‘rebuke, reproof’, G. *achmhasán*, EIr. *athchomsán*
oikan (Bible, Cr., K.); *oinkan, inkan* (Cr.) ‘infant’, G. **naoidheacán,*
**naoidhneacán*, ScG. *naoidheachan*
roagan (Cr.), *raucan* (K.), ‘scallop’, G. *?*rothacán*
udlan ‘swivel’, G. *udalán*

Sometimes there is final stress in synchronically bisyllabic items, presumably as a result of early syncope:

phadeyr ‘prophet’, G. *fáidheadóir*
scrudeyr ‘writer, scribe’, G. *scríobhadóir*
Parlane ‘Bartholomew’, G. *Parthalón*

Synchronically heavy third syllables are found only in loanwords and derivations involving stressed suffixes:

emperúyr (Ph.) ‘emperor’
offishear ‘officer’

onnoroil ‘honourable’, G. *onóir* + *amhail*
spyrrydoil ‘spiritual’, G. *spioradamhail*

5.1.6 Quality of post-tonic shortened vowels

There is regularly /a/ in the reduced suffixes *-an*, *-ag*, *-al* judging by the orthography and by frequent occurrence of [a] in the phonetic data, although there is sometimes also reduction to [ə]. In some final syllables with shortened long vowels, the Phillips orthography appears to show /a/ which may have been reduced to /ə/ by the Classical Manx period:

cassid ‘accuse’, Ph. *kassad*, *kasaid* (4), *ghassaid*, G. *casaid*, ScG. *casaid*
 /kasadi/

Final *-adóir* is regularly reduced to *-eyder* in the Classical Manx orthography, which appears to suggest /e/ rather than /ə/ or /a/.

5.1.7 Irregular stress in *reeriaght* ‘kingdom’

Unexpected stress patterns may be lexically conditioned in certain instances. Notably, *reeriaght* ‘kingdom’ is found as /ri'ri:.axt/ in Late Manx (Rhÿs: 166; *HLSM* II: 364), perhaps from a blend of *ríoghacht* and *ríoghraidheacht*. The influence of the rhythm of reciting the Lord’s Prayer may also be relevant (cf. *dty ennym* ‘thy name’ /də 'enəm/, *dty aigney* ‘thy will’ /də 'aɣn'ə/, *dty reeriaght* ‘thy kingdom’ /də ri'ri:.axt/).

5.2 Apocope

Loss of final /ə/ has been noted especially in Manx and Scottish Gaelic (O’Rahilly: 138–9; Watson 1985: 128), although it also more sporadically occurs in Irish (e.g. Ó Curnáin 2007: 117–19). In Manx final /ə/ is usually retained in bisyllables, as in e.g.

arrey ‘watch’, G. *aire*
caashey ‘cheese’, G. *cáise*

lurgey ‘leg’, G. *lurga*
kiuney ‘calm’, G. *ciúine*
sniaghtey ‘snow’, G. *sneachta*
thanney ‘thin’, G. *tana*

It tends to be lost in bisyllables after sonorant clusters /RN/, /RL/, /RLj/. However, it is retained *baarney* ‘gap’ (G. *bearna*), *farney* ‘black-alder’ (G. *fearn(a)*).

arn /a:rn/ ‘sloe’, G. *airne*
Baarle /be:rl/ ‘English language’, G. *Béarla*
chiarn /tʃa:rn/ ‘lord’, G. *tighearna*
coyrle /kō:rlj/ ‘advice’, G. *comhairle*
oarn /o:rn/ ‘barley’, G. *eórna*

As observed by O’Rahilly (138), apocope in Manx is more widespread in items with more than two original syllables (this category may include *coyrle*, *chiarn* above):

aghin ‘petition’, G. *athchuinge*
Boaldyn ‘May’, G. *Bealltaine*
chaghter ‘messenger’, G. *teachtair*
eshlyn, *eshlys* ‘shroud’, G. *eisléine*
feanish ‘witness, evidence’, G. *fiadhnaise*
feysht ‘question, examine’, G. *faoiside*
immyr ‘bed or butt of land’, G. *iomaire*
kemmyrk ‘refuge’, G. *coimirce*
Lhunys ‘Lammas’, G. *Lughnasa*
maggle ‘testicle’, G. *magairle*
magher ‘field’, G. *machaire*
muinneel ‘sleeve’, G. *muinchille*
roayrt ‘springtide’, G. *rabharta*, *robharta*, ScG. *reothairt*
sharvaant ‘servant’, G. *searbhónta*
shilleeid (Cr.), *shelleed* (K.), ‘snail, slug’, G. *seilchide*
skibbylt ‘nimble, light of foot’, G. *sciobalta*
sproghil ‘dewlap’, G. *sprochaille*
staghyl ‘clumsy person’, G. *stachaille*
troar, *troayr* ‘crops’, G. *treabhaire*

The following are variable:³²¹

-*aghey*, -*agh*, vn. termination, G. -*aghadh*, ScG. -*achadh*
enney, *enn* ‘recognition, knowledge’, G. *aithne*
bochilley, *bochil* ‘shepherd’, G. *buachaille*
boandyr, *boandyrey* ‘nurse’, G. *banaltra*
dunver, *dunverey* ‘murderer’, cf. G. *dúnmharbhthóir*
firriney, *firrin* ‘truth’, G. *fírinne*
skaaley, *skaal* ‘flat dish, saucer’, G. *scála*

Items with an original termination -*t(h)a*, -*t(h)e* (past participles, old genitives of verbal nouns, etc.) often have apocope, as in:

losht ‘burn, burnt’, G. *loisc*, *loiscthe*
nasht ‘betrothed’, G. *naiscthe*
skeilt ‘cloven’, G. *scoilte*
Jeheiney-Cheays ‘Good Friday’, G. *Aoine an Chéasta*
dooiney-poost, *ben-phoost* ‘bridegroom, bride’, G. *pósta*, gen. *pósadh*
sheelt ‘sober’, G. *síobhalta*, Eng. ‘civil’
skibbylt ‘nimble, active’, G. *sciobalta*

But /-ə/ is sometimes retained:

cailjey ‘lost’, G. *caillte* (of sheep etc., otherwise usu. *caillit*)
custey ‘cursed’, Eng. *curse* + G. -*ta*
sailjey ‘salted’, G. *saillte*

Note that loss / reduction of the participle ending leads to new forms with regular -*it*, sometimes reduplicated -*jit* (cf. Thomson 1970: 149):

currit ‘put’, G. *cuir*, *curtha* + Manx -*it*
riojit ‘frozen’, G. *reóite* + Manx -*it*

A few loanwords which in other Gaelic dialects often have an excrescent final schwa (cf. Ó Curnáin 2007: 123–4) lack this in Manx, and some of these are assimilated into native paradigms:

³²¹ As far as can be discerned, these are to be interpreted as variant underlying or citation forms; there appears to be no evidence of the ‘caducous vowel’ found in Scottish Gaelic (Watson 1985; also Borgstrøm 1940: 50).

giat ‘gate’, gen. *giatthey*, G. *geata* (invariable in singular)
oast, in *thie-oast* ‘inn’, *fer-oast* ‘hostelier’, G. *ósta*
pann, *panney* ‘pan’, gen. *panney* (Bible), G. *panna*
pot ‘pot’, pl. *pooiyt*, G. *pota*
spot ‘spot’, pl. *spuitt*, G. *spota*
sole ‘threshold’, G. *sóla*

But others have added /ə/:

atthey ‘crown’, G. *hata*, Eng. *hat*, Norse *hattr*
barrey ‘bar’, G. *barra*
cloagey ‘cloak’, G. *clóca*
boandey ‘bond’, G. *banda*
bolley ‘boll’, G. *bolla*
cooiny ‘coin’
foalsey ‘false’, G. *fallsa*
paggey ‘pack’, G. *paca*
shartey ‘job, spell of work’ (EDD s.v. *start* 11)
thunney ‘ton’, G. *tunna*
tubbey ‘tub’, G. *tuba*

Emphatic suffixes / clitics *-sa*, *-se* always have apocope or metathesis:

mish ‘I, me’, G. *mise*
uss ‘you’, G. *thusa*
ish ‘she, her’, G. *ise*
shiuish ‘you’, G. *sibhse*
aym’s ‘at me’, G. *agamsa*
my ennym’s ‘my name’, G. *m’ainm-se*
dty egooshys ‘without you’ (CS), G. *i d’ fhéagmhais-se*

The following irregular verb forms have apocope:

cheayll, *geayll* ‘heard’, G. *chuala*
vaik, *naik* ‘saw’, G. *faca*
ren ‘did, made’, G. *rinne*

Other original bisyllables with apocope:

bine ‘drop’, G. *boinne*
drease, *dreast* (Cr.) ‘after a while’, ScG. *an-dràsta*
failt ‘welcome’, G. *fáilte*

faare ‘close, near’, G. *farradh*
feoilt ‘generous’, G. *faoilte(ach)*
eayst ‘moon’, G. *éasca*
insh ‘tell’, G. *innse*
reaisht ‘span’, G. *réise*

Final *-adh* (in verbal nouns etc.) is usually retained, except where it coalesces into a long vowel or diphthong resulting from vocalized fricatives. Note that genitive *-aidh* (Manx *-ee /i/*) may nevertheless appear:

craa ‘shaking’, G. *crathadh*, gen. *craae*
loau ‘rotting’, G. *lobhadh*, gen. *loauee*
screeu ‘writing’, G. *scríobhadh*, gen. *screeuee*
sneeu ‘spinning’, G. *sníomhadh*, gen. *sneeuee*

This termination may spread by analogy to other verbal nouns without original *-adh*:

snaue ‘swimming, crawling’, G. *snámh*, gen. *snauee*

There is variable loss of *-adh* in *freaylley*, *freayll* ‘keep’ (G. *friotháladh*), and also in the termination *-agh(ey)* (see above).

5.3 Syncope

The following concerns phonologically or lexically conditioned syncope in post-tonic syllables (cf. Watson 1985: 125–6). Syncope within morphological paradigms (as found generally in Gaelic dialects), is not considered,³²² nor is syncope in trisyllables with original final heavy syllables (§5.1.5.5), or syncope in pre-tonic syllables (§5.1.3).

Syncope is regular in final unstressed *-rra(i)n(n)*, *-rtha(i)n(n)*, *-rra(i)ng* (cf. O’Rahilly 1942a: 120):

ayrn ‘part’, G. *earrann*
faarn ‘rain leaking through roof’, G. *fearthain*
er-mayrn ‘left, remaining’, G. *marthain*

³²² E.g. *cossyn* ‘win, gain’ (G. *cosain*), verbal noun *cosney* (G. *cosnadh*), or *millish* ‘sweet’ (G. *milis*), comparative *ny s’miljey* (G. *níos milse*).

keirn ‘rowan’, G. *caorthann*
tayrn ‘pull, draw’, G. *tarraing*
yiarn ‘iron’, G. *iarann*³²³

Syncope is also found in the following. Note that some items have both contracted and uncontracted by-forms. Some of the contracted forms may be back-formations from syncopated plurals (cf. Thomson 1999: 401–2).

faarkey ‘bathe’, G. *fothragadh*, influenced by *faarkey* ‘sea’, G. *fairrge?*
fess(t) ‘spindle’, G. *fearsaid*
feysht ‘question, examine’, G. *faoiside*
geaysh ‘hair, fur’, G. *gaoiside*
insh ‘tell’, G. *innis*
jeelt ‘saddle’, G. *díollaid, diallaid*
mooads, mooadys ‘amount’, cf. G. *méad* + *as*
shleayst, slheeayst, slheeassid ‘thigh’, G. *sliasaid*
sleayst ‘shovel’, G. *sluasaid*
taggloo ‘talk’, G. *agallamh*
yindys ‘wonder’, G. *iongantas*, Ir. *iontas*

Compare also *Yernagh* ‘Irish, Irishman’ (G. *Éireannach*), but *Nherin* ‘Ireland’ (*an / in Éirinn*) and *Sostnagh* ‘English, Englishman’ (G. *Sa(c)sanach*).

5.4 Epenthesis

It has been noted that epenthesis or svarabhakti is more restricted in Manx than in most other Gaelic dialects (Marstrander: 70–1; O’Rahilly: 203; Jackson: 60; Thomson 1960; Ó Baoill 1980: 94, 101–2; *HLSM* III: 143–5). Notably it is absent in the following sonorant-stop clusters:

³²³ Originally O.Ir. *íarn*, with insertion of an epenthetic vowel in Middle Irish; for discussion see O’Rahilly (1942a). It seems more likely that the Manx form represents secondary loss of the vowel in the second syllable, as in the other items listed here, and with reduction of /iə/ to /ja/ as in *chiarn* ‘lord’ (G. *tighearna*) (perhaps with the motivation of avoiding an over-heavy syllable), than maintenance of original *iarn* (see §4.6.2).

/lb/

scolb /skolb/ ‘chip, break shell; stir’, G. *scolb*

/lg/, /lʲgʲ/

bolg /bolg/ pl. *builg* /bulʲgʲ/ ‘belly’, G. *bolg*³²⁴*jolg*, *jialg* /dʒolɡ/ pl. *jilg* /dʒilʲgʲ/ ‘thorn’, G. *dealg**tilg* /tilʲgʲ/ ‘throw’, G. *tilg*

/rb/

borb /borb/ ‘harsh, rough, severe’, G. *borb*

/rg/, /rʲgʲ/

jiarg /dʒa:rg/ ‘red’, G. *dearg**farg* /fa:rg/ ‘anger’, G. *fearg**s’merg* /smerʲgʲ/ ‘woe’, G. *is mairg*³²⁵

Early epenthesis appears in monosyllables in the following clusters consisting of two sonorants, or a sonorant followed by a stop or a voiced fricative, and is already attested in Phillips:

/lm/, /lʲmʲ/

Collym /koləm/ name, G. *Colm* (*HLSM* III: 144)*hellym* /helʲəm/ ‘sounded’, G. *seinm* (with dissimilation)

³²⁴ Ó Baoill (1980: 101–2) notes the anomalous apparent presence of an epenthetic vowel in Manx data from Wagner (*LASID* IV: 174, 188) in the cluster /lg/ where it is otherwise unattested: ‘[ən wulag uft’ə] *an bolg uisce?* [vɔlagən ʃe:d’ə] *bolgán séide?*’ (Ó Baoill’s interpretations). The clear vowel in these is suspicious as it looks like the diminutive /ag/ (G. *-óg*) rather than epenthesis where /ə/ would be expected. The first of these looks like *yn vullag ushtey* ‘the water keg’ (G. *mullóg*) (the feminine gender of *mullag* would explain the lenition, and the informant may have misunderstood Wagner’s prompt to translate ‘water-bag’, a term relating to the calving of cattle). The second may be confused with trisyllabic *bellyssyn* ‘bellows’ (Ifans and Thomson 1979–80: 150; *HLSM* II: 28), and or phonetically similar *bollag* ‘skull’ (G. *ballóg*), *mullag* ‘keg’, or *mollag* ‘buoy’ (G. *meallóg*); in any case this is a deviation from expected *builg-sheidee* (Jeremiah 6:29). Broderick also notes *bolg my vaggley* ‘my scrotum’ (‘the belly / bag of my testicles’, G. *magairle*), **bolag mə** ‘*vagələn* TC (*HLSM* II: 39), suggesting that ‘[t]he epenthetic vowel in *bolg* may be influenced from the central syllable in *vaggley*, so as to assist in the flow of the phrase’ (*HLSM* III: 144). Ó Baoill’s (1980: 102) suggested explanation is rather weak: ‘I would favour the view that the forms with epenthesis are the oldest and that the retention of the epenthesis in these forms is due mainly to their semantic relationship with the original stem being obscured or forgotten. What I am suggesting is that the form *bolg* on its own and in the phrase *an bolg uisce* may not be related to each other in the native speaker’s mind.’ It should also be borne in mind that Wagner appears to have had a tendency to misanalyse Manx and transcribe ghost features from Irish (§1.5.8).

³²⁵ But note Ph. *sh’marig* etc. The <i> here may represent epenthesis, or perhaps simply palatality?

/r̥m/, /r̥m̄/

gorrym /gorə̃m/ ‘blue’, G. *gorm*
orrym /orə̃m/ ‘on me’, G. *orm*
gerry /gẽr̥iə̃m/ ‘cock-crow’, G. *gairm*
sterry /stẽr̥iə̃m/ ‘storm’, G. *stoirm*

/n̥m̄/

ennym /enə̃m/ ‘name’, G. *ainm* (§4.4.3)

/n̥b/

kennip /ken̥iə̃p/ ‘hemp’, ScG. *cainb*, Ir. *cnáib*

/r̥iv/

Ph. *teryuf* /tẽr̥iə̃v/ ‘bulls’, CM *terriu* /tẽr̥iə̃/, G. *tairbh*
 Ph. *meirif* /mẽr̥iə̃v/ ‘dead’ (pl.), CM *merriu* /mẽr̥iə̃/, G. *mairbh*

There was presumably epenthesis prior to vocalization of fricatives in e.g. *jalloo* ‘picture’ (G. *dealbh*) */d̥iə̃lə̃v/ > CM /d̥zalu/, of which Early Manx *teryuf* etc. is the last remnant (Thomson 1960: 122).

When further syllables are added, the epenthetic vowel may be absent:³²⁶ e.g. *ennym* ‘names’ (ScG. *ainmean*), *enmaghey* ‘to name’ (*ainmeaghadh*), *gormid* ‘blueness’ (G. *goirme* + *id*), *stermagh* ‘stormy’ (G. *stoirmeach*).

Where there is forward stress there is no epenthesis in a cluster preceding the stressed syllable (Thomson 1960: 121).³²⁷ Note the maintenance of /v/ in this position:

colmane /kol'mə̃:n/ ‘dove’, G. *colmán*
sharmane /ʃar'mə̃:n/ ‘sermon’, G. *searmóin*
marvaanagh /mar'vẽ:nax/ ‘mortal’, G. *marbhánach*
shirveish /ʃir'vẽ:ʃ/ ‘service’, G. *seirbhís*

³²⁶ As also with historical vowels, e.g. *currym* ‘duty’ (G. *cúram*), *curmaghey* ‘to charge’; *corrym* ‘equal’ (G. *comhthrom*), *cormal* ‘to compare’.

³²⁷ The existence of epenthesis in monosyllables such as *gorrym* but not in polysyllables with forward stress such as *colmane* is treated by Ó Baoill (1980: 101–2) as a puzzle in need of a solution. He suggests that epenthesis only occurred in stressed syllables, and so must postdate stress shift. However, he does not note the polysyllabic morphologically complex forms without stress shift which also show absence of epenthesis, such as *enmaghey*, *stermagh* etc. Since this category of epenthesis is restricted to original monosyllables, an obvious motivation for the development is to break up the cluster in the complex coda; this motivation would not exist in polysyllables, regardless of their stress pattern, if syllable boundaries fall within the cluster, i.e. *col.'mane*, *'ster.magh*. Alternatively, there would be greater motivation for syncope of the epenthetic vowel in longer words.

It is unclear whether epenthesis in the cluster /rx/ was an early development; it is spelt <rg> in Phillips, but as Thomson notes, this is also sometimes the case where a historical vowel is expected, as in *karghey* ‘repair, correct’, CM *karraghey* (G. *coireaghadh*, ScG. *càireachadh*). According to Thomson (1960: 121), it first appears in the surname Faragher (G. *Mac Fearchair*) in 1649 (cf. Moore 1903: 23; Quilliam 1989: 76).

/rx/

dorraghey /dɔrəxə/ ‘dark’, G. *dorcha*

orraghey /ɔrəxə/ ‘bow-shot’, G. *urchar* (§4.2.2)

Similar clusters /Nɣ/, /nɣ/ are only found in one item in Ph., apparently without (Thomson 1960: 124), and in a place name:

/Nɣ/, /nɣ/

kranghyr (Ph.) /kraN(ə)xər/ ‘lot’, G. *crannchor*

Connaghyn /,skɪlʲəˈkɔnəxən/ ‘Kirk Conchan’ (*PNIM* IV: 361; *HLSM* II: 510)

There is epenthesis in /lx/ in one item, although this may have been reanalysed as *-achán* (cf. the Scottish form):

/lx/

ollaghan /oləxən/ ‘treadle of spade’, G. *ealchaing*, ScG. *ealachainn*

Later, epenthesis appears in original polysyllables in other clusters, in which a stop or a fricative is followed by a sonorant. Some of these are variable in Phillips (Thomson 1960: 124)³²⁸ and later, as shown by orthographic and metrical evidence (Thomson 1960: 125; Lewin and Wheeler 2019: 4). This type corresponds to the ‘secondary epenthesis’ characteristic of Munster Irish (e.g. Noyer 1990).

³²⁸ Thomson (1960: 124) also notes variation in derived or inflected forms with expected syncope such as *doccaragh* ‘toilsome’ (G. *docrach*), *focklyn* ‘words’ (G. *focla*), *feacklyn* ‘teeth’ (G. *fiacra*). In these items, however, it is uncertain whether we have original lack of syncope, epenthesis, or forms reconstructed from the stem.

/br/

dobberan /dobəran/ ‘mourning’, G. *dobrón*

/dr/

maarderagh /me:rdərax/ ‘fornicator, whoremonger’, G. *meirdreach*
mad(y)ran /mad(ə)ran/ ‘morning’, ScG. *maidnean?*

/kr/

accryrs (Bible),³²⁹ *accrys*, /ak(ə)rəs/ ‘hunger’, G. *ocras*, but EIr.
occoras

/sr/

fysseree /fisəri/ ‘knowledge’, G. *fiosraighe*
gassree, gadyree, gadyrey /gasəri/ ‘heat in bitches’, ScG. *gasraidh*
glasseraght /glasəraxt/ ‘vegetation’, G. *glasrach*
losserey, pl. *lossreeyn* /losərə/ ‘herb’, G. *lusra*

/ʃrʲi/

casherick /kaʃərʲəkʲi/ ‘holy’, G. *coisrigthe*
shesheragh /ʃeʃərʲaχ/ ‘plough-team’, G. *seisreach*

/xr/

(er-)shagh(y)ryn /ʃax(ə)ran/ ‘astray’, G. *seachrán*
ogh(y)rish /ox(ə)rəʃ/ ‘bosom’, G. *fochras*

Epenthesis is also attested in other medial clusters (Marstrander: 66; Thomson 1960: 120; *HLSM* III: 144–5), though usually not written (except in the items with *-yragh*):

/nr/

maynrey ‘happy’, *maynrys* ‘happiness’ /me:nrə(s)/, G. *méanar*,
mendrə SK, **mē:ndrə**, **me:ndərəs** JW (*HLSM* II: 293)

/mni/ > /mrʲi/

lheimyragh(t) /lʲe:mərʲaχ/ ‘leap, jump’, *cor-lheimyragh* ‘skip’, G.
léimneach
breimaragh (Cr.), *bremmeragh* (K.) /bremərʲaχ/ ‘fart’, G.
*broimneach*³³⁰

³²⁹ So consistently in the Bible, but adjective *accryssagh* ‘hungry’.

³³⁰ These may be influenced by the category of verbal / abstract nouns with G. *-aireach(t)*, and words of similar shape such as *fynneraght* ‘coolness, breeze’ (G. *fionnuarach(t)*).

/mn/ (>/ml/) > /mr/ (apparently a northern development)

chymney /tʃimnə/ ‘will’, G. *tiomnadh*, **tʃimnə**, **tʃim.nə** NM, **tʃimərə** TC, **tʃimərə** HB (*HLSM* II: 79)

famlagh (Bible, Cr.), *famyragh* (Cr.) /famlax, famərax/ ‘seaweed’, G. *feamnach*, **famlax**, **famlax** NM, **famləx**, **fömərəx** WA, **famərəx** J:JTK (*HLSM* II: 158–8)

/rg/

margey /margə/ ‘market’, G. *margadh*, **ma:gə** and similar; **vörəgə** TC (*HLSM* II: 290)

An epenthetic vowel may also be inserted in initial /mn > mr/, /ml/, each occurring radically in one item each (actually fossilized eclipsis in the latter case), from Phillips (>[mən-]) (Thomson 1960: 120) through to Late Manx (>[mər-]) (*HLSM* III: 145):

/mr/

mraane /mrɛ:n/ ‘women’, G. *mná*, ScG. *mnàthan*, Ph. *mynáyn* (5), *mynayn* (2), *mynanyn* [*sic*], **mʳ're:n^(ʳ)** S, **mrɛ:n** S (*HLSM* III: 145), also gen. sg. Ph. *myny*, *mynú* (G. *mná*, but form probably = dat. *mnaoi*)

/ml/

*my-leeaney*³³¹ (Bible), *myleeaney* (Cr., K.) /m(ə')liɛnə/ ‘this year’, G. *i mbliadhna mə'l'inə* N/S (*HLSM* III: 145)

5.5 Vowel shortening and lengthening

Both shortening and lengthening of vowels are attested in Manx in certain lexical items. The former is often shown in spelling, but the latter is not generally represented and may be a late development.

Late spoken Manx is also characterized by not a few alterations in the quantity of stressed vowels [...]. In a number of words an originally short vowel has been lengthened, e.g. *lhiābbee*, *sniāghtey*, *fākin*, *brēh*,³³² *brīshey*, *bōght*, *pōbbyl* [*sic*], in contrast to E[arly] Mod[ern] Ir[ish] *leabaidh*, *sneachta*, *faicsin*, *breith*, *briseadh*, *bocht*, *pobal*, respectively. On the other hand, originally long vowels

³³¹ The initial cluster here may have been reanalysed as preposition *my* ‘about’ (ScG. *mu*).

³³² This item does not belong here, but rather shows regular lengthening of a synchronically final vowel from historical /Vh/ sequences (cf. §2.2.4).

or diphthongs have been occasionally shortened, as in *freogh*, *Gailic* [*sic*], *geayl*, in contrast to E. Mod. Ir. *fraoch*, *Gaoidhealg*, *gual*, respectively; cf. further Manx *fidder* with Ir. *fíodóir* (< *figheadóir*).

(O’Rahilly: 118–9)³³³

Jackson notes that these lengthenings and shortenings are ‘characteristic’ of Manx, and suggests that the length contrast in Manx is not very robust in any case.

In principle there are long and short vowels, but the long vowels are sometimes little more than half-long. This is especially true in the case of Common Gaelic short stressed vowels which have been secondarily lengthened in Manx in certain circumstances. These lengthenings are a characteristic feature of Manx as distinct from Irish and Scottish Gaelic. [...] On the other hand, equally characteristic, [...] is [...] the frequent shortening of original *éa*, *ao*, *aoi*, *ua*, *uai*.

(Jackson: 9–10)³³⁴

Broderick’s observations are similar (*HLSM* III: 122):

The long vowels are about three-quarters the length of their counterparts in Irish, especially original short stressed vowels which have been secondarily lengthened. This feature of secondary lengthening is a characteristic of L[ate] S[poken] M[anx] [...] Equally characteristic, though not so prevalent, is the proclivity of LSM to shorten original stressed long vowels [...]. All such long vowels can be affected by secondary shortening.

(*HLSM* III: 122)

The apparent reduction in the length of Manx long vowels noted by Broderick and Jackson could conceivably have contributed to fluctuation in quantity. However, compare Scouller (2017: 235–7) for the difficulties of making generalizations about vowel length. Scouller notes that Colonsay phonemically long vowels are marked as ‘half-long’ in *SGDS*, but he suggests that this may have been due to the single informant’s ‘clipped’ speech style and ‘in natural speech, vowel length can be extremely variable, and that the listener’s perception of a vowel as ‘long’ or ‘short’ is

³³³ The examples appear to be taken from Rhÿs.

³³⁴ In this passage Jackson (9) also mentions the ‘not very common [...] shortening of original stressed long vowels before final ^h**n** and ^h**m**’, which is discussed under the phenomenon of preocclusion (§4.5.2).

more important than precise measurement of its duration'. Nevertheless, it is tempting to see the variability of vowel length in Manx as signs of an incipient reanalysis of vowel length distinctions as contrasts of quality on the lines of the English tense-lax contrast; compare also the difficulty of analysing length in diphthongs (§3.9.1).

5.5.1 Vowel shortening

Vowel shortening may be found in a number of items. In most cases, the short vowel is shown in the Classical Manx orthography, as in *firriney* 'truth' (G. *fírinne*), in contrast to *feer* 'true, very' (G. *fíor*). A number of spellings in Phillips may suggest short realizations also (cf. Rhÿs: 166), although the picture is not entirely clear as vowel length is not marked consistently in this orthography. In addition to these cases, Rhÿs notes a number of examples of shortening of other items where the long vowel is marked in the orthography, including *keead* 'hundred' (G. *céad*) (Rhÿs: 7), *eyl* 'lime' (G. *aol*), *meayl* 'bald' (G. *maol*) (Rhÿs: 21), *vooar* (G. *mhór*) (Rhÿs: 67), *dy bragh* 'ever' (G. *go bráth*) (Rhÿs: 67). This shortening may be variable, as in the following case:

Such a word as *freoagh* 'heather' (Goi. *fraoch*) should be pronounced *fr̥ygh* [fr̥ə:x] according to analogy, and I have occasionally heard it so, but much oftener it is *fr̥ygh* [fr̥əx] with a short vowel.

(Rhÿs: 18)

Broderick (*HLSM* III: 122–40) gives numerous further examples of sporadic shortening in the Manx of the terminal speakers. These are mentioned by Stockman (1986: 12–3), who compares them to similar developments in Ulster dialects.

Table 107 contains those items where the evidence suggests that shortening was well-established in Classical and Late Manx:

Table 107. Long vowel shortening

	Phillips	CM pronunciation	etymology	English	HLSM
cheddin, keddin; myrgeddin	ed (3), æd (2), ied (3), iedd	/çedən/ /mər'gʲedən/	céadna; mar a gcéadna	same; likewise	i NM, ɛ TC, JW, ï HK
cheet ³³⁵	íít (7), iit (4), ít (2), ít, it (6), itt	/tʃi(:)t/	tigheacht	come	ɛ HK, JW, ø TC, i JK, NM, i , ɛ JTK, e HB
chied	ie (6), iê, ei (5), êi	/çed/	céad	first	ɛ (HLSM I: 50)
currym	ur, or, urr (5)	/kurəm/	cúram	duty, charge	
eaddagh	yd (12)	/edax/	éadach	clothes	ï JK, e : JK, e JTK, NM, ɛ TT
earroo	er (8), ér (7), err, ær (3), áer (5)	/er'ju/	áireamh	number	ɛ WQ, i TC
eddin	ydd, æd (2), ed (5), yd (5), yth, éth, eyd, ýd	/edən/	éadan	face	ø TC, i NM
eddrym	edr (5)	/edrəm/	éadrom	light	ɛ HK, e JTK, ɛ W:N
ennagh	egnagh (3), ægnagh, egyn (3)	/en'ax/	éigin(each)	some, certain	ə 'n'x NM, ɛnax HB
fidder		/fideri/	figheadóir	weaver	i JK, TT, ɛ TT
firriney; firrinagh	íírr, irr (18), yr, ir (2), ier (2), iyrr (2), iirr, yir, eir	/fir'ənɪə/	fírinne(ach)	truth; true	ɛ TC, ï HK, i NM
foddee	od (39), odd (13)	/fodi/	féad, ScG. faod	can, may, maybe	ø JW, HB, i , ɛ NM, ɔ TC, JK, NM, ə NM, ɔ HB
folder, foldyr, yiarn foldyragh	phalyder	/foldəri/	ScG. fàladair	mower; scythe	o JK
Gaelg (Cr.), Gaelck (K.), Gailck	(adj. <i>Gaelgagh</i>) gellgah, golgkagh (?gel- [Thomson])	/gel'ki/, /gel'gi/	Gaidhealg etc.	Manx language	i JTK, HB, JK, W:N, WQ, NM, i TC, NM, W:S, J:JK, J:NM, ɛ JW, e W:S, ʷe Fa

³³⁵ *chit* frequent in Bible MSS and elsewhere.

geddyn, feddyn	eatt (4), æatt, eytt, yæth, eadth (4), etd (4), edth (3), eadh, eath (2), êath (3), êâth (2), edtg	/gʲedən/, /fedən/	ScG. faotainn	get, find	ø TC, e NM, JK, JTK, HB, ɪ NM
haink, daink	aink (16), áink (8)	/heɲkʲ/	tháinig	came	ɪ TC, TL, NM, e NM, ɛ TT
hed, jed, hem, jem, hemmayd, jemmayd	eid (2), éid, áid, eidg (2), æids, ædj, æd, éad, edg (2), edj (2), ed, id	/hedʲ/, /hem/	théid, théighim, théigh muid	will go	(hem) ɛ TT, HK, ɪ TC, JW, ɪ JW, (hem main, mayd) ɪ TC, ɪ, ε NM, (jed) ɛ TC, (jem) ɛ HK, (jem mayd) ɛ HK
irree	irr (27), irř, írr, ir, ír	/iri/	éirghe	rise	ɪ TC, ɪ NM, JK, i: JK, ɪ: NM
jean, jannoo	(jean) ean (28), éan, eán, (jannoo) an (9), ān (2), ean (4), ian	/dʒen/, /dʒenu/	déan, déanamh	do, make	(jannoo) ɛ TC, JW e JK, NM, W:N, ɔ JTK, HB, W:N, W:S, ɪ TK, DC, TL, EL, NM, a NM, JW, EC, ɛ JW, ε SK, Wa, J:EK, J:TL, (jeant) ɛ TC, (jean impv.) ɪ, ɛ, (jean fut.) ɛ, ɪ
jeig	éeg (4), eeg (2), ieg (yeig) (5), éyg	/dʒeg/	déag	teen	ɛ TC, Fa, Co, Wa, e JK, TK, HK, ɪ WQ, e HB
karraghey	ar (3), arr (2), ayr, ař	/karaxə/	cóirigh, ScG. càraich, càirich	mend, repair	ɛ NM, JK, e TK, ɪ TK, ɛ JW, TK, HK, ɪ HK
kirree	irr (5), ir	/kiri/	caoirigh, caoraigh	sheep (pl.).	ɪ, i: NM, ɪ HK, ɪ TC
mam		/mam/	mám, ScG. mam	handful (of both hands)	
mam		/mam/	mám, ScG. mam	blain, blister, boil	

milley (1 Chronicles 21. 12) ³³⁶	il (5), iyl. iil	/milʲə/	míle	thousand, million	i: TK, JK, NM 'mile'
mirril	ir (3), yr (2), ír	/mirəlʲ/	míorbhail	miracle	ɛ JW, HK
mwarree (Bible, Cr.), moirree (K.)		/mwari/	East Ulster Ir. móiridhe (Dinneen), móraí (Ó Dónaill)	grandmother	wɔ:ri, wa:ri NM, mūāri [mwā:ri], wɔrə [wōrə] (Rhÿs notebook 6: 79, 149)
prash	ass (4)	/praʃ/	*prais, prás	brass	a TC
queig; queiggoo	queig (3), queigg, (wheiggoo) queiggu, quygu, quygú, quygggu, quyggú	/kwegʲ/, /xwegʲu/	cúig, cóig; cúigmheadh	five; fifth	kweg NM, TK, HK, kweg HK, fʷeg Wa; kwe.gu NM
raink		/reŋki/	ráinig	reached, arrived	
red	ed (10), edd (4), yd (5), ydd, áed	/red/, /rud/	réad, raod, rud	thing	ɪ JK, HB, J:TL, JTK, NM, SK, ï JK, HB, W:S, SK, ɔ JK, HB, NM, SK, W:Peel, ø TC, u HB, NM, SK, ö J:EK, ə NM
rhum (Cr.), ³³⁷ room (Bible), rooym (K.)	umm, úym, úym	/ru(:)m/		room	u, ū:, u: TC
reamlagh (Bible), rimlagh (Cr., NBHR)		/riəmlax/, ?/rimlax/	ruaimneach	fishing-line	ɪ NM, ï HK, TK, ü W:S
saillym	al (11), all (10), ail (15), âil, âil, aill (3), áil, áill	/salʲəm/	is áil le	wish, want	ɛ: TC, a: JW, J:JK, ³³⁸ HK, i JW, ɔ HK, ɪ TM

³³⁶ *meeil(l)ey* 'mile' (Bible, Cregeen).

³³⁷ *rhum-aarlee* 'kitchen' (Cregeen).

³³⁸ 'In *myr* 's *ailliu* [sic] hene, "as you yourself like," = **mö sa:l'u** 'hi:n [John] KN[een], the Ir. *áil*, ScG. *àill*, seems to have had its vowel shortened and subsequently lengthened secondarily, as otherwise **ɛ:l'** would presumably be expected; a short vowel seems indicated by the Manx spelling' (Jackson: 25).

scribider (Cr.), cf. screebeyder 'scratcher' (Cr.)		/skribədəi/	scríobadóir	grater	
sheill, sheiltyn (Bible, Cr.), sheltyn (Cr.), shein (Cr.), shell, shellagh, sheillagh, shillym (K.)		/ʃi(:)ʃiʃə/	saoil, cf. Ir. dial. síl	think	vn. ʃi:n JW, ʃiⁿ NM, ʃi:n JK
skynn	ýn	/skʲin/	scian, dat. sciaín, ScG. sgian, dat. sgithinn ³³⁹	knife	i: JK, NM, i NM, TL, W:N, JK
splughan (Cr.)		?/splʲuxan/	spliúchán, ScG. spliùchan, spliuchan	pouch	
stainney		/stanʲə/	stán, stáin, ScG. staoin, stàin	tin	ṡ: TC
steillin, steillyn	àl	/stelʲəni/	ScG. stàilinn, Norse stál	steel	ɛ: TC
stheg (Cr.)		/steg/		steak	
tooran 'pronounced <i>thurran</i> ' (Cr.), tooran (K.)		/turan/	?túrán, cf. torrán	turret, stack of corn	
toshiagh- jioarey		/,tʲax'dʒʲrə/	taoiseach, tóiseach deóradh	coroner	
un	yn (6), ýnn (3), ynn (3), yñ (2), únn, uñ, ún, un, hyn (2)	/un/	aon	one	o: JTK, ɛ: , E: JK, u: TK, ɸ: , ɸ: J:JTK ³⁴⁰
vees	víis (6), vñs, viss (4)	/vi(:)s/	bhéas, bhias, bhíos, ScG.	will be	i: TC, 'written <i>vees</i> but

³³⁹ Cf. gen. and pl. forms with short vowel, *scine*, *scena* (*eDIL*).

³⁴⁰ The *HLSM* examples apparently represent secondary re-lengthening, although it is short according to Rhys (18) even when stressed: 'the case of [...] *un* 'one' [...], is the same [as that of *freoagh* 'heather', G. *fraoch*], except that the brevity of its vowel is sufficiently accounted for by the fact of its being a proclitic, though it may now sometimes have the stress but without restoration of its long vowel'.

			bhitheas, bhios		pronounced v̥ʲs [vəs] ³⁴¹ (Rhÿs: 166)
yummyd	ym, ým	/iməd/	adhmad	use	ɪ JW, HK, ɛ HK, e HK
ynrycan, ynrican	ynr (5)	/inrəkan/	aonracán	only	ĩ JW

The above Manx examples often correspond to cases of vowel shortening in other dialects, such as in frequently occurring verb forms (*haink, cheet, hed, jean, jannoo, geddyn, irree, raink, sheill, saillym*) (Quiggin 1906: 14; Mac Gill-Fhinnein 1966: 52–6; Ó Curnáin 2007: 79). The latter may alternate as ‘unaccented’ (*neamhaiceannta*) forms alongside accented variants, used for example in answers to yes-no questions (Mac Gill-Fhinnein 1966: 52–6). In some Ulster dialects, however, the reduced forms appear to have been generalized: Stockman (1986), commenting on such shortenings in Ulster Irish, notes that Gaelic verbs often lack strong sentential stress, and suggests that reduced forms have spread by analogy to fully stressed positions.³⁴¹ It is likely that many of the Manx shortenings represent similar lexicalization of post-lexical stress.

Red ‘thing’ (G. *réad, raod*), is generally short *rud* in the modern dialects (and the written standards), presumably owing to lack of stress in collocations such as *rud ar bith* ‘anything’ (Manx *red erbee*). Rhÿs (18, 127) gives a similar explanation for shortening in proclitic *un* ‘one’ (G. *aon*) and *dy bragh* ‘ever’ (G. *go bráth*), from phrases such as *dy bragh beayn* (G. *buan*), *dy bragh farraghtyn* (G. *mair*), ‘everlasting’; lack of stress may also explain shortening in *jeig* ‘teen’ (G. *déag*), *toshiagh-jioarey* ‘coroner’ (G. *taoiseach deóra*), *rhum-aarlee* ‘kitchen’. The shortening, and vowel quality, in *queig* ‘five’ (G. *cóig, cúig*) may be attributed to the influence of *jeig*, and to postlexical destressing.

There is a small group of nouns with initial *éa-* or *ao-* in Gaelic where shortening seems to be well established (*eaddagh, eddin, eddrym*), also *feddyn* (lenited form *eddyn*), and *earroo* may also have been influenced by these and by *earish* ‘time,

³⁴¹ E.g. ‘/ə danik’ ʃə ‘raf gə fo:L’? ha ‘danik’/ *An dtáinig sé ar ais go fóill? Cha dtáinig* [‘Has he come back yet? No’] (Stockman 1986: 13), where the verb has a short vowel in both positions, despite being fully stressed in the answer.

weather’ (G. *iris*, EIr. *aires*). *Ymmyd* ‘use’ (G. *adhmad*) may also belong here, although it may also have been influenced by semantically similar *ymmyrch* ‘need’ (ScG. *imir*), *ymmyrchagh* ‘necessary, useful’.

There is apparently a semantic split between *meeilley* ‘mile’, with vowel length retained, and *milley* ‘million, thousand’ (both G. *míle*), the latter possibly influenced by English *million* (the usual word for ‘thousand’ is the borrowing *thousane*). Note, however, the curse *my veelley mhillee ort*, interpreted by Cregeen as ‘my dirty mile on thee, or my bad wish on thee’, but more readily explicable as ‘my thousand(fold) destruction on you’ (*mo mhíle millidh ort*). Compare also *mirril* (G. *míorbhail*), which may be similarly influenced by English ‘miracle’.

In other cases there may be no obvious motivation for the shortening, although the bisyllabic cases may be attributed to a tendency observed in Ulster Irish for initial heavy syllables to be shortened in polysyllabic words (Stockman 1986). This phenomenon is discussed by Green (1997: 75–9) under the label ‘trochaic shortening’ (see Hayes 1995: 145–9; Prince 1990: 359–70). This phenomenon is explained by the observation that light-light trochees are cross-linguistically better formed than heavy-light ones owing to a preference in trochaic languages for even duration (Hayes 1995: 79–85) (§5.1.1.6).³⁴²

The contractions to monosyllabic forms in *haink*, *daink* ‘came’ (G. *tháinig*), *raink* ‘reached, arrived’ (G. *ráinig*) and *Gaelg* ‘Manx’ (G. *Gaoidhealg*) may be regarded as a further stage of reduction; in the case of the verbs, see also *cheayll*, *geayll* ‘heard’ (G. *chuala*) and *vaik* ‘saw’ (G. *faca*).

³⁴² For another potential factor, see Ó Maolalaigh (2014b: 19), who links vowel shortening in Stockman’s (1986) Ulster items to the presence of a light sonorant following the vowel in many of them.

5.5.2 Vowel lengthening

According to Jackson (9), unhistorical vowel lengthening is found in /a/ and /o/:

These lengthenings [...] occur only before present-day single consonants, and seem to affect only original stressed *a*, *ai*, *o*, and *ea* in its **a** pronunciation

(Jackson: 9)

This is noted also by Marstrander (61, 68). Rhÿs likewise reports this primarily in /a/:

Open *a*, long. This is approximately the \bar{a} of the English word ‘father,’ and it is not uncommon in Manx, especially when an *a* which, etymologically speaking, is short, has been lengthened in an accented syllable, as for example, in the word [...] *fakin* ‘to see’ (Ir. *faicsin*, *feicsin*, ScG. *faicsinn*, *faicinn*), [...] *lhiabbee* ‘bed’ (Ir. *leabadh*, ScG. *leaba*), [...] *cliaghtey* to ‘be wont, a habit or custom’ (Ir. *cleachtadh*, *cleachd*, ScG. *cleachd*), [...] *clashtyn* ‘to hear’ (Ir. *cloisdin*, ScG. *claisinn*), [...] *shassoo* ‘to stand’ (Goi. *seasamh*). [...]

I have sometimes heard this vowel [Open *a*, long] in monosyllables ending with *s*, such as *glass* ‘green, blue, grey’ (Goi. *glas*), pronounced just like its Welsh equivalent *glâs* and so in [...] *jiass* (Goi. *deas*). But more usually the *a* in these words and the like is decidedly short or of an intermediate length.

(Rhÿs: 3)

According to Rhÿs (45–6), the stressed vowel in *moddey* ‘dog’ (G. *madadh*) is long in the singular, but short in the plural *moddee*:

Short [nasal] *y* [ɔ̃] [...] occurs in [...] *moddee* ‘dogs’ the tone vowel of which is always short and this differs both in quality and quantity from that of the singular [...] *moddey*.

(Rhÿs: 45)

According to Broderick (*HLSM* III: 122), however, all short vowels can be lengthened:

This feature of secondary lengthening is a characteristic of L[ate] S[poken] M[anx] and can affect all (orig[inally] stressed) short vowels.

(*HLSM* III: 122)

Thomson (1999: 391) notes early evidence for secondary lengthening in the form of diacritics in the 1707 transcriptions of Manx speech for Edward Lhuyd (§1.5.1) which

suggest lengthening, again in /a/ and /o/. It is possible that these lengthenings began in /a/, as there is no risk of merger with /a:/ from historical *á*, which has become /ɛ:/ (§2.2.2). On the other hand, Jackson's and Broderick's descriptions suggest that secondarily lengthened vowels may have remained shorter than historical long vowels, so full mergers may have been avoided.

In a few items, unhistorical vowel lengthening appears to be long-established and is shown in the orthography (Table 108):

Table 108. Vowel lengthening shown in orthography

	Phillips	CM pronunciation	etymology	English	HLSM
fairaig (Cr., K.), fairage (K.) ³⁴³		/fa'riɛ:g/	faireóg	gland, wax-kernel, 'a lump in the groin or armpit' (Cr.)	
sheeiney, sheeint(yn) (Cr., Bible)		/ʃi:ɪə/	sine	teat, nipple	i TC
sooree		/su:ri/	suirghe	court, woo	u: JW, NM, HK, SK, u W:N, u: J:EK
spagey, spaagey	agg	/spɛ:gə/	spaga, Eng. bag (O'Rahilly 1927: 27)	bag, scrip	
strep, strepey, strebin		?/stre:pə/, ?/stre:bəni/	ScG. streap, Ir. dreap	struggle, wrestle, wallow	i: TC

³⁴³ The stress marked on the first syllable by Cregeen, but see §5.1. If there is in fact stress shift as implied by the spellings, this suggests the strong likelihood of an earlier long vowel in the first syllable (§5.1); there may have been confusion with *fáir*, *fáireóg* 'nest' (although this is not attested in Manx).

5.6 Vowel nasalization

Phonological vowel nasalization is widely attested across Gaelic dialects (Ó Maolalaigh 2003a; Ó Curnáin 2007: 291–361), although many varieties, particularly in Ireland, and parts of south-west Scotland appear to have lost this feature, or to have been in the process of losing it, relatively recently, i.e. in the last two centuries (Quiggin 1906: 64; Pedersen 1909: 386; Grant 1987: 58; Ternes 2006: 103; Ó Curnáin 2007: 325–332).

Besides the prototypical case of vowel adjacent to original nasal consonants (including *mh* */*ṽ*/), vowel nasality (and denasalization) in Gaelic arises by a number of processes (Ó Curnáin 2007: 319–24), which produce a system replete with complexity, exceptions, unpredictability and considerable dialectal and idiolectal variation. Alongside categorical phonemic nasalization, speakers (including those lacking phonemic nasalization or having a reduced system) may exhibit a number of other types of vowel nasalization, including co-articulatory (partial) nasalization (Ternes 2006: 104–5; Morrison 2018: 5), phonological perseverative and anticipatory spread of nasality (Ó Curnáin 2007: 293–5, 301–11), and paralinguistic nasalization and nasal speech setting (*ibid.*: 311–316, 1860–4). These complexities can make analysis very difficult (*ibid.*: 310–332; Oftedal 1956: 41), especially when combined with ongoing denasalization (Ó Curnáin 2007: 310–1, 324).

Jackson's (63–4) and Broderick's (*HLSM* III: 147) descriptions of terminal Manx report only sporadic vestigial remains of vowel nasalization. However, the evidence of Rhÿs suggests that vowel nasality was much more widespread in the speech of his informants. He devotes a whole chapter to 'nasal vowels' (Rhÿs: 31–48), and presents a much more complete system, recognizable as similar to those described e.g. by Ternes (2006) and Ó Curnáin (2007). Rhÿs provides evidence of a wide range of processes found in other Gaelic dialects, including perseverative spread of nasality (Rhÿs: 35); vowel nasality after initial clusters *cn-*, *gn-*, *mn-*, *sn-* and *tn-* where *n* is synchronically /r/ (Rhÿs: 33–4); nasality in items where the nasal consonant is elided (Rhÿs: 35–6; also Jackson 63; *HLSM* III: 147); and a number of apparent cases of

nasality arising through rhinoglottophilia³⁴⁴ (Lewin 2019a: 85–9), a phenomenon previously noted by Ó Maolalaigh (2003a: 116–7) in Manx *injl* ‘low’ (G. *íseal*).

The near absence of vowel nasality in the terminal speakers recorded in the twentieth century might be considered a semi-speaker feature of incomplete acquisition, comparable to the absence of feminine gender concord or the lack of control of initial mutation (§1.6.9.1); however it may also in part represent the end point of a trend towards denasalization across the Gaelic world, perhaps connected with language contact (Ó Curnáin 2007: 359).

For reasons of space this topic cannot be discussed in further detail here, and the reader is directed to my discussion of vowel nasalization in Lewin (2019a: 82–9).

³⁴⁴ The term rhinoglottophilia refers to the relationship between glottal or laryngeal and nasal articulations, which have acoustic and perceptual similarities (Matisoff 1975; Ohala 1983). In the Gaelic context, see Ó Maolalaigh (2003a) and Ó Curnáin (2007: 323).

Chapter 6 Conclusion

6.1 Topics covered

From the outset, the aim of this doctoral research project has been to cover as wide a range of sub-topics within the historical phonology of Manx as time and space would allow to be treated in adequate depth. It was recognized that practically all aspects of the topic (and indeed all areas of Manx linguistics) required in-depth re-evaluation and fresh analysis in order to bring them to a state where they can be solidly engaged with by scholars of the Gaelic languages on a basis comparable to descriptions of other dialects and periods (§§1.1, 1.5).

In view of the breadth of areas in critical need of attention, and the acknowledged hindrance that a lack of adequate descriptions of Manx presents to Gaelic linguistics (e.g. Ó Maolalaigh 1997: 5, 11), it was felt that an approach focusing on a number of (only loosely related) topics in reasonable depth, rather than on a single, narrower topic in exhaustive depth, was the right one. In principle, however, a number of the chapters or sections in the present work could form the basis of full theses in their own right.

It was difficult to prioritize topics, and precedence was given to those considered to be of the widest interest within the pan-Gaelic context (including the development of *ao(i)* and *ua(i)*, and the sonorant consonants); those which seemed to be the most complex and intractable (or to have suffered the most misanalysis in the previous literature), and therefore in most urgent need of reappraisal and resolution; and simply those which had long pricked the author's curiosity.

Initially, topics which seemed to have been covered somewhat more extensively than most in the existing literature, notably the complex developments in the stress system (§5.1), were intended to be covered only briefly. However, as the project progressed, closer examination showed that none of the existing analyses of the topic of stress were fully adequate, and some contained significant misapprehensions, such that it was decided that suprasegmental and prosodic topics merited a full chapter of their own.

On the other hand, the intricate topic of the “new” diphthongs (and triphthongs) formed within Gaelic dialects during the modern period from the vocalization of medial and final fricatives (*abh* > /au/, etc.), and with which Manx in particular ‘teems’ (Rhÿs: 2), although certainly of equal interest to the other subjects covered in the thesis,³⁴⁶ has been reluctantly omitted for reasons of space, although one of the most complex parts of this topic is discussed briefly in the chapter on G. *ao(i)*, *ua(i)* (§3.9.1).

Apart from Chapter 4 on the sonorants, developments in the consonant system have not been covered in depth within this thesis. This is despite the fact that the topic of medial voicing and fricativization (‘secondary lenition’), in particular, is one of the most intriguing areas of Manx phonology, and one in which change can clearly be seen in progress during the attested period of the language, and which was still very much in a state of fluctuation among the terminal speakers (Thomson 1984: 314–5; *HLSM* III: 4–13; Williams 1994b: 712; Green 2006). It seems likely that secondary lenition would correlate with sociolinguistic factors, as well as dialect and idiolect, and that some of the quantitative approaches introduced in this thesis could fruitfully be brought to bear on this topic. Similarly, the degree to which the broad-slender palatalization contrast had broken down or entered a situation of ‘wild allophonic variation’ (Broderick 1999: 81–6; see also Williams 1994b: 712, 737; Lewin 2017a: 156, 187–8) in the language of the terminal speakers has not yet been quantified (although see §4.4.3).

6.2 Progress made

Although the main ‘outlines’ of the distinctive developments of Manx phonology have been known to scholarship since Rhÿs’s pioneering treatise published in 1894, the existing descriptions have been difficult to interpret, and inaccessible and misleading to the scholar who is not a Manx specialist, but wishes to make reference to the language in broader contexts. The main achievement of this thesis, then, is to clarify and describe in a systematic fashion a good deal of what has previously been only

³⁴⁶ See e.g. Ó Maolalaigh (2006) for aspects of this topic in a pan-Gaelic context.

known in broadest outline or assumed about Manx phonology. For example, it has long been known that G. *ua(i)* /ua/ is often fronted in Manx, but the environments and lexical items in which this takes place have not before been clearly described. Furthermore, while the superficial similarity here between Manx and Ulster Irish developments has been noted, it has not been previously pointed out that the conditioning factors appear to be quite different in the two cases (§3.8).

That *ao(i)* and *ua(i)* have some tendency to merge had been noted by previous scholars, but the full range of evidence for these developments from across the attested period of the language has not before been collated and analysed quantitatively (Chapter 3). While some uncertainties and ambiguities in the evidence remain (which, given imperfections in the data, may never be resolved completely), a solid basis for reference and further research has nevertheless been provided, and a significant step forward has been taken in removing some of the “noise” in the ‘mass of raw phonetic Manx data’ (Ó Maolalaigh 1997: 5) which comprises existing datasets.

By comparing a number of different sources quantitatively (the Phillips orthography; the eighteenth-century orthography; maximally complete lexical sets for individual phones or developments drawing on the dictionaries; the independent descriptions of Rhÿs, Marstrander, Jackson and Broderick; the corpus of transcribed data in Broderick’s *HLSM*; and instrumental analysis of the recordings of the terminal speakers), it is possible to identify patterns which were not immediately obvious in previous, impressionistic analyses. Even if results based on a single dataset can only be tentative, firmer conclusions can be drawn when a number of independent datasets point towards similar patterns, as notably is the case with the topic of *ao(i)* and *ua(i)*.

With the exception of Rhÿs, whose work traces the development of Manx sounds from Phillips through to the speech of his own informants, most research on Manx phonology has drawn almost exclusively on data recorded or transcribed from the last remaining speakers in the twentieth century, compared directly with Classical Irish cognate forms, with relatively little consideration of the evidence of the historical orthographies. These seem to have generally been presumed to be idiosyncratic and erratic (§1.6.2), too irregular and ambiguous to provide much usable evidence. At any rate, scholars — especially those commenting on Manx in passing rather than

specializing in it — have known too little about the conventions of Manx spelling to make reliable use of orthographic data in their analyses, and when they have tried, there has been a tendency to ascribe implausible realizations to orthographic representations owing to deficient understanding of robustly attested patterns and conventions (see §§1.5.7, 5.1.1.4, 5.1.1.5 for examples).

Redressing the balance, and to a certain extent “rehabilitating” the Manx orthographies, has therefore been a central concern of this thesis. Throughout, it has been shown that there are often striking regularities in the orthographies which can be shown to correlate strongly with particular realizations (e.g. the contrasts between /u:/ ~ /uə/, /i:/ ~ /iə/, §2.2.6, and between /e:/ and /ɛ:/ §2.2.3), although it is certainly true that there are also many frustrating ambiguities (for example, the lack of clarity with regard to sonorant contrasts, Chapter 4).

The somewhat negative attitudes of many scholars towards Manx, and in particular assumptions regarding its ‘anglicized’ or even ‘creoloid’ nature (Lewin 2017a), have resulted in a tendency to assume that certain features of the language as recorded in the twentieth century were also characteristic of earlier periods, when it is likely that they are in fact symptomatic of incomplete acquisition and/or rustiness in a situation of language shift and obsolescence, and belong to the last generation or two of speakers only (*ibid.*: 180–93). Making this distinction clearer, and bringing an understanding of the processes of language shift based on contemporary empirical research on language contact and bilingualism to bear on the study of Manx, has been a major concern of my research (Lewin 2014b; 2017a; 2019a) and informs many aspects of the present thesis.

Nevertheless, it is not always easy to distinguish between internal developments, contact features, and features related to obsolescence (e.g. the reductions in the sonorant consonant inventory discussed in Chapter 4). Claims that Manx is in some way exceptional, such that contemporary phonological frameworks applied to other languages are unsuitable for the analysis of Manx data, have been treated with scepticism (§1.5.9), although it is readily admitted that analysis of historical linguistic data is not always simple, and that conclusions reached are, by necessity, sometimes tentative.

This brings us to another resource which has been under-used and to some extent dismissed (e.g. Jackson: 4): the descriptions and transcriptions made by John Rhÿs in the 1880s and 90s, including his recently documented notebooks (§1.5.2). Although in some respects less scientific and more rudimentary than his successors in the twentieth century, Rhÿs's descriptions are of paramount importance because they pertain to an earlier generation of informants, at least some of whom were Manx-dominant speakers who acquired Manx in communities where knowledge and use of English was not yet universal. They attest to features such as more consistent and productive use of initial mutations, the /r ~ rⁱ/ contrast (§4.2.1), more extensive preservation of coda /r/, /rⁱ/ (§4.2.3), more conservative reflexes of *ao(i)* and *ua(i)* (§3.5.1), extensive vowel nasalization almost completely absent in the terminal speakers (§5.6; Lewin 2019a: 82–9), as well as other linguistic features such as noun gender (Lewin 2019a: 79–82).

Although considerations of space and scope have not allowed too much discussion of wider theoretical implications, insights from the cross-linguistic theoretical and typological literature have been brought to bear where appropriate, and have proved particularly enlightening in the analysis of stress shift (§5.1), vowel shortening in polysyllables (§5.5.1), and the development of earlier geminate sonorants (including the emergence of preocclusion, §4.5). The latter discussion in particular constitutes a significant contribution in placing Manx within the context of prosodic developments within the north-west European linguistic area (cf. Wagner 1964; Salmons 1992; Iosad 2016b).

In terms of situating Manx in the wider Gaelic dialectological context, it is hoped that the analyses in this thesis will provide a more solid basis for comparison than has hitherto been available. It has been shown that, as would be expected, Manx developments often show similar patterns, trajectories and conditioning factors to analogous developments in the other Gaelic dialects — for example, some of the short vowel developments have similar conditioning factors to those evidenced in Ó Maolalaigh (1997) — although, as noted above in relation to fronting of *ua(i)*, such parallels should not be taken for granted. The sonorants also show similar developments to those found elsewhere (e.g. early merger of /r/ and /rⁱ/ to the dental lateral (§4.3.2), which is widely attested in Ireland and Scotland), as well as specific

parallels with Scottish Gaelic (merger of broad and slender lenis /n ~ nʲ/ in certain items, §4.4.3), but there are also specific Manx developments (e.g. depalatalization of lenis */lʲ/ in certain limited circumstances, §4.3.2.2).

An important connection to neighbouring dialects is revealed in the analysis of the Manx development of G. *ao(i)* which is shown to give a front-central mid unrounded (or only weakly rounded) vowel /ə:/, which also represents *agh* etc. (Chapter 3). This bears a strong resemblance to the situation in south-western Scottish dialects (§3.2.1; Lewin 2018), in contrast both to the rest of the northern Gaelic dialect area (Ulster and the rest of Scotland), where *ao* > /u:/, contrastive with *agh* > /ɤ:/, and southern Irish dialects, with *ao* > /i:/ or /e:/ and *agh* > /əj/. This connection has not been picked up by previous analyses.

Other similarities, however, are less likely to be related to any historical affinity or contact. The developments of lengthening, rounding and diphthongization of short vowels before original geminate sonorants in monosyllables might at first glance invite association with similar developments in Munster and the northern Hebrides, but the evidence of Phillips' orthography shows that in the early seventeenth century these developments were only incipient (§4.6), and, on the whole, Manx realizations of this period would have resembled those found in the conservative varieties of Ulster and southern Argyll today. If the Manx developments were largely a development of the mid seventeenth century, there is some evidence that the analogous developments in Munster and Scotland had taken place at least a century or more earlier (O'Rahilly: 51–2). It is unlikely for sociohistorical reasons (§1.3) that this development could have spread into Manx from these areas at such a late date; rather, such parallel developments should be seen as arising from a limited set of options for realizing common inherited features (§1.4). Similar considerations are relevant in the case of stress shift and post-tonic long vowel shortening (§5.1).

6.3 By-products

The development of this thesis naturally involved considerable amounts of background research and data-gathering, and investigation of tangential topics, not all of which has found its way into the permitted space, or is relevant to the central focus of the project. Some of this material has already appeared in print in an article on the cross-Gaelic dialectological and typological development of *ao(i)* (Lewin 2018), and an evaluation of Rhÿs's work as a fieldworker (Lewin 2019a), including notably a discussion of aspects of the topic of vowel nasalization in Manx which are only briefly discussed in the thesis (§5.6). It is hoped that further analyses of related topics, including especially a discussion of the topic of fricative vocalization mentioned above, can be published soon.

Throughout this thesis extensive tables of lexical material are given, with Gaelic or Early Irish cognates provided, or at least tentatively suggested, as far as possible. The most important previously-available sources for etymologies of Manx words are Thomson's (1953; 1954–59) glossary of Phillips' prayer book, and Broderick's dictionaries of 'Late Spoken Manx' (*HLSM* II) and Rhÿs's notes (Broderick 2019). These are restricted, however, to items which happen to appear in the material on which they are based. Other etymologies are given in varia notes on Irish and Scottish Gaelic lexical items by a number of scholars, notably O'Rahilly (see Lewin 2017a: 147) (and also in his *Irish Dialects Past and Present*), and in notes to editions of Manx texts. The former are restricted to items which happen to be of interest from the perspective of the other Gaelic languages, however, and the latter again to forms which appear in particular texts. Since datasets in the present study incorporate numerous lexical items which are attested only in texts for which glossaries are unavailable (e.g. they may be found in the Bible, but not in Phillips or *HLSM*), or else are only attested in Cregeen's and Kelly's dictionaries, the above sources may be of little help, and etymologies for these items had to be identified. During the course of this work, a sizeable collection of additional lexical and etymological data has been assembled, which is likely to prove useful in future research. There are several hundred items whose etymology remains obscure which require further investigation. In these cases,

the insights into the development of Manx phonology and orthography gained during the present research have the potential to provide valuable clues.

6.4 Prospects for future research

As mentioned above, some of the innovative methodologies employed in this project could certainly be applied productively to other aspects of Manx phonology. The instrumental analysis of recordings of the terminal speakers, which involves time-consuming annotation of spectrograms, has only been applied in a couple of areas (§§2.2.3, 3.7, 4.5) but has obvious potential for wider application, including to other sets of recordings beyond those of the Irish Folklore Commission. The quantitative analyses of written material, as well as written phonetic transcriptions, have similarly been applied parsimoniously in the present work, and doubtlessly have the potential to reveal further insights. A full quantitative analysis of all vowel representations in Phillips is a desideratum, for example.

The written material on this which much of this thesis is based is largely restricted to readily available printed material which has been digitized, including the Bible and the two main dictionaries. The only manuscript source of which extensive use is made is Phillips' Prayer Book, for which we have an edition and a full glossary. The analysis of the eighteenth-century orthography is largely restricted to the "standard" as represented in the later editions of the Bible, and the dictionaries. Divergent forms found in less standardized printed sources (such as *Coyrle Sodjeh*, the earliest printed book in Manx published in 1707), and in manuscript sources such as the translators' drafts of the Bible (Lewin 2019b), have only been referred to when they happen to have come to my attention. Clearly, a more systematic engagement with these sources would be fruitful.

The majority of the printed Manx texts have now been digitized in one format or another, an effort to which the present author has contributed (e.g. Lewin and Wheeler 2017; 2019a). In due course it is hoped these texts can be brought together in a similar online format to the available corpora of Irish (*Corpas Stairiúil na Gaeilge* and *Nua-*

Chorpas na Gaeilge) and Scottish Gaelic (*Corpas na Gàidhlig*). The manuscript material presents a more significant challenge, and includes, as mentioned, a sizeable portion of the original drafts of the Bible translation, around 700 sermons, and ~40,000+ lines of carvals (religious ballads). Relatively little of this material has been edited,³⁴⁸ or digitized, although the sermons and the carvals have at least been recently catalogued; see Lewin (2015b) for an edition of the earliest known manuscript sermon. Much of this material is in quite divergent orthography, and has obvious potential to provide much additional information on phonological change, dialect, and the development and refinement of the orthography within the social networks of eighteenth- and nineteenth-century Man.

An obvious priority would be to trace the development of the orthography in the manuscript sources from the early to mid eighteenth century, prior to its standardization in the Bible in the 1770s, and to investigate possible changes in the orthographic practices of key figures, such as Philip Moore, for whom we have surviving early sermons from the 1720s, and who went on to train many of the other clergy and Bible translators and to oversee and edit the Bible translation for publication (Butler 1799: 186–205). Another important source of information is personal and place names, especially the extensive data contained in Broderick's *Placenames of the Isle of Man (PNIM)*. These have been referred to at certain points in the thesis, but await more systematic analysis (§1.5.10).

It is hoped in due course to complete a fuller description of Manx historical phonology, including those areas (primarily the consonantal system) which have had to be omitted from the present thesis. Similarly, other areas of Manx linguistics (such as morphology and syntax) await fresh treatment, and these are also areas in which I have taken an interest and made some progress (Lewin 2014b; 2016a; 2016b), and to which I hope to return. Questions relating to the medieval origins and development of Manx and its relationship with other Gaelic dialects (§§1.3, 1.4), and questions of language contact throughout its history (Lewin 2017a), also deserve fuller treatment.

³⁴⁸ With the important exception of significant parts of the folksong manuscript corpus, which have been edited by Broderick, Thomson and others, and the original prose writings of Edward Faragher (Broderick 1981a; 1982b; Lewin 2014).

Bibliography

Primary sources

AG – *Aght giare dy heet gys tushtey as toiggal jeh'n chredjue Creestee*. John Clague (1814), translation of *An Introduction to the knowledge of the Christian religion*, Henry Crossman (1742).

< <https://books.google.co.uk/books?id=IMoHAAAAQAAJ&pg=>>

Bible – Unless otherwise specified references are to the 1819 (repr. 1979) edition of the Manx Bible

Bible MSS – original translators' drafts, with editorial emendations. Manx National Heritage Library MS 5690C.

CS – *Coyrle Sodjeh*. Lewin and Wheeler (2017) (eds)

HLMS – transcribed texts and vocabulary in *A Handbook of Late Spoken Manx* (Broderick 1894–86)

Hymns – *Lioar dy Hymnyn*. [Manx hymn books] 1795, 1799, 1830, 1846. Lewin and Wheeler (2019) (eds)

PC – *Pargys Caillit*. Thomson (1995) (ed.)

PC 1796 – 'Thomas Christian, *Pargys Caillit* (1796)', ed. by Max W. Wheeler (2017) <https://www.academia.edu/31310779/Thomas_Christian._Pargys_Caillit._1796_edition> [accessed 11.11.2018]

PC 1872 – 'Thomas Christian, *Pargys Caillit*, as published in Manx Miscellanies No. 1, Douglas: The Manx Society, 1872', ed. by Max W. Wheeler (2017). <https://www.academia.edu/31310780/Thomas_Christian._Pargys_Caillit._1872_edition> [accessed 11.11.2018]

Scanned from PDF of original publication:

<books.google.co.uk/books?id=Kws5AQAAMAAJ> [accessed 11.11.2018]

Phillips, Ph. – Bishop Phillips translation of the Book of Common Prayer (c. 1610). Moore and Rhys (1895) (eds); Thomson (1953) (glossary).

PSD – *Plain and Short Directions and Prayers* [appendix to *Coyrle Sodjeh*]. Lewin and Wheeler (2017) (eds)

SW – Sharmaneyn liorish Thomase Wilson [sermons by Thomas Wilson]. 1783 (Bath: R. Cruttwell)

<<https://books.google.co.uk/books?id=ROQGAAAAQAAJ&dq>>

NBHR – ‘Manx Stories and Reminiscences of Ned Beg Hom Ruy’ Broderick (1981b) (ed.)

Rhÿs, John. 1886–93. *Manx notebooks*. National Library of Wales GB 0210 JORHYS A2/5; A3/9, 11, 12; A4/10.

Trad. Ballad – ‘Manx Traditionary Ballad’. Thomson (1960–62) (ed.)

Secondary sources

Ahlqvist, Anders. 1994. ‘Litriú na Gaeilge’, in *Stair na Gaeilge*, ed. by Kim McCone and others (Maynooth: National University of Ireland), pp. 23–59

Archangeli, Diana and others. 2011. ‘ATR in Scottish Gaelic tense sonorants’, in *Formal Approaches to Celtic Linguistics*, ed. by Andrew Carnie (Newcastle upon Tyne: Cambridge Scholars Publishing), pp. 283–306

Ball, Martin J. and Briony Williams. 2001. *Welsh Phonetics* (Lewiston, NY: Edwin Mellen)

Barras, William. 2018. ‘Residual Rhoticity and Emergent r-sandhi in the North West and South West of England: Different Approaches to Hiatus-Resolution?’, in *Sociolinguistics in England*, ed. by Natalie Braber and Sandra Jansen (London: Palgrave Macmillan), pp. 363–92

Barry, Michael V. 1984. ‘Manx English’, in *Language in the British Isles*, ed. by Peter Trudgill (Cambridge: Cambridge University Press), pp. 167–77

Bauer, Laurie. 1985. ‘Tracing phonetic change in the received pronunciation of British English’, *Journal of Phonetics*, 13: 61–81

Bauer, Michael. 2011. *Blas na Gàidhlig The Practical Guide to Gaelic Pronunciation* (Glasgow: Akerbeltz)

Bergin, Osborn. 1946. ‘Irish Grammatical Tracts III and IV’, *Ériu*, 14: 165–257.

Blankenhorn, Virginia S. 1981. ‘Pitch, quantity and stress in Munster Irish’, *Éigse*, 18: 225–250

- Boersma, Paul and David Weenink. 2015. *Praat: doing phonetics by computer* <<http://www.praat.org>>
- Borgstrøm, Carl Hj. 1937. 'The Dialect of Barra in the Outer Hebrides', *Norsk Tidsskrift for Sprogvidenskap*, 8: 71–242
- 1940. *The Dialects of the Outer Hebrides* (Oslo: H. Aschehoug & Co.)
- 1941. *The Dialects of Skye and Ross-shire* (Oslo: H. Aschehoug & Co.)
- Breatnach, Liam. 1994. 'An Mheán-Ghaeilge', in *Stair na Gaeilge*, ed. by Kim McCone and others (Maynooth: National University of Ireland), pp. 221–333
- 2003. 'On Words Ending in a Stressed Vowel in Early Irish', *Ériu*, 53: 133–42
- Breatnach, Risteard A. 1993. 'Cregeen's Manx proverbs and familiar phrases', *Éigse*, 27: 1–34
- Breatnach, Risteard B. 1947. *The Irish of Ring Co. Waterford: A Phonetic Study* (Dublin: Dublin Institute for Advanced Studies)
- Broderick, George. 1981a. 'Baase Illiam Dhone', *Celtica*, 14: 105–23
- 1981b. 'Manx Stories and Reminiscences of Ned Beg Hom Ruy', *Zeitschrift für celtische Philologie*, 38: 113–78
- 1981c. 'Manx Traditional Songs and Song Fragments I: Manx Museum MS. 263A (Clucas Coll.)', *Béaloideas*, 48–9: 9–29.
- 1982a. 'Manx Stories and Reminiscences of Ned Beg Hom Ruy Translation', *Zeitschrift für celtische Philologie*, 39: 117–94
- 1982b. 'Manx Traditional Songs and Song Fragments II: Manx Museum MS. 450A', *Béaloideas*, 50: 1–41
- 1983. 'Boddagh Yn Coonat Laaghagh: A Manx Version of a Fenian Tale', *Béaloideas*, 51: 1–10
- 1984a. 'Ny Kirree Fo Niaghtey', *Celtica*, 16: 157–68
- 1984b. 'Berrey Dhone: A Manx Caillech Bérrí?', *Zeitschrift für celtische Philologie*, 40: 193–210
- 1984c. 'Ec ny Fiddleryn', *Zeitschrift für celtische Philologie*, 40: 211–27
- 1984–86. *A Handbook of Late Spoken Manx*. 3 vols. (Tübingen: Niemeyer)
- 1990. 'Fin as Oshin', *Celtica*, 21: 51–60

- 1993. ‘Manx’, in *The Celtic Languages*, ed. by Martin J. Ball and Nicole Müller, 1st edn (London: Routledge), pp. 228–86
- 1994–2005. *Placenames of the Isle of Man*. 7 vols (Tübingen: Niemeyer)
- 1997. ‘Manx English an Overview’, in *The Celtic Englishes*, ed. by Hildegard L. C. Tristram (Heidelberg: Winter), pp. 123–34
- 1999. *Language Death in the Isle of Man* (Tübingen: Niemeyer)
- 2005. ‘Manx Gaelic’, in *Bausteine zum Studium der Keltologie*, ed. by Helmut Birkhan (Wien: Praesens), pp. 239–41
- 2010. ‘Manx’, in *The Celtic Languages*, ed. by Martin J. Ball and Nicole Müller, 2nd edn (London: Routledge), pp. 305–56
- 2011. ‘The imperfect and secondary future in Late Spoken Manx’, *Scottish Gaelic Studies*, 28: 307–32
- 2015. ‘Manx Traditional Songs and Song-Fragments III: 1 MNH MD 900 MS 08307 and the Robert Gawne Collection?’
<<https://sites.google.com/view/gailck-hasht/artyn?authuser=0>>
[accessed 21.06.2020]
- 2016a. ‘Sir John Rhÿs and his visits to the Isle of Man (1886-1893) I: Catalogue & Lists of Informants’.
<<https://gaelg-hasht.000webhostapp.com/astoo/gb/John%20Rhys%20I.pdf>>
[accessed 23.10.2018]
- 2016b. ‘Sir John Rhÿs and his visits to the Isle of Man (1886-1893) II: Diary of his visits to the Isle of Man (1886-1893)’.
<<https://gaelg-hasht.000webhostapp.com/astoo/gb/John%20Rhys%20II.pdf>>
[accessed 23.10.2018]
- 2017. ‘The last native Manx Gaelic speakers. The final phase: ‘full’ or ‘terminal’ in speech?’, *Studia Celtica Fennica*, 14: 18–57
- 2018a. ‘Manx Gaelic: the end game’, *Celtica*, 30: 56–182
- 2018b. ‘Francis J. Carmody: The Manx Recordings’, *Studia Celtica*, 52: 157–78
- 2018c. ‘Prof. Sir John Rhÿs in the Isle of Man (1886–1893): Linguistic material and texts’, in *Proceedings of the second European symposium in Celtic Studies, held at Prifysgol Bangor University from July 31st to August 3rd 2017*, ed. by Raimund Karl and Katharina Möller (Hagen: Curach Bhán), pp. 35–69

-
- 2018d. ‘Carl Marstrander’s Field Notes from the Isle of Man 1929, 1930, 1933’, *Celtica*, 30: 183–205
- 2018e. ‘Manx Traditional Songs and Song-fragments in the End-phase of Manx Gaelic: From the Clague Music Collection (1890s)’, *Studia Celtica Fennica*, 15: 28–64
- 2018f. ‘Fin as Oshin: a reappraisal’, *Zeitschrift für celtische Philologie*, 65: 63–81
- 2019. Prof. Sir John Rhÿs in the Isle of Man (1886–1893): dictionary. *Zeitschrift für celtische Philologie*, 66: 15–73
- Butcher, Andrew and Debbie Loakes. 2008. ‘Enhancing the left edge: the phonetics of prestopped sonorants in Australian languages’, *Journal of the Acoustical Society of America*, 124: 2527.
- Butler, Weeden. 1799. *Memoirs of Mark Hildesley, D.D. late Lord Bishop of Sodor and Mann; and Master of Sherburn Hospital, under whose auspices the holy scriptures were translated into the Manks language* (London: J. Nichols)
- Campbell, John Lorne (ed.). 1972. *Saoghal an Treobhaiche* (Inbhirnis: Club Leabhar)
- Campbell, Lyle and Martha C. Muntzel. 1989. ‘The structural consequences of language death’, in *Investigating Obsolescence: Studies in Language Contraction and Death*, ed. by Nancy C. Dorian (Cambridge: Cambridge University Press), pp. 181–196
- Carmody, Francis J. 1947. *Manx Gaelic Sentence Structure in the 1819 Bible and the 1625 Prayer Book* (Berkeley: University of California Publications)
- 1953. ‘Spoken Manx’, *Zeitschrift für celtische Philologie*, 24: 58–80
- Carney, James. 1964. *The poems of Blathmac, son of Cú Brettan, together with the Irish Gospel of Thomas and a poem on the Virgin Mary* (Dublin: Irish Texts Society)
- Chaudhri, Talat. 2007. ‘Studies in the Consonantal System of Cornish’ (unpublished doctoral dissertation, University of Wales, Aberystwyth)
- Clancy, Thomas Owen (ed.). 1998. *The Triumph Tree: Scotland’s Earliest Poetry AD 550–1350* (Edinburgh: Canongate Books)
- 2010. ‘Gaelic in medieval Scotland: advent and expansion’, *Proceedings of the British Academy*, 167: 349–92

- Coates, Richard. 1987. 'Historical Linguistics', in *New Horizons in Linguistics 2*, ed by John Lyons, Richard Coates, Margaret Deuchar and Gerald Gazdar (London: Penguin), pp. 179–99
- Cox, Richard A. V. 2011. 'Eachdraidh is tùs a' mhìr àireamhail ann an Gàidhlig (na h-Albann)', *Scottish Gaelic Studies*, 28: 255–94
- 2013. 'The history of the numerical particle in (Scottish) Gaelic', in *Lochlann: festschrift til Jan Erik Rekdal på 60-årsdagen: Aistí in ómós do Jan Erik Rekdal ar a 60ú lá breithe*, ed. by Cathinka Hambro and Lars Ivar Widerøe (Oslo: Hermes Academic Publishing), pp. 247–81
- Cregeen, Archibald. 1835. *A Dictionary of the Manks Language* (Douglas: Quiggin)
- Cumming, J. G. (ed.). 1859. *An Account of the Isle of Man* (Douglas: Manx Society)
- DASG: *Corpas na Gàidhlig, Digital Archive of Scottish Gaelic* (University of Glasgow) <<http://dasg.ac.uk/corpus/>>
- de Bhaldraithe, Tomás. 1945. *The Irish of Cois Fhairrge, Co. Galway: A Phonetic Study* (Dublin: Dublin Institute for Advanced Studies)
- de Búrca, Seán. 1970. *The Irish of Tourmakeady, Co. Mayo* (Dublin: Dublin Institute for Advanced Studies)
- Dillon, Myles. 1953. 'Semantic distribution in Gaelic dialects', *Language*, 29: 322–25
- 1962. 'Phonetic analogy', in *Proceedings of the Fourth International Congress of Phonetic Sciences held at the University of Helsinki 4–9 September 1961*, ed. by Antti Sovijärvi and Pentti Aalto (The Hague: Mouton), pp. 577–79
- Dilworth, Anthony. 1996. 'A comparison of a central western dialect with a peripheral one — western Mainland Inverness-shire and Perthshire', *Scottish Language*, 14/15: 42–51
- Dinneen, Patrick S. 1927. *Foclóir Gaedhilge agus Béarla: An Irish–English Dictionary*, reprinted 1996 (Dublin: Irish Texts Society)
- Dorian, Nancy C. 1977. 'The Problem of the Semi-Speaker in Language Death', *International Journal of the Sociology of Language*, 12: 23–32
- 1981. *Language death: The Life Cycle of a Scottish Gaelic Dialect* (Philadelphia: University of Pennsylvania Press)
- (ed.) 1989. *Investigating Obsolescence: Studies in Language Contraction and Death* (Cambridge: Cambridge University Press)

-
- 2010. *Investigating Variation: The Effects of Social Organization and Social Setting* (Oxford: Oxford University Press)
- Dressler, Wolfgang U. 1981. ‘Language shift and language death — a protean challenge for the linguist’, *Folia Linguistica*, 15: 5–28
- Dwelly, Edward. 1911. *A Gaelic dictionary, specially designed for beginners and for use in schools. Profusely illustrated* (Camus-a-Chorra: the author) <<http://www.dwelly.info/>>
- EDD: The English Dialect Dictionary*, Wright 1898–1905
- eDIL*: Toner, Gregory and others (eds). *Electronic Dictionary of the Irish Language*. <<http://edil.qub.ac.uk/dictionary/search.php>>
- Elsie, Robert. 1986. *Dialect relationships in Goidelic* (Hamburg: Helmut Buske)
- Etchingham, Colmán and others. 2019. *Norse-Gaelic Contacts in a Viking World* (Turnhout: Brepols)
- Faclair Beag*: Bauer, Michael and William Robertson. *Am Faclair Beag*. <<https://www.faclair.com>>
- Fargher, Douglas C. 1979. *Fargher’s English–Manx Dictionary* (Douglas: Shearwater Press)
- Fellows-Jensen, Gillian. 1983. ‘Scandinavian Settlement in the Isle of Man and North-West England: The Place-Name Evidence’, in *The Viking Age in the Isle of Man*, ed. by Christine Fell and others (London: Viking Society for Northern Research), pp. 37–52
- 2015. ‘The Manx Place-name Evidence,’ in *A New History of the Isle of Man. Volume III The Medieval Period 1000–1406*, ed. by Seán Duffy and Harold Mytum (Liverpool: Liverpool University Press), pp. 257–80
- Fougeron, Cécile and Caroline L. Smith. 1999. ‘French’, in *Handbook of the International Phonetic Association* (Cambridge: Cambridge University Press), pp. 78–81
- Gelling, Margaret. 1971. ‘The place-names of the Isle of Man’, *Journal of the Manx Museum*, 7:82, 130–9, 168–75
- 1991. ‘The place-names of the Isle of Man’, in *Language Contact in the British Isles. Proceedings of the Eighth International Symposium on Language Contact in Europe, Douglas, Isle of Man, 1988*, ed. by P. Sture Ureland and George Broderick (Tübingen: Niemeyer), pp. 141–55

- George, Ken and George Broderick. 2009. 'The revived languages – Cornish and Manx', in *The Celtic Languages*, ed. by Martin J. Ball and Nicole Müller (London: Routledge)
- Gilchrist, A. G. and others. 1924–26. 'Manx Collection' (various individual titles). *Journal of the Folk-Song Society*, 28: 117–183, 29: 203–280, 30: 281–347.
- Gillies, William. 1994. 'The Celtic languages: some current and some neglected questions', in *Speaking in our tongues: medieval dialectology and related disciplines*, ed. by Margaret Laing and Ian K. Williamson (Woodbridge: D. S. Brewer), pp. 139–48
- GOI: A Grammar of Old Irish*. Thurneysen 2003
- Grand, Seumas. 2000. *The Gaelic of Islay: A Comparative Study* (Aberdeen: Department of Celtic)
- Grant, James. 1987. 'The Gaelic of Islay: phonology, lexicon and linguistic context' (University of Aberdeen, unpublished doctoral dissertation)
- Green, Antony D. 1997. 'The Prosodic Structure of Irish, Scots Gaelic, and Manx' (Cornell University, unpublished doctoral dissertation)
- 2006. 'The independence of phonology and morphology: The Celtic mutations', *Lingua*, 116: 1946–1985
- Greene, David. 1952. 'Middle Quantity in Irish', *Ériu*, 16: 212–18
- 1962. 'Varia. I', *Ériu*, 19: 111–13
- 1976. 'The Diphthongs of Old Irish', *Ériu*, 27: 26–45
- 1977. 'Feras, banas, and some related abstracts', *Ériu*, 28: 155–61
- 1983. 'Cró, crú and similar words', *Celtica*, 15: 1–9
- Grinevald, Colette and Michel Bert. 2011. 'Speakers and communities', in *The Cambridge Handbook of Endangered Languages* ed. by Peter K. Austin and Julia Sallabank (Cambridge: Cambridge University Press), pp. 45–65
- Hall, T. A. 2009. 'Rule Inversion in a Regional Variety of Bavarian German', *Zeitschrift für Dialektologie und Linguistik*, 76: 137–64
- Hamer, Andrew. 2007. 'English on the Isle of Man', in *Language in the British Isles*, ed. by David Britain (Cambridge: Cambridge University Press), pp. 171–75
- Harvey, Mark and others. 2015. 'Contrastive and Non-contrastive Pre-stopping in Kaytetye', *Australian Journal of Linguistics*, 35: 232–50

- Hayes, Bruce. 1995. *Metrical Stress Theory: Principles and Case Studies* (Chicago: University of Chicago Press)
- Henderson, John Noel. 1974. *A phonetic study of the Irish of Tory island, Co. Donegal* (Belfast: Institute of Irish Studies)
- HLSM: A Handbook of Late Spoken Manx*, Broderick 1984–86.
- Holmer, Nils. 1938. *Studies on Argyllshire Gaelic* (Uppsala: Almqvist & Wiksells)
- 1957. *The Gaelic of Arran* (Dublin: Dublin Institute for Advanced Studies)
- 1962a. *The Gaelic of Kintyre* (Dublin: Dublin Institute for Advanced Studies)
- 1962b. *The Dialects of Co. Clare Part I* (Dublin: Royal Irish Academy)
- Ifans, Dafydd and Robert Thomson. 1980. ‘Edward Lhuyd’s Geirieu Manaweg’, *Studia Celtica*, 14–5: 129–67
- Iosad, Pavel. 2013. ‘Head-dependent asymmetries in Munster Irish prosody’, *Nordlyd*, 40: 66–107
- 2016a. ‘Tonal stability and tonogenesis in North Germanic’, In *Beyond borealism: New perspectives on the North*, ed. by Ian Giles, Laura Chapot, Chris Cooijmans, Ryan Foster, and Barbara Tesio (London: Norvik Press), pp. 80–97
- 2016b. ‘The northwest European phonological area: New approaches to an old problem’ (handout, paper delivered at University of Edinburgh Linguistic Circle, 29th September 2016)
<<https://www.research.ed.ac.uk/portal/files/52774442/handout.pdf>> [accessed 19.05.2019]
- Jackson, Kenneth. 1953. *Language and History in Early Britain* (Edinburgh: Edinburgh University Press)
- 1955. *Contributions to the Study of Manx Phonology* (Edinburgh: Nelson)
- 1968. ‘The breaking of original long ē in Scottish Gaelic’, in *Celtic studies: essays in memory of Angus Matheson 1912–1962*, ed. by James Carney and David Greene (London: Routledge), pp. 65–71
- Jardine, Adam and others. 2015. ‘Banyaduq Prestopped Nasals: Synchrony and Diachrony’, *Oceanic Linguistics*, 54: 548–78
- Jones, Glyn E. 1982. ‘Central rounded and unrounded vowels in sixteenth-century Welsh’, *Cardiff Working Papers in Welsh Linguistics*, 2: 43–52.

- Jones, George. 2010. 'The Gaelic of Jura: A Description' (unpublished doctoral dissertation, Aberystwyth University)
- Kelly, John. 1804. *A Practical Grammar of the Antient Gaelic; or, Language of the Isle of Mann, usually called Manks* (London: John Nichols and son)
- 1866. *Fockleyr Manninagh as Baarlagh* ['Manx and English dictionary'] (Douglas: Manx Society)
- Kewley Draskau, Jennifer. 2008. *Practical Manx* (Liverpool: Liverpool University Press)
- Kneen, J. J. 1925–28. *The Place-Names of the Isle of Man with their Origin and History*, 6 vols (Douglas: Yn Cheshaght Ghailckagh)
- 1927. Letter to editor, *Revue Celtique*, 44: 467
- 1931. *A Grammar of the Manx Language* (London: Oxford University Press)
- 1937. *The Personal Names of the Isle of Man* (London: Oxford University Press)
- 1938. *English–Manx Pronouncing Dictionary* (Douglas: Mona's Herald)
- Kniezsa, Veronika. 1997. 'The Origins of Scots Orthography', in *The Edinburgh History of the Scots Language*, ed. by Charles Jones (Edinburgh: Edinburgh University Press), pp. 24–46
- Ladefoged, Peter. 1967. *Three Areas of Experimental Phonetics* (London: Oxford University Press)
- Ladefoged, Peter and Ian Maddieson. 1996. *The Sounds of the World's Languages* (Oxford: Blackwell)
- Ladefoged, Peter and others. 1998. 'Phonetic Structures of Scottish Gaelic', *Journal of the International Phonetic Association*, 28: 1–41
- Lass, Roger. 2000. 'Phonology and Morphology', in *The Cambridge History of the English Language*, ed. by Roger Lass (Cambridge: Cambridge University Press), pp. 56–186
- Lavin, Thomas J. 1957. 'Notes on the Irish of East Mayo: 1', *Éigse*, 8: 309–21
- La Voie, Lisa. 1996. 'Consonantal strength: results of a data base development project', Working Papers of the Cornell Phonetics Laboratory 12: 207–32
- LEIA: Lexique étymologique de l'irlandais ancien*. Vendryes, Bachallery and Lambert 1959–1996

- Lenoach, Ciarán. 2012. ‘An Ghaeilge Iarthraidisiúnta agus a Dioscúrsa’, in *An Chonair Chaoch: An mionteangachas sa Dáttheangachas*, ed. by Ciarán Lenoach, Conchúr Ó Giollagáin and Brian Ó Curnáin (Indreabhán, Leabhar Breac), pp. 19–109
- Lewin, Christopher. 2011. ‘A sermon in Manx translated from the work of Thomas Wilson: Text and Commentary’, *Scottish Gaelic Studies*, 28: 175–210
- 2014a. *Lioar-lhaih Ghaelgagh: Original Manx Gaelic Prose 1821–1907* (Douglas: Culture Vannin)
- 2014b. ‘The persistence of grammatical gender in Manx Gaelic’ (unpublished undergraduate dissertation, University of Edinburgh)
- 2015a. ‘Classical Manx, Revived Manx and English: competing standards’, in *Minority languages in Europe and beyond – results and prospects*, ed. by P. Sture Ureland and John Stewart (Berlin: Logos), pp. 23–31
- 2015b. ‘A Manx sermon from 1696’, *Zeitschrift für celtische Philologie*, 62: 45–96
- 2016a. ‘The syntax of the verbal noun in Manx Gaelic’, *Journal of Celtic Linguistics*, 17: 147–239
- 2016b. ‘Syntactic innovation in Manx and Sutherland Gaelic’, in *Rannsachadh na Gàidhlig 8*, ed. by Wilson McLeod, Anja Gunderloch and Rob Dunbar (Edinburgh: Dunedin), pp. 237–49
- 2016c. ‘The revivability of Manx Gaelic: a linguistic description and discussion of Revived Manx’ (unpublished masters dissertation, Aberystwyth University)
- 2017a. ‘“Manx hardly deserved to live”: Perspectives on language contact and language shift’, *Zeitschrift für celtische Philologie*, 64: 141–205
- 2017b. ‘Scholarship and Language Revival: Language Ideologies in Corpus Development for Revived Manx’, *Studia Celtica Posnaniensia*, 2: 97–118
- 2018. ‘The vowel */ə:/ ao in Gaelic dialects’, *Papers in Historical Phonology*, 3: 158–79
- 2019a. ‘John Rhys: a pioneer in Manx Studies’, *Cambrian Medieval Celtic Studies*, 77: 65–95
- 2019b. ‘The Manx Bible translation as a source for linguistic features and variation in vernacular eighteenth-century Manx’ (conference paper, 26th International Congress of Celtic Studies, Bangor University)

- Lewin, Christopher and Max W. Wheeler (eds). 2017. ‘*The Principles and Duties of Christianity ... In English and Manks (Coyrle Sodjey)*, by Thomas Wilson, 1707’. <<https://sussex.academia.edu/MaxWheeler>> [accessed 18.01.2018]
- (eds). 2019. ‘*Lioar dy Hymnyn: A critical edition of the four Manx Gaelic hymn books printed 1795–1846*’. <<https://sussex.academia.edu/MaxWheeler>> [accessed 31.01.2019]
- Lhuyd, Edward. 1707. *Archæologia Britannica: Giving some account Additional to what has been hitherto Publish’d, of the Languages, Histories and Customs Of the Original Inhabitants of Great Britain, From Collections and Observations in Travels through Wales, Cornwall, Bas-Bretagne, Ireland and Scotland* (Oxford: the author)
- Loakes, Debbie and others. 2008. ‘Phonetically prestopped laterals in Australian languages: a preliminary investigation of Warlpiri’, in *Proceedings of the 9th Annual Conference of the International Speech Communication Association Brisbane*, ed. by Janet Fletcher and others, pp. 90–3.
<https://www.isca-speech.org/archive/interspeech_2008/i08_0090.html> [accessed 20.05.2019]
- MacBain, Alexander. 1911. *An Etymological Dictionary of the Gaelic Language*, 2nd edn (Stirling: Eneas Mackay) <<http://www.ceantar.org/Dicts/MB2/>>
- Mac Cárthaigh, Eoin. 2014. *The Art of Bardic Poetry: A New Edition of Irish Grammatical Tracts I* (Dublin: Dublin Institute for Advanced Studies)
- Mac Gill-Fhinnein, Gordon. 1966. *Gàidhlig Uibhist a Deas (Téacsleabhar)* (Baile Átha Cliath: Institiúid Ard-Léinn Bhaile Átha Cliath)
- Macquarrie, Charles W. 2015. ‘The Isle of Man in Medieval Gaelic Literature,’ in *A New History of the Isle of Man. Volume III The Medieval Period 1000–1406*, ed. by Seán Duffy and Harold Mytum (Liverpool: Liverpool University Press), pp. 281–304
- Manx National Heritage. 2003. *Skealyn Vannin / Stories of Mann: The complete collection of Manx Language archive recordings made by the Irish Folklore Commission in 1948* (Douglas: Manx National Heritage)
<https://www.youtube.com/watch?v=zOdn9m_EtAA&list=PLxvEbuf5XvSubAhwdDxX9xBf14pfAxB5d> [accessed 26.04.2020]
- 2017. ‘Manx language archives; wax cylinder recordings’.
<<https://www.youtube.com/watch?v=4cbdFPIL1Bk&list=PLxvEbuf5XvSubCI4Wp4XFd2YUXt6ve7pT>> [accessed 05.06.2019]

- Marstrander, Carl J. S. 1932. 'Det Norske Landnám på Man', *Norsk Tidsskrift for Sprogvidenskap*, 6: 40–386
- Matisoff, James A. 1975. 'Rhinoglottophilia: the mysterious connection between nasality and glottality', in *Nasálfest: Papers from a symposium on nasals and nasalization* ed. by James A. Matisoff, Charles A. Ferguson, Larry M. Hyman and John J. Ohala (Stanford, California: Dept. of Linguistics, Stanford University), pp. 265–87.
- McCone, Kim. 1994. 'An tSean-Ghaeilge agus a réamhstair', in *Stair na Gaeilge*, ed. by Kim McCone and others (Maigh Nuad: Roinn na Sean-Ghaeilge), pp. 61–219
- 1996. *Towards a Relative Chronology of Ancient and Medieval Celtic Sound Change* (Maynooth: Department of Old Irish)
- McDonald, R. Andrew. 2007. *Manx kingship in its Irish Sea setting, 1187–1229: King Rognvaldr and the Crovan dynasty* (Dublin: Four Courts Press)
- McKenna, Malachy. 2001. 'Palatalization and Labials in the Irish of Torr, Co. Donegal', in *Béaltra: Aistí ar Theangeolaíocht na Gaeilge*, ed. by Brian Ó Catháin and Ruairí Ó hUiginn (Maigh Nuad: An Sagart), pp. 146–60
- McLeod, Neil. 2000. 'Kinship', *Ériu*, 51: 1–22
- McManus, Damian. 1994. 'An Nua-Ghaeilge Chlasaiceach', in *Stair na Gaeilge*, ed. by Kim McCone and others (Maynooth: National University of Ireland), pp. 335–4
- Megaw, Basil. 1976. 'Norseman and native in the Kingdom of the Isles: a reassessment of the Manx evidence', *Scottish Studies*, 20: 1–44
- Meisel, Jürgen M. 2009. 'Second-language acquisition in early childhood', *Zeitschrift für Sprachwissenschaft*, 28: 5–34
- Menn, Lise. 1989. 'Some people who don't talk right: Universal and particular in child language, aphasia, and language obsolescence', in *Investigating Obsolescence: Studies in Language Contraction and Death*, ed. by Nancy C. Dorian (Cambridge: Cambridge University Press), pp. 335–45
- Mhac an Fhailigh, Éamonn. 1968. *The Irish of Erris, Co. Mayo: A Phonemic Study* (Dublin: Dublin Institute for Advanced Studies)
- Miller, Stephen. 2007. "'Here the Manx language lingers, and may linger some time longer": Manx and English in Cregneash in 1901', *Zeitschrift für celtische Philologie*, 55: 108–21

- Montrul, Silvina A. 2008. *Incomplete Acquisition in Bilingualism: Re-examining the Age Factor* (Amsterdam: John Benjamins)
- 2015. *The Acquisition of Heritage Languages* (Cambridge: Cambridge University Press)
- Moore, Arthur W. 1891. *Carvallyn Gailckagh* (Isle of Man: John Christian Fargher)
- 1896. *Manx Ballads and Music* (Douglas: G. & R. Johnson)
- 1903. *Manx Names*, 2nd edn (London: Elliot Stock)
- Moore, Arthur W. and John Rhÿs (eds). 1895. *The Book of Common Prayer in Manx Gaelic*. 2 vols (Oxford: Oxford University Press)
- Moore, A. W., Sophia Morrison and Edmund Goodwin. 1924. *A Vocabulary of the Anglo-Manx Dialect* (London: Oxford University Press)
- Morris-Jones, John. 1913. *A Welsh Grammar Historical and Comparative* (Oxford: Clarendon)
- Morrison, Donald Alasdair. 2018. ‘Vowel nasalisation in Scottish Gaelic: The search for paradigm uniformity effects in fine-grained phonetic detail’, in *Supplemental Proceedings of the 2017 Annual Meeting on Phonology*, ed. by Gillian Gallagher, Maria Gouskova and Sora Yin (Washington, DC: Linguistic Society of America)
<<https://journals.linguisticsociety.org/proceedings/index.php/amphonology/article/view/4236>> [accessed 25.10.2018]
- Musil, Jakub. 2017. ‘Lateral Consonants in Scottish Gaelic: From dialectology towards a substance-free phonology’ (unpublished dissertation, University of Edinburgh)
- Ní Chasaide, Ailbhe. 1979. ‘Laterals of Gaoth Dobhair Irish and of Hiberno-English’, in *Papers in Celtic phonology*, ed. by Dónall P. Ó Baoill (Coleraine: New University of Ulster), pp. 54–78
- Nic Fhlannchadha, Siobhán and Tina M. Hickey. 2007. ‘Acquiring an opaque gender system in Irish, an endangered indigenous language’, *First Language*, 37: 475–99
- Noyer, Ralph. 1990. ‘Secondary Epenthesis and Stress in Munster Irish’, *Proceedings of the Harvard Celtic Colloquium*, 10: 1–23
- Ó Baoill, Colm. 1978. *Contributions to a Comparative Study of Ulster Irish & Scottish Gaelic* (Belfast: Queen’s University of Belfast)

- Ó Baoill, Dónall P. 1980. 'Preaspiration, epenthesis and vowel lengthening—interrelated and of similar origin?', *Celtica*, 13: 79–108
- 2012. 'Tábhacht an athraithe *ai* go *oi* sa tSean-Ghaeilge mar léiriú ar fhorás canúna', in *Ilteangach, ilseiftiúil: Féilscríbhinn in ómós do Nicholas Williams*, ed. by Liam Mac Amhlaigh and Brian Ó Curnáin (Dublin: Arlen House), pp. 410–29
- Ó Briain, Micheál. 1923. 'Hibernica', *Zeitschrift für celtische Philologie*, 14: 309–34
- Ó Buachalla, Breandán. 1988. 'MacNeill's Law and the Plural Marker *-(e)an*', *Proceedings of the Royal Irish Academy*, 88C: 39–60.
- 2002. "'Common Gaelic" revisited', in *Rannsaigh na Gàidhlig 2000*, ed. by Colm Ó Baoill and Nancy R. McGuire (Obar Dheathain: An Clò Gaidhealach), pp. 1–12.
- Ó Cléirigh, C. R. 1958. Review of Jackson (1955), *Éigse*, 9: 139–142.
- Ó Cuív, Brian. 1944. *The Irish of West Muskerry, Co. Cork: A Phonetic Study* (Dublin: Dublin Institute for Advanced Studies)
- 1957. 'A Poem in Praise of Ragnall, King of Man', *Éigse*, 8: 283–301
- 1980. 'The verbal noun ending *-áil* and related forms', *Celtica*, 13: 125–45
- Ó Curnáin, Brian. 2007. *The Irish of Iorras Aithneach County Galway*. 4 vols (Dublin: Dublin Institute for Advanced Studies)
- 2012. 'An Ghaeilge Iarthraidisiúnta agus an Phragmaitic Chódmheasctha Thiar agus Theas', in *An Chonair Chaoch: An mionteangachas sa Dátheangachas*, ed. by Ciarán Lenoach, Conchúr Ó Giollagáin and Brian Ó Curnáin (Indreabhán, Leabhar Breac), pp. 19–364
- Ó Direáin, Séamas. 2015. *A Survey of Spoken Irish in the Aran Islands, Co. Galway*, 2nd edn (Dublin: Dublin Institute for Advanced Studies)
<<http://aranirish.nuigalway.ie/en/>> [accessed 02.01.2018]
- Ó Dochartaigh, Cathair. 1978. 'Unstressed long vowel shortening in Ulster: the evidence from Achill', *Éigse*, 17: 331–58
- 1987. *Dialects of Ulster Irish* (Belfast: Institute of Irish Studies)
- 1994–97. *Scottish Gaelic Dialect Survey*, 4 vols (Dublin: Dublin Institute for Advanced Studies)
- Ó Dónaill, Niall. 1977. *Foclóir Gaeilge–Béarla* (Baile Átha Cliath: An Gúm)
<<https://www.teanglann.ie/en/fgb/>>

- Oftedal, Magne. 1956. *The Gaelic of Leurbost Isle of Lewis* (Oslo: H. Aschehoug & Co.)
- 1963. ‘On “Palatalized” Labials in Scottish Gaelic’, *Scottish Gaelic Studies*, 10: 71–81
- Ohala, John J. 1981. ‘The listener as a source of sound change’, in *Papers from the Parasession on Language and Behavior*, ed. by Carrie S. Masek, Roberta A. Hendrick and Mary Frances Miller (Chicago: Chicago Linguistics Society), pp. 178–203
- 1983. ‘The phonological end justifies any means’, in *Proceedings of the XIIIth International Congress of Linguists, August 29–September 4, 1982, Tokyo*, ed. by Shirō Hattori and Kazuko Inoue (Tokyo: Proceedings publication committee), pp. 232–43
- 1993. ‘The phonetics of sound change’, in *Historical Linguistics: Problems and Perspectives*, ed. by Charles Jones (London: Longman), pp. 237–78
- Ó hIfearnáin, Tadhg. 2007. ‘Manx orthography and language ideology in the Gaelic continuum’, in *Langues proches–Langues collatérales / Near Languages–Collateral Languages*, ed. by Jean-Michel Eloy and Tadhg Ó hIfearnáin (Paris: Harmattan), pp. 159–70
- Ó Máille, Tomás. 1910. *The language of the Annals of Ulster*. Manchester: Manchester University Press.
- Ó Maolalaigh, Roibeard. 1996. ‘The development of eclipsis in Gaelic’, *Scottish Language*, 14/15: 158–73
- 1997. ‘The Historical Short Vowel Phonology of Gaelic’ (unpublished doctoral dissertation, University of Edinburgh)
<<https://www.era.lib.ed.ac.uk/handle/1842/22535>> [accessed 05.06.2019]
- 2001. ‘Forás na nDeirí Díspeagtha -ean agus -ein i nGaeilge na hAlban’, in *Béalra: Aistí ar Theangeolaíocht na Gaeilge*, ed. by Brian Ó Catháin and Ruairí Ó hUiginn (Maigh Nuad: An Sagart), pp. 1–43
- 2003a. ‘Processes in Nasalization and Related Issues’, *Ériu*, 53: 109–32
- 2003b. ‘Varia II. A Possible Internal Source for Scottish Gaelic Plural -an’, *Ériu*, 53: 157–61
- 2003c. ‘Varia III. Vocalic Variation in air-, aur-’, *Ériu*, 53: 163–9

- 2006. ‘Coibhneas idir consan (*dh / gh*) agus guta i stair na Gaeilge’, in *Aistí ar an Nua-Ghaeilge*, ed. by Aidan Doyle and Siobhán Ní Laoire (Baile Átha Cliath: Cois Life), pp. 41–78
- 2007. ‘*Péisteoigín itheas éadach*: The significance of *leagmhán* ‘moth’’. in *Fil súil nglais A Grey Eye Looks Back: a Festschrift in honour of Colm Ó Baoill*, ed. by Sharon Arbuthnot and Kaarina Hollo (Ceann Drochaid, Perthshire: Clann Tuirc), pp. 213–40
- 2008a. ‘The Scotticisation of Gaelic: a reassessment of the language and orthography of the Gaelic Notes in the Book of Deer’, in *Studies on the Book of Deer*, ed. by Katherine Forsyth (Dublin: Four Courts Press), pp. 179–274
- 2008b. ‘*“Bochanan modhail foghlaimte”*: Tíre Gaelic, lexicology and Glasgow’s Historical Dictionary of Scottish Gaelic’, *Scottish Gaelic Studies*, 24: 373–523
- 2013. ‘Gaelic *gach uile/a h-uile* and the genitive of time’, *Éigse*, 38: 41–93
- 2014a. ‘Am buadhfhacal meadhan-aoiseach *meranach* agus *mearan, mearanach, dàsachdach, dàsan(n)ach* na Gàidhlig’, *Scottish Studies*, 37: 183–206
- 2014b. ‘Glottal and related features in the Gaelic languages’ (unpublished paper presented at 8th Celtic Linguistics Conference, University of Edinburgh)
- 2019. ‘*Fadó*: a conservative survival in Irish?’, *Éigse*, 40: 207–25
- forthcoming a. ‘Cumhachd àireamhan: Cinneachadh nan taobhach caola: Ròchainnteachd agus for-dheasachadh’, in *Litreachas, Eachdraidh & Cànan: Rannsachadh na Gàidhlig 7*, ed. by Sheila M. Kidd, Thomas Owen Clancy and Roibeard Ó Maolalaigh (Glasgow: Celtic & Gaelic, University of Glasgow), pp. 320–81
- forthcoming b. ‘Lexical and phonological variation in words for ‘ankle’ in Gaelic’
- Ó Muircheartaigh, Peadar. 2015. ‘Gaelic dialects present and past: a study of modern and medieval dialect relationships in the Gaelic languages’ (unpublished doctoral dissertation, University of Edinburgh)
- 2016. ‘Fin as Ossian revisited: A Manx ballad in Belanagare and its significance’, *Zeitschrift für celtische Philologie*, 63: 95–127
- Ó Murchú, Máirtín. 1986. ‘*R caol i dtús focal: blúire canúineolaíochta*’, in *Féilscríbhinn Thomáis de Bhaldráithe*, ed. by Seosamh Watson (Baile Áth

- Cliath: Coiste Fhéilscríbhinn Thomáis de Bhaldraithe, An Coláiste Ollscoile), pp. 19–26
- 1989a. *East Perthshire Gaelic* (Dublin: Dublin Institute for Advanced Studies)
- 1989b. ‘Some Irish phonological rules and their chronological order’, *Ériu*, 40: 143–6
- Ó Murchú, Séamas. 1989. ‘Réimniú an bhriathair i nGaeilge Charna’ (unpublished doctoral dissertation, National University of Ireland, Dublin)
- O’Rahilly, T. F. 1926. ‘Etymological Notes’, *Scottish Gaelic Studies*, 1: 28–37
- 1927. ‘Etymological Notes. II’, *Scottish Gaelic Studies*, 2: 13–29
- 1931. ‘Etymological Notes III’, *Scottish Gaelic Studies*, 3: 52–72
- 1932. *Irish Dialects Past and Present* (Dublin: Browne and Nolan)
- 1942a. ‘*Iarann, lár, etc.*’, *Ériu*, 13: 119–27
- 1942b. ‘Notes, Mainly Etymological’, *Ériu*, 13: 144–219
- Ó Searcaigh, Séamus. 1925. *Foghraidheacht Ghaedhilge an Tuaiscirt* (Béal Feirste: Brún agus Ó Nualláin)
- Ó Sé, Diarmuid. 1984. ‘Coimriú siollaí tosaigh sa Ghaeilge’, *Éigse*, 20: 171–86
- 1989. ‘Contributions to the study of word stress in Irish’, *Ériu*, 40: 147–78
- 1991. ‘Prosodic change in Manx and lexical diffusion’, in *Language Contact in the British Isles. Proceedings of the Eighth International Symposium on Language Contact in Europe, Douglas, Isle of Man, 1988*, ed. by P. Sture Ureland and George Broderick (Tübingen: Niemeyer), pp. 159–80
- 2000. *Gaeilge Chorca Dhuibhne* (Baile Átha Cliath: Institiúid Teangeolaíochta Éireann)
- Ó Súilleabháin, Pádraig (ed.). 1953. *Rialachas San Froinsias* (Baile Átha Cliath: Institiúid Árd-Léinn Bhaile Átha Cliath)
- Parry-Williams, T. H. 1923. *The English Element in Welsh: a Study of English Loan-words in Welsh* (London: Cymmrodorion)
- Patterson, Nerys W. 1990. ‘Patrilineal kinship in early Irish society: the evidence from the Irish law texts’, *The Bulletin of the Board of Celtic Studies*, 37: 133–65
- Pedersen, Holger. 1909–13. *Vergleichende Grammatik der keltischen Sprachen*. 2 vols (Göttingen: Vandenhoeck und Ruprecht)

- Pickeral, John. 1988–90. ‘A Preliminary Phonology of Manx’, *Orbis*, 35: 81–97
- PNIM: Placenames of the Isle of Man*. Broderick 1994–2005
- Polinsky, Maria. 2006. ‘Incomplete acquisition: American Russian’, *Journal of Slavic Linguistics*, 14: 191–262
- Prince, Alan S. 1990. ‘Quantitative consequences of rhythmic organization’, *Chicago Linguistic Society*, 26: 355–98
- Quiggin, E. C. 1906. *A Dialect of Donegal* (Cambridge: Cambridge University Press)
- Quilliam, Leslie. 1989. *Surnames of the Manks* (Peel: Cashtal Books)
- Rhÿs, John. 1894. *The Outlines of the Phonology of Manx Gaelic* (Douglas: Manx Society). Also published as an appendix to vol. 2 of Moore and Rhÿs (1895).
- Robertson, Charles M. 1902. ‘Sutherland Gaelic’, *Transactions of the Gaelic Society of Inverness*, 25: 84–125
- Røsstad, Rune. 2011. ‘Kva fortel kjeldene om innovasjonen *dl* i norsk?’, *Maal og Minne*, 103, 96–119
- Russell, Paul. 1995. *An Introduction to the Celtic Languages* (London: Longman)
- Salmons, Joseph C. 1992. *Accentual change and language contact: comparative survey and case study of early northern Europe* (London: Routledge)
- Sammallahti, Pekka. 1998. *The Saami languages: an introduction* (Kárášjohka: Davvi girji)
- Sandøy, Helge. 2005. ‘The typological development of the Nordic languages: I: Phonology’. In *The Nordic languages: An international handbook of the history of the North Germanic languages*, ed. by Oskar Bandle and others (Berlin: Walter de Gruyter), pp. 1852–71.
- Sasse, Hans-Jürgen. 1992a. ‘Theory of language death’, in *Language Death: Factual and Theoretical Explorations with Special Reference to East Africa*, ed. by Matthias Brenzinger (Berlin: Mouton de Gruyter), pp. 7–30.
- Sasse, Hans-Jürgen. 1992b. ‘Language decay and contact-induced change: Similarities and differences’, in *Language Death: Factual and Theoretical Explorations with Special Reference to East Africa*, ed. by Matthias Brenzinger (Berlin: Mouton de Gruyter), pp. 59–80.
- Schmidt, Annette. 1985. *Young people’s Dyrbal. An example of language death from Australia* (Cambridge: Cambridge University Press)

- Scouller, Alastair MacNeill. 2017. 'The Gaelic Dialect of Colonsay' (University of Edinburgh, unpublished doctoral dissertation)
- Sebba, Mark. 1998. 'Orthography as practice and ideology: the case of Manx' (Lancaster University Department of Linguistics and Modern English Language, Centre for Language in Social Life: Working Paper 102)
<<https://eprints.lancs.ac.uk/id/eprint/60448/1/clsl102.pdf>>
[accessed 27.06.2020]
- SGDS: Scottish Gaelic Dialect Survey*. Ó Dochartaigh 1994–97.
- Shaw, John. 1971. 'L'évolution de vieil-irlandais *áe, óe, aí, oí* dans les dialectes gaéliques', *Études celtiques*, 12: 147–56
- Shaw, William. 1780. *A Galic and English Dictionary; containing all the words in the Scotch and Irish dialects of the Celtic, that could be collected from the voice, and old books and MSS*. 2 vols (London: the author)
- Sommerfelt, Alf. 1922. *The dialect of Torr, Co. Donegal* (Christiania: Dybwad)
- 1959. 'The study of Celtic phonetics and phonemics', *Phonetica*, 3: 51–63
- Stockman, Gearóid. 1986. 'Giorrú gutaí fada aiceannta i nGaeilge Chúige Uladh', in *Féilscríbhinn Thomáis de Bhaldráithe*, ed. by Seosamh Watson (Baile Átha Cliath: Coiste Fhéilscríbhinn Thomáis de Bhaldráithe, An Coláiste Ollscoile), pp. 11–8
- Stowell, Brian. 2005. 'The case of Manx Gaelic', in *Rebuilding the Celtic Languages: Reversing Language Shift in the Celtic Countries*, ed. by Diarmuid Ó Néill (Talybont: Y Lolfa), pp. 383–416
- Stüber, Karin. 1997. 'The Inflection of Masculine and Feminine *N*-Stems in Irish', *Ériu*, 48: 229–37
- Ternes, Elmar. 1973. *The Phonemic Analysis of Scottish Gaelic*. 1st edn (Hamburg: Helmut Buske)
- 2006. *The Phonemic Analysis of Scottish Gaelic*. 3rd edn (Dublin: Dublin Institute for Advanced Studies)
- Thomson, Robert L. 1950. 'The syntax of the verb in Manx Gaelic', *Études celtiques*, 5: 260–92
- 1953. 'Early Manx: A Contribution to the Historical Study of Manx Gaelic arranged as a supplementary volume to the Moore-Rhys edition of the Phillips Prayer Book (1610)' (unpublished B.Litt. dissertation, University of Glasgow)

-
- 1954–59. ‘A Glossary of Early Manx’, *Zeitschrift für celtische Philologie*, 24, 272–307; 25, 100–40, 264–308; 27: 79–160
- 1960. ‘Svarabhakti and some associated changes in Manx’, *Celtica*, 5: 116–26
- 1960–62. ‘The Manx Traditionary Ballad’, *Études Celtiques*, 9: 521–48, 10: 60–87
- 1963. ‘Norse Loanwords in Manx’, *Scottish Gaelic Studies*, 10: 65–8
- 1968. ‘Edward Lhuyd in the Isle of Man?’, in *Celtic studies: essays in memory of Angus Matheson 1912–1962*, ed. by James Carney and David Greene (London: Routledge), pp. 170–82
- 1969. ‘The Study of Manx Gaelic. Sir John Rhys Memorial Lecture’, *Proceedings of the British Academy*, 55: 177–210
- 1970. *Foirm na n-Urrnuidheadh. John Carswell’s Gaelic translation of the Book of Common Order* (Edinburgh: Scottish Gaelic Texts Society)
- 1976. ‘The stressed vowel phonemes of a Manx idiolect’, *Celtica*, 11, 255–263
- 1981. *Lessoonyn Sodjey ’sy Ghailck Vanninagh* [‘Further lessons in Manx Gaelic’] (Douglas: Yn Cheshaght Ghailckagh)
- 1983. ‘The Continuity of Manx’, in *The Viking Age in the Isle of Man: Select Papers from the Ninth Viking Congress, Isle of Man, 4–14 July 1981*, ed. by Christine Fel, Peter Foote, James Graham-Campbell and Robert L. Thomson (London: Viking Society for Northern Research), pp. 169–74
- 1984. ‘Manx’, in *Language in the British Isles*, ed. by Peter Trudgill (Cambridge: Cambridge University Press), pp. 306–17
- 1988. ‘Manx-Latin *gilbogus* again’, *Celtica*, 20: 141–44
- 1990. ‘The Revd Dr John Kelly as a Lexicographer’, *Proceedings of the Isle of Man Natural History and Antiquarian Society*, 9: 443–58
- 1991. ‘Foreign elements in the Manx vocabulary’, in *Language Contact in the British Isles. Proceedings of the Eighth International Symposium on Language Contact in Europe, Douglas, Isle of Man, 1988*, ed. by P. Sture Ureland and George Broderick (Tübingen: Niemeyer), pp. 127–40
- 1992. ‘The Manx language’, in Donald MacAulay (ed.), *The Celtic Languages* (Cambridge: Cambridge University Press), pp. 100–36

- 1995. *Pargys Caillit. An abridgement of John Milton's Paradise Lost By Thomas Christian with the anonymous translation of Thomas Parnell's The Hermit* (Douglas: Centre for Manx Studies)
- 1997. *Paart dy homileeyn ny sharmaneyn oikoil Agglish Hostyn* (Douglas: Yn Cheshaght Ghailckagh)
- 1998. *Yn Fer-raauee Creestee (1763) The Christian Monitor (1686): A Bilingual Edition with Notes and Introduction* (Douglas: Yn Cheshaght Ghailckagh)
- 1999. 'Edward Lhuyd's *Geirieu Manaweg II*', *Celtica*, 23: 390–407
- 2000. 'Manx', in Glanville Price (ed.), *Languages in Britain & Ireland* (Oxford: Blackwell), pp. 58–89
- 2015†. 'Language in Man: prehistory to literacy,' in *A New History of the Isle of Man. Volume III The Medieval Period 1000–1406*, ed. by Seán Duffy and Harold Mytum (Liverpool: Liverpool University Press), pp. 241–56
- Thomson, Robert L., and Adrian J. Pilgrim. 1988. *An Outline of Manx Language and Literature* (Douglas: Yn Cheshaght Ghailckagh)
- Thurneysen, Rudolf. 2003. *A Grammar of Old Irish*, 1st edn 1949 (Dublin: Dublin Institute for Advanced Studies).
- Trask, Larry. 1995. 'Summary: Buccalization'. <<https://linguistlist.org/issues/6/6-960.html>> [accessed 22.09.2019]
- Trebitsch†, Rudolf and Ulla Remmer. 2003. *The collections of Rudolf Trebitsch Celtic recordings 1907–09*. Audio CD and accompanying booklet (Vienna: Österreichische Akademie der Wissenschaften)
- Trudgill, Peter. 1974. 'Linguistic change and diffusion: Description and explanation in sociolinguistic dialect geography', *Language in Society*, 3: 215–46
- Ua Súilleabháin, Seán. 1994. 'Gaeilge na Mumhan', in *Stair na Gaeilge*, ed. by Kim McCone and others (Maigh Nuad: Roinn na Sean-Ghaeilge), pp. 479–538
- Unsworth, Sharon and others. 2014. 'The Role of Age of Onset and Input in Early Child Bilingualism in Greek and Dutch', *Applied Psycholinguistics*, 35: 765–805
- Vendryes†, J., E. Bachallery and P.-Y. Lambert. 1959–1996. *Lexique étymologique de l'irlandais ancien*. 7 vols (incomplete) (Dublin: Dublin Institute for Advanced Studies)

- Vikar, Anders. *Contributions to the History of the Durham Dialect* (Malmö: Röhr)
- Wagner, Heinrich. 1956. Review of Jackson (1955), *The Modern Language Review*, 51: 107–9
- 1958–69. *Linguistic Atlas and Survey of Irish Dialects*. 4 vols (Dublin: Dublin Institute for Advanced Studies)
- 1959. *Gaeilge Theilinn: Foghraidheacht Gramadach Téacsanna* (Baile Átha Cliath: Institiúid Ard-léinn Bhaile Átha Cliath)
- 1964. ‘Nordeuropäische Lautgeographie’, *Zeitschrift für celtische Philologie*, 29: 225–98
- Watson, Seosamh. 1985. ‘Caducous and Fallen Vowels in Irish and Scottish Gaelic’, *Ériu*, 36: 125–36
- Watson, William J. 1926. *The History of the Celtic Place-Names of Scotland* (Edinburgh: Blackwood)
- Wells, John C. 1982. *Accents of English, vol. 2 The British Isles* (Cambridge: Cambridge University Press)
- Wentworth, Roy G. 2002. ‘Na bolaichean aig na Geàrrlaich ’s an loch làn diubh: fòineimean taobhach ann an dualchainnt Ghàidhlig an Ros an Iar’, in *Rannsachadh na Gàidhlig 1*, ed. by Nancy R. McGuire and Colm Ó Baoill (Obar Dheathain: An Clò Gaidhealach), pp. 91–9
- 2005†. *Rannsachadh air Fòn-eòlas Dualchainnt Ghàidhlig Gheàrrloch, Siorrachd Rois*. Online publication (Dublin: Dublin Institute for Advanced Studies)
 <<https://www.dias.ie/wp-content/uploads/2011/04/gearrloch.pdf>>
 (accessed 21.12.2017)
- Whall, W. B. 1913. *Ships, Sea Songs and Shanties* (Glasgow: James Brown & Son)
- Wheeler, Max W. 2017. ‘Survey of grammatical gender in Classical Manx’ (unpublished paper)
 <https://www.academia.edu/32892848/Survey_of_grammatical_gender_in_Classical_Manx> [accessed 14.05.2019]
- 2018. *Fockleyr Chregeen aa-orderit* [Cregeen’s dictionary re-ordered]. 2nd edn
 <https://www.academia.edu/35892604/Fockleyr_Chregeen_aa-orderit._New_edition._Feb._2018> [accessed 21.10.2018]

- 2019. ‘Phillips’ Manx translation of the Psalms (MNH MS 00003) Diplomatic edition’
<https://www.academia.edu/41457167/Phillips_Manx_translation_of_the_Psalms_MNH_MS_00003_-_Corrected> [accessed 20.06.2020]
- 2020. ‘Psalmyn Ghavid. A critical parallel text edition of the two Manx translations of the Psalms, alongside the English’
<https://www.academia.edu/41917797/Psalmyn_Ghavid._A_critical_parallel_text_edition_of_the_two_Manx_translations_of_the_Psalms_alongside_the_English> [accessed 20.06.2020]
- Williams, Nicholas. 1994a. ‘Na Canúintí a Theacht chun Solais’, in *Stair na Gaeilge*, ed. by Kim McCone and others (Maynooth: National University of Ireland), pp. 447–78
- 1994b. ‘An Mhanainnis’, in *Stair na Gaeilge*, ed. by Kim McCone and others (Maynooth: National University of Ireland), pp. 703–44
- Wood, Simon N. 2006. *Generalized Additive Models* (Boca Raton: Chapman and Hall/CRC)
- Wright, Joseph. 1898–1905. *The English Dialect Dictionary*. 6 vols (London: Henry Frowde) <<http://eddonline-proj.uibk.ac.at/edd/index.jsp>>

