SINGING
IN
LATIN

OR Pronvnciation Explor'd

HAROLD COPEMAN

With a Preface by
Andrew Parrott

[1990]

PUBLISHED AT OXFORD BY THE AUTHOR

A very short booklet suitable for use during rehearsals, with selected
tables of pronunciation, is being published by the author as
        THE POCKET 'SINGING IN LATIN' (£3.50/$6.00).

Both these books are available from:
Harold Copeman, 22 Tawney Street, Oxford OX4 1NJ (0865-243830).

AUTHOR'S NOTE

My thanks are due to all the experts, musical, phonetical, linguistic, historical and ecclesiastical, who have tolerated my intrusion into their fields. Some of them are named *passim* but errors and infelicities are mine.

For reading successive drafts and making me write what I meant to convey, I am in debt to many, but particularly to Alison Wray and to Helen Mead. Over wide fields of language, history and music I am grateful to Charles Barber and to John Stevens. The generous help of many specialists is acknowledged in the text. The staff of the Bodleian Library and of the Taylor Institution have helped greatly.

One of the starting-points of this book has been Dr Frederick Brittain's *Latin in Church.* I am privileged to have been allowed by Mrs Brittain to read and use Dr Brittain's working papers (extending for over 30 years from 1933), particularly on pages 156 and 266f below.

I am grateful for permission to use copyright items owned by Mrs I. Danielsson (Bror Danielsson, *Sir Thomas Smith – Literary and Linguistic Works*, Stockholm, 1978, 1983); Editions Salabert (two of Poulenc's *Motets*, Paris, 1952); Longman Group (J.A. Kemp, *John Wallis's Grammar of the English Language*, London, 1972); Oxford University Press (R.L. Greene, *The Early English Carols*, second edition, Oxford, 1978); Scolar Press (John Hart, *An Orthography*, facsimile, 1969); University of Toronto Press (M. Pope, *Collected Works of Erasmus*, Toronto, 1985); and H.M. Treasury (the print of Whitehall Palace from the Lister Collection).

Several of my suggested pronunciations have been put through the mill by singers, expert and other. I am especially grateful to friends round my table, to Michael Procter and Keith Bennett, to Bruno Turner, Paul Hillier, Rebecca Stewart: and to Andrew Parrott, who has been so good as to provide a Preface which reflects his experience of rehearsing, performing and recording with the Taverner Choir and Consort.

My footnotes are partly designed to stimulate interest and research. To improve their visibility in the minuscule type, I have used an unorthodox mixture of type sizes; there is moral here for computer designers! My thanks are due to Alex Godden for sorting out many computer-printing problems.

I look forward to comments and suggestions from other performers and scholars.

H. A. C.
Oxford
June 1990

iii

CONTENTS

- - - - -

Preface

by

ANDREW PARROTT

'My dear Saxon', Corelli is reported to have said to the young Handel, 'this music is in the French style, of which I have no knowledge.' That one of the most distinguished violinists of his day should have been thus 'confounded in his first attempt to play' a straightforward 'French' overture by Handel[1] should serve as a salutary reminder to the present-day musician of the stylistic pitfalls in an ever-expanding repertory.

Consideration of the pronunciation of Latin will be regarded, I suspect, by most singers as a low priority – a matter of mere surface detail, rather than one of musical style – and certainly it would be wrong to over-emphasise its importance in isolation. But style is the all-but-indefinable product of an interaction of a whole host of elements: acoustics, timbre, tuning, pitch, tempo, scoring, balance, diction, ornamentation, and so on. The contribution of any one factor cannot be properly assessed *in vacuo* nor its value appreciated until it has been tested in context: that is, in performance – in strong and committed performance that explores and expands our current historical understanding of the music.

In practice, it is all too easy to find reasons not to bother with the niceties of different historical pronunciations of Latin. Today's busy singer, whether amateur or professional, is expected to be conversant with the musical idioms of England, France, Germany, Italy, the Low Countries, Spain and further afield, and of almost any period from the early Middle Ages right up to the present day. Furthermore, a single programme may well embrace works from diverse backgrounds, and rehearsal schedules are apt to be too tight to allow a singer to become really familiar with any 'new' manner of pronunciation.

It may also be argued that in any case too little is known, and that relevant information and guidance remain inaccessible to non-specialists. These arguments are now removed by the publication of Harold Copeman's book.

Or, it may be said, what is the point of all this? Surely the good thing about Latin is that the language is dead, timeless and beyond discussion?

Naturally, singing in Latin with an historical approach to its pronunciation will produce all sorts of response. In my own experience there have been three principal benefits, none of them quite expected. Firstly, a correctly

---

[1] Sir John Hawkins: *A General History of the Science and Practice of Music*, 1776 (p. 675 of the 1875 edition).

underlaid text will tend to become easier to sing (given the correct voice-
type, at the right pitch), by virtue of the fact that, at the extremities of the
vocal range and on melismas, the appropriate vowel from the period is likely
to be technically more helpful to the singer. (We know that Renaissance
theorists were concerned that composers should set the words in this way.[2])
Secondly, the rhythms of the music and language are more likely to match,
where sometimes they might fight.[3] Thirdly, Latin is rescued from appearing
to be a dead language, or the exclusive property of the modern Roman
Church; and through its similarity to the vernacular in any country it
acquires a paradoxically greater feeling of familiarity. (More specifically, the
meaning of a word may become more apparent to singer and listener alike
through a sound closer to that of the word's vernacular descendant.)

In short, what may appear to be merely a veneer on musical performance
can shed unexpected light on the nature of the music itself and in particular
it helps to refine our understanding of the subtle balance of music and text
that characterises the best vocal writing of any age.

To this end, Harold Copeman has painstakingly amassed a wealth of
information. This in itself constitutes a major achievement; but he has also
succeeded, without compromise, in bringing this material out of the often
hermetically sealed world of scholarship to those who can make practical use
of the ideas (and perhaps even develop them further) – to singers
themselves. In clear and comprehensive fashion this book lays out the
evidence and proceeds to explore whatever conclusions may be drawn from it.
Inevitably, there is still much room for debate (most obviously on the issue
of diphthongs in Tudor music) and it is indeed part of Harold Copeman's
intention to invite and fuel such debate. But for a very long time to come
singers and others involved with vocal music will be in his debt for having
tilled the soil so thoroughly and so skilfully; the challenge is there for
performing musicians to accept.

A. H. P.

Stanton St John

March 1990

---

2 Vicentino (1555), for example, warns the composer that in a run in the lower voices
some vowels (A, O, U) are easy and resonant to sing on; in the middle voices A, E and O,
while in the higher and highest voices A, E, I are most fitting. The letter I is sharp in
sound and pronunciation but the singer seems not to be able to manage it with full voice
on a run in the lower parts (*L'antica musica*, IV, 29). See D. Harrán, *Word-tone relations
in musical thought* (American Institute of Musicology, 1986), 186, 430.

3 Machaut's *Messe de Notre Dame* is a very clear example. Look, for instance, in the *Credo*
at *Deum de Deo*, *lumen de lumine* or *et propter nostram salutem*. The musical rhythm and the
customary classical/ Italian accentuation are in strong conflict. With a French or Picard
style (weak accentuation and end-lengthening) the two are reconciled.

NOTATION of SOUND-VALUES

A book about pronunciation, unlike a tape-recording, needs symbols to represent the various sounds. I have used three methods: a. I have quoted earlier authors who have explained Latin pronunciation in their own varying ways. b. Sometimes it has been useful to refer to a word in a well-known language which illustrates a particular sound. c. Starting in Chapter 4 I have used **phonetic** symbols, in square brackets [ ], from the alphabet of the International Phonetic Asociation (I.P.A.). The exact usage varies somewhat from author to author; mine is defined below. I have not needed to use the **phonemic** symbol / /, denoting a family of near-alike sounds, any of which would be understood in their context.

The texts in method a. have to be interpreted in terms of the vernacular pronunciation of the time (on which I give some guidance). In methods b. and c., imitations and symbols are geared to present-day educated speech in the relevant country; for English the analogue is **(British) Standard English**, which for practical purposes can be taken as the speech of present-day B.B.C. news-readers. I have used ā, ă etc. for **'long'** and **'short'** vowels

Except in quotations, references to letters of the alphabet are in *italics* (a, A, etc.) The sound of a letter is denoted, in general terms, as 'a', 'o', etc. Where appropriate the **phonetic alphabet** has been used ([a], [ɑ], [e], [ɛ], [ə], [ɔ], [ɒ], [ʃ], [ʒ], etc.), in the way defined on the next two pages.

Vowels

[ɑ] as in:	Fr. *pas*	[ɑ:] as in:	harbour[1]
[a]	Fr. *à la salle*	[a:]	lengthened [a]
[æ]	mat	[æ:]	bad, pronounced long
[e]	Fr. *été*[2]	[e:]	Ger. See: close vowel
[ɛ]	met[2]	[ɛ:]	Fr. *bête*
[I]	sit	[I:]	machine[3]
[i]	Fr. *si*	[i:]	Fr. *rire*; Ger. *ihn*
[o]	Fr. *sauter*	[o:]	tone; Ger. *Sohn*
[ɔ][4]	Ger. *Gott*	[ɔ:][4]	nor, saw
[ɒ][4]	Brit. Eng. not	[ɒ:][4]	lengthened [ɒ]
[u]	Fr. *foule*	[u:]	boot[1]; Ger. *gut*
[U]	full[1], book[1]		
[ʌ]	but[1]		
[y]	Fr. *volume*	[y:]	Fr. *littérature*, Ger. *grün*
[Y][5]	Ger. *Küche*	[Y:]	lengthened [Y]

[œ]   Fr. *oeuf*, Ger. *Mönche*; for more central vowels see page 26.
[ə] - weak vowels like father, about, gallop, Fr. *petit*, Ger. *Güte*.
                     [ə:]   fur, mirth (S. Eng.)

---

[1] Not as in some northern English.

[2] At these points I differ from the usage of E.J. Dobson, English Pronunciation 1500-1700 (Oxford, 1968), xx f. He has [e] = Fr. *blé* and [e] = pen (but I.P.A. does not).

[3] This is a personal usage, explained on p. 126: lips are slightly rounded to give a good singing vowel. (An extended [I], in contrast, gives the sound in 'Bring', sung long.)

[4] The way various authors use these symbols is particularly confusing.

[5] More open and less forward than [y].

LENGTH AND QUALITY

In the table on the previous page the vowels in the right-hand column are of longer duration than those on the left; they have the same quality unless otherwise noted. Conventionally, however, English vowels described as 'short' and 'long' (see page 16) have differed strongly in quality:

[æ   ɛ   I   ɒ   ʌ] short;

[ei: i: ai[6] ou ju:] long .

SEMI-VOWEL GLIDES

[j], [w], [ẅ] are quick consonantal versions of [i]/[I], [u], [y]/[Y].

NASAL VOWELS

[ɑ̃], an open nasal vowel produced at the back of the mouth cavity:
   Fr. *commencer, ancien, ample.*
[æ̃], a forward, not very open, nasal vowel, as often in American 'have'.
[ɛ̃], as in Fr. *faim, vingt.*
[ɔ̃], as in Fr. *on, fond, prononciation.*
[œ̃], as in Fr. *un.*
[ĩ], [ũ], [ỹ], [Ỹ], in French and Portuguese Latin, by nasalising each vowel.

DIPHTHONGS

These are denoted [au], [ai] etc., which should be read as 'starting with [a] and gliding towards [u], [I], etc, though not necessarily attaining them'. The mixture is a diphthong if it acts as the vowel of one syllable; if there are two distinct syllables it is a 'double vowel', written [a-u] etc.

Consonants (where not obvious)

	As in:
[ŋ]	sing.
[θ][2]	theta, thing.
[ð]	this (the voiced equivalent of [θ].
[ʃ]	she, *château.*
[ʒ]	leisure; Fr. *j'ai, Liège.*
[ç]	Ger. *ich.*
[x]	Sc. loch, Ger. *ach,* Sp. *jabon.*
[ɣ]	(the voiced equivalent of [x]: western Dutch 'g' and 'ch' (*Scheveningen*)

ECONOMIES IN PHONETIC SIGNS. Because this is primarily a book for non-phoneticians I have cut down on the number of symbols to be remembered. I have not used the symbol [ß] for 'bilabial v' (often audible in German English for *v* or *w*); and I have used ñ (as in Sp. *mañana,* Fr. *digne, agneau*) in preference to the I.P.A. symbol [ɲ] (to avoid confusion with [ŋ] above).

[6] The modern English 'long I' can also be represented as [aj], or as [aI] (and *O.E.D.* uses [əi]): see 'Diphthongs', above. In singing most languages the glide element in any such diphthongs should be quite short.

LENGTH AND QUALITY

In the table on the previous page the vowels in the right-hand column are of longer duration than those on the left; they have the same quality unless otherwise noted. Conventionally, however, English vowels described as 'short' and 'long' (see page 16) have differed strongly in quality:

[æ   ɛ   I   ɒ   ʌ] short;
[ei: i: ai[6] ou ju:] long .

SEMI-VOWEL GLIDES

[j], [w], [ẅ] are quick consonantal versions of [i]/[I], [u], [y]/[Y].

NASAL VOWELS

[ɑ̃], an open nasal vowel produced at the back of the mouth cavity:
  Fr. *commencer, ancien, ample.*
[æ̃], a forward, not very open, nasal vowel, as often in American 'have'.
[ɛ̃], as in Fr. *faim, vingt.*
[ɔ̃], as in Fr. *on, fond, prononciation.*
[œ̃], as in Fr. *un.*
[ĩ], [ũ], [ỹ], [Ỹ], in French and Portuguese Latin, by nasalising each vowel.

DIPHTHONGS

These are denoted [au], [ai] etc., which should be read as 'starting with [a] and gliding towards [u], [I], etc, though not necessarily attaining them'. The mixture is a diphthong if it acts as the vowel of one syllable; if there are two distinct syllables it is a 'double vowel', written [a-u] etc.

Consonants (where not obvious)

	As in:
[ŋ]	sing.
[θ][2]	theta, thing.
[ð]	this (the voiced equivalent of [θ].
[ʃ]	she, *château.*
[ʒ]	leisure; Fr. *j'ai, Liège.*
[ç]	Ger. *ich.*
[x]	Sc. loch, Ger. *ach,* Sp. *jabon.*
[γ]	(the voiced equivalent of [x]: western Dutch 'g' and 'ch' (*Scheveningen*)

ECONOMIES IN PHONETIC SIGNS. Because this is primarily a book for non-phoneticians I have cut down on the number of symbols to be remembered. I have not used the symbol [ß] for 'bilabial v' (often audible in German English for *v* or *w*); and I have used ñ (as in Sp. *mañana*, Fr. *digne, agneau*) in preference to the I.P.A. symbol [ɲ] (to avoid confusion with [ŋ] above).

6 The modern English 'long I' can also be represented as [aj], or as [aI] (and *O.E.D.* uses [əi]): see 'Diphthongs', above. In singing most languages the glide element in any such diphthongs should be quite short.

THE SOUND OF ENGLISH LATIN TO 1650

English Latin has a history of nearly 1400 years: Celtic Latin (pages 135, 139–41) goes back to the conversion of the Ancient Britons and of the Irish Celts, but there was virtually no continuity when the Germanic tribes invaded Britain in the fifth century. The story is more complex than for other countries: but at least we have a fair idea of the pronunciation at the beginning and at the end. It started as Western Vulgar Latin[1] when missionaries came in the sixth century (from the Celtic Church in Ireland and Scotland and from Rome)[2]; today the traditional Old Style Latin has nearly disappeared (I describe it on pages 198f and 277–82). We have certain important descriptions from the intervening centuries, but joining up the ends and the middle is not always straightforward. I will first set out both ends, showing the most changeable area, the accented vowels.

ACCENTED VOWELS

SHORT[3]	A	E	I	O	U
6th-c.	[a]	[ɛ]	[I]*	[o]	[U]*
20th-c. Old Style	[æ]	[ɛ]	[I]	[ɒ]	[ʌ]

LONG[3]					
6th-c.	[a:]	[e:]*	[i:]	[o:]*	[u:]
20th-c. Old Style	[ei], [ɑ:]	[i:]	[ai]	[ou]	[ju]

* [I] and [e] were closely linked and partly merged, as were [U] and [o].

[1] J.B. Scheier, *The Roman Pronunciation of Latin* (Indiana, 1904), details the references by early grammarians; and see pp. 55 above, n. 3, and 122, n. 59.

For V.L., including regional detail, cf. Grandgent, esp. 75–140. How and when Latin came to be used by the Church is outlined on pp. 244–6.

[2] Missionaries (origin unknown) had come to Celtic Britain in the second or third centuries. The Germanic tribes which invaded in the fourth and fifth centuries, and became the English, do not seem to have taken over Christianity or Latin from the Britons. The Celts retreated west, some of them apparently taking to Ireland their religion and the Latin. According to W.G. Elcock, *The Romance Languages* (London, 1960), 323, the Irish Church used the ordinary church Latin of the 5th-6th c, with none of the deterioration that affected the literary Latin of Gaul; but Dr D. Howlett suggests to me that assimilation into Irish speech was important.

St Columba took faith and language to Iona (west of the Scottish coast), and the movement continued in the 7th c. to Lindisfarne, Northumbria, through St Aidan (*Oxford Dictionary of the Christian Church*). See p. 135 for the effect on Latin pronunciation in the British Isles, and pp. 106f for the spread to N.W. Europe.

[3] I use these traditional words 'short' and 'long' (see p. 16) for the more open/lax and closed/tense vowels denoted by a given letter. Sargeaunt, S.P.E. Tract IV, 8–10, adds 'long' *ER, IR, UR* ([ə:]) and *OR* ([ɔ:]), and 'short' *er, or* ([e]).

In the early centuries A.D. *AE, OE* came to be written and pronounced as *E* (*AE* at first a more open vowel than *OE*).

i, a. England, 600–800

NORTHUMBRIA was Christianised in the seventh century, through both Pope Gregory in Rome (via Canterbury and York) and Celts from the teaching abbeys of Iona (and later Lindisfarne). Missionaries to Canterbury established the great monasteries at Jarrow and Wearmouth, where Bede wrote; Alcuin of York was called to reform the liturgy and the Latin of Charlemagne's Empire.

KENT. Latin was taught at Canterbury in the late seventh century under the (Greek) Archbishop Theodore, St Benedict Biscop and Hadrian the African. John, archcantor of St Peter's, was brought to teach Roman chant in England[4]. Kentish chant started from their Latin, with (we may guess) local colouring.

In all the English kingdoms it seems likely that the **vowels** were those of the Roman alphabet, which replaced the earlier (runic) spelling of the vernacular, Latin (Roman) values being given to the sounds[5]: but the rounded vowels [y:], [y] were used as well as [u:] and [U]. Before front vowels (e, i, æ, oe), C was palatalised, but the change from the earlier and classical [k] was probably only that between the palatal 'k' of 'kit', and the initial sound in 'cat'. Before those vowels initial G moved towards consonantal y, [j], a soft guttural y. S was usually [s] though perhaps [z] between vowels; H between vowels (*mihi, nihil*) was probably [x] (as in 'loch')[6].

i, b. England, particularly Wessex, 800–1066.

Here we have rather more useful data. Following a strong lead by King Alfred (d. 901), his successors and Saints Dunstan, Æthelwold and Oswald revived scholarship and monasticism in the tenth century; written records of Old English (Anglo-Saxon) and of Latin then become more frequent[7]. Our sources are spelling variants (pages 8, 48–53), and analogies between the languages, for instance in the spelling and development of words borrowed by Old English from Latin and vice versa. A conservative literary Latin existed as well as a developed Vulgar Latin, and some educated clergy were trying to go back to classical quantities. There was also a strongly popular influence in churchly circles, Latin style in singing may have varied.

[4] See *Oxford Dictionary of the Christian Church*, 154, 824. Benedict Biscop, a Northumbrian, returned from Rome and Canterbury with 7th-c. Roman Latin. At Lindisfarne pronunciation will have been early V.L. overlaid by centuries of Celtic speaking, with Scots added when St Cuthbert came in 664; when the Celtic monks left, upset at the change to Roman practices following the Synod of Whitby, the monastery became 'Italo-Saxon'.

[5] By clerics, who used Celtic forms (Anglo-Saxons, unlike Britons, had no direct contact with the Romans): Barber, *The Story of Language*, 125f; Gimson, 75, 79; cf. p. 81, n. 3.

[6] A. Campbell, *Old English Grammar* (Oxford, 1959), esp. 14, 21, 24 (on 'h'), and (on the velar sounds for both C and g) 173-7. The softer (palatalised) sound for g is consistent with that of O.E. yogh. See also Grandgent, 108-111; Allen, 102; J. and E.M. Wright, *Old English Grammar* (Oxford, 1925), 163, 164.

The Wrights, 161, give s = [s] between voiced sounds. On the Latin of Pope Gregory's missionaries see Sargeaunt, S.P.E. Tract IV, 3.

[7] See S. Keynes's introduction to J.R. Backhouse, *The Golden Age of Anglo-Saxon Art* (B.M. exhibition catalogue, London, 1984).

There was also Norman-French influence: in the late tenth century Oswald, Archbishop of York, needed an instructor of monks; having been educated at Fleury (map on page 149) he was able to call upon Abbo (the Abbot), who founded and came to teach at Ramsey Abbey (986-8) and wrote for his pupils *Quæstiones Grammaticales*, on prosody and pronunciation[8].

In this late Saxon period there was a growing body of simple church music, and we are fortunate to have a scholarly reconstruction of Wessex Latin[9]. Combining these sources I suggest this scheme for late Anglo-Saxon music:

VOWELS

A The stressed long and short vowels were practically identical in quality at this date: an open back vowel, [ɑ][10]; unstressed, perhaps a vague central vowel in the [ə] range.

AE, OE By now usually pronounced and written as *E* (There was also the vernacular sound [æ] which came to be denoted by Roman *æ*[11])

E A front vowel, roughly as in 'bet' ([ɛ]; [ɛ:] or [e:]). Even then the long *e* was tending to close – *celum/ cilum* ([silUm] or [selUm]). When unstressed it retained its full value (as did other vowels)[10].

I/Y was a front vowel: I suspect, without evidence, that it may have been less tense, in a damp western climate, than the French or Italian *i*: probably a somewhat lazy [I:]. Wessex is unlikely at this stage to have been affected by the diphthongs which spread from the north through the eastern parts into Middle English, but perhaps they had their own.

I The short vowel was roughly [I] as at present. As to the ending *–is* (whether it had a long or a short vowel on classical rules), by the fifteenth century [Is] appears in rhymes (page 36) despite three centuries of French Latin tuition. I suspect it was an ancient and obstinate habit, and I suggest its use in all forms of *–is* ending (despite the use of [is] in the recording I have recommended).

[8] Ed., with Fr. trs. and introdn., A. Guerreau-Jalabert in *Auteurs latins du Moyen Age* (Paris, 1982). On *e*, *ae*, *oe* see 38-41; *h*, 43; *c*, *g*, *gn*, 45, 49, 103f; *s*, 100; *d*, *t*, 101f.

The site of Ramsey Abbey (with a 15th-c. ruined gatehouse) is north of Cambridge.

[9] *Anglo-Saxon Easter*, Archiv 413546/1 AH (deleted from list; copies may still be available from Schola Gregoriana of Cambridge, 124 Cambridge Road, Barton, Cambridge CB3 7AR).

[10] Campbell, 14f, 22; Grandgent, 103; Barber, *The Story of Language*, 132.

[11] When O.E. first came to be written down, Latin letters were used for the O.E. sounds resembling the Latin sounds (which came directly or indirectly from Roman missionaries). The *a* (probably [a]) was no doubt the nearest Roman vowel to the Germanic [ɑ] of the O.E. *a*. The forward sound of O.E. *æ* does not seem to have had a counterpart in Latin, but *æ* (long superseded in Latin by *e*) was chosen as the symbol for the O.E. sound [æ].

O. A rounded back vowel, around [ɔ]. The long vowel was similar ('daughter'), possibly tending to diphthong [ou][12].

U. With lips protruded; an element of [y][13].

UNACCENTED VOWELS

The *E* may be either open, [ɛ], or weak, [ə]; on this and other unaccented vowels, in the absence of an O.E. scholar, speak as if in German.

CONSONANTS

C before *a, o, u.* As [k], probably aspirated, as in 'cool'[14].

C before *e, i.* As an initial consonant, as [tʃ] (and thus for *caeli*, which was written *celi*); also medially after *i* (*dices*, probably *princeps*). After a back vowel (*pacem*) probably as [k]. But the Continental 'school' pronunciation [ts] was also widely used[15].

C before consonant: as [k] (*clarus*). In *ecce*, 'ek-tse' may become [ɛt-tʃe][9].

CH. As [k], in O.E. and Latin.

G. The earlier Latin [g] could become a spirant – [ç] or [j], or [x] or its voiced equivalent – or it could have a dual pronunciation: [g] before *a, o, u,* but being palatalised and assibilated (except by purists) before the front vowels, as [ʒ] until late pre-Norman clerical Latin, when it developed to [dʒ], its modern value.

GN. As 'ng-g-n', [ŋgn]; *agnus* = [æŋgnus].

H. Aspirated when an initial letter; in *mihi, nihil,* [ç] (as in *ich*)[16].

HI (initial), *I* and later *J*, consonantal. Strongly aspirated into English and becoming Pres. Eng. 'j', [dʒ]; or else as consonantal *y*, [j].

K. See *C* before *a, o, u.* In *Kyrieleison, Christeleison* the two *e*'s could become one; the *ei* may have been reduced to [i:][17].

Mihi, nichil. See *H.*

NC, NG, NQ. Possibly softened to ='ng-g' [ŋg][18].

12 Campbell, 15; Grandgent, 85.

13 Guesswork: but cf. Germanic habit later reported by Erasmus (p. 57, E16), which may have come with the A.S. invaders. For a table of the O.E. sound system see Gimson, 79.

14 Grandgent, esp. 108-113; R. Quirk and C.L. Wrenn, *An Old English Grammar* (London, 1955); Campbell, 21, 173; Smith's 16th-c. view, S31, and Dobson's dismissive comment.

15 Campbell, 21, 173-7; T. Pyles, in *Proc. of Medieval Language Soc. of America*, v. 58, 905-7, 'On pronunciation of Latin learned loan-words and foreign words in Old English'; on Abbo's views, M. Bonioli, *La pronuncia del latino nelle scuole* (Turin, 1962), 77.

16 5/56; Campbell, 23f, says *h* in O.E. replaced *ch* as the symbol for [ç] and [x] between vowels. See Barber, *The Story of Language*, 131f, on [h], [x] and [ç] as one O.E. phoneme.

17 5/55; see also pp. 313f.

18 Grandgent, 113, 127.

PH. As [f].

PS became [s] and was alliterated with *s.*

QU. Probably [kw]: Alcuin, *Orthographia*, 17, distinguishes *quotidie* from *cotidie*, which 'per c et o dicitur et scribitur'.

R. Distinct and trilled.

S. As [s] at the beginning and end of words and before voiceless consonants; as [z] between vowels (so *posuisti* = [pɔzyIstI]); *ss* = [ss].

SC. As [ʃ][19].

TI + vowel. Probably [tsi][18].

V. A light [v], but as [u] if a consonant follows[20].

Z in O.E. in biblical names was [ts][9].

DOUBLE CONSONANTS were pronounced double.

ACCENTUATION was changing under the influence of heavy initial stress in Germanic dialects, leading to secondary stresses in the longer Latin words. *Magister*, originally stressed on the second syllable only, developed a secondary stress on the first syllable; this later became the main stress.

ii. England, 1066-1400

Latin now moved to a Norman-French style which lasted for 300 years; it was taught, in French (see page 9, note 7). Where it was being spoken by English natives, the French style was coloured by local English accents. In speaking Norman-French, even French settlers developed an insular accent differing from mainland French; their Latin will have followed suit.

Detailed evidence in this period is limited to spelling variants; a secondary source is Dobson's opinion on secular songs of the twelfth to fourteenth centuries[21]. I comment on key letters or words below.

VOWELS

A (short). Closer than in the previous period; generally still around [a][22].

A (long). Perhaps the sound varied from a Germanic back vowel [ɑ:] to a forward [ɛ:]: Dobson's suggestion of an Italianate [a:] is a safe middle way.

[19] See 5/40. The recording (p. 113, n. 9) has *scientia, suscipe.*

[20] Grandgent, 134f.

[21] Dobson (Dobson and Harrison, *Medieval English Songs*, 50, 321) suggests that *AE/Æ* was the open vowel, [ɛ] or [ɛ:]. This may have been the 'school' pronunciation: see *E*, p. 146. Dr Rigg doubts whether *Æ* should be treated differently from *E*, at least after 1100. See also M.K. Pope, *From Latin to Modern French* (rev. edn., Manchester, 1952), 427-454, on Anglo-Norman phonology, and Barber's table in *The Story of Language*, 168.

[22] 5/14, 38. The Norman contribution to this narrowing of the *A* is confirmed by the change to [ɛ:] in the accented vowel in V.L. in northern Gaul (Grandgent, 82).

Æ. Normally written *e,* see *E* below[21]: *celis* was [sɛ:lis] or [sɛ:lIs].

AU had become a diphthong, [au], rather than two distinct vowels [a:u][23].

E. Dobson[21] indicates (in my terminology) [ɛ], but prefers the Italian close 'e', [e], in songs of the twelfth century, and sometimes of the fourteenth century. In sacred music we can note Hart's (later) statement about traditional musical training on the vowels in 'Set the net'.

   I suggest that the **accented** 'e' should be [ɛ:], but perhaps a closer vowel in the region of [e] where it gives a better transition to another sound, as in the open syllable of *Deus* (which in speech was moving at the end of this period to the tense sound [i:]); and perhaps also in courtly use[24].

   In an **unaccented** position, especially at the end of words, e (or *æ*) was probably sung as [e] or (a near-equivalent) [I], under Norman influence.

ER, accented, [ar] or [ær] (*persona*)[25]; unaccented, [ɛr] ([ər] is much newer).

I was [I] and [i:][26]; *I/J* consonantal was [dʒ]: *eia* = [ɛ:dʒa][26].

O. Open 'o' was [ɔ], 'close o' was nearer to [u][26].

OE. Dobson favours a close vowel ([e], not [ɛ])[27]: but as *e* was commonly used, I doubt if the distinction was made in church singing: follow *E* above.

U. As [U] in a closed syllable (*crux, De-us*), and (under Norman influence) as [iu] or [y:] in an open syllable (*cru-cem, singu-laris, spiritu*)[21].

CONSONANTS
C. Before *e, i,* etc., as [ts], but [s] from the early thirteenth century[21,23].

   Before *a,* it seems possible that Vulgar Latin palatalisation of [k][28] could lead, when Latin *ca* had led to English *cha,* to the use of the English sound, [tʃa]: e.g. *cantare* gradually became 'chant'. Words with *co-, cu-,* kept *c* = [k].

CC. As [kts] to the early thirteenth century, then [ks][29].

CH before a vowel, even *a, o, u,* may have moved from [kh] to [tʃ] (*chorus, cherubim*), though note the variant *eukaristia.* Between vowels *ch* may also represent a strongly aspirated [h] (*michi, nichil*): but see end of page 130.

CT. Could be [t]: but in *-ctio* etc., as *ci-* , [si], or *xi,* [ksi][30].

[23] Grandgent, 89; G.H. Fowler, *History*, September 1937, 101; and see 5/40.

[24] H2, 18, 20; 5/45. N.b. Hampole, 1340 (*O.E.D.*): 'If the child a woman be, When it is born it says "e, e" ... the first letter of Eve.'

[25] 5/48.

[26] Barber, *The Story of Language*, 196-8; Dobson and Harrison, 317, 321. On *eia* see n. 93.

[27] Dobson and Harrison, 321; cf. Grandgent, 80, 90.

[28] The *k/c* moved from 'stopped' [k] to aspirated [k], then to [ç], and during the course of O.E. to [tʃ] (Campbell, 21).

[29] 5/47.

[30] 5/18, 43.

D. Di + vowel could be [dʒ] or [z] (*media, hodie*), but not in *dies*. Final *d* could be [t] or perhaps voiced 'th'[31]. All this would vary with region.

G. Before *e, i,* as [dʒ] (probably from the Normans); elsewhere as [g][21].

GN. Usually [ŋgn] (the [ŋ] is a transition to the [g]), sometimes simplified to [ŋn] or even [n]; similarly *GM* [ŋgm], and probably also [ŋm] or [m][32].

H. Often mute (under Norman influence) – e.g. *(h)osanna, habitare.* Also mute between vowels (*vehementem*). *Hier-* might be a strongly aspirated *h* (similar to a *y,* [j]), but more likely [ç], or [dʒ]. For *mihi, nihil,* see *CH* above[33].

I/J consonantal (*Iesu, cujus,* etc). As [dʒ]: see *I* above.

Kyrie eleison: [kYrielizɔn], the [e] sometimes elided[34].

NCT. Before a velar consonant ([g], [k]), *m, n* softened to [ŋ], and *nct* might then be [ŋkt], [ŋt], or [nt] if the *c* got elided. Or *c* might soften to [g]; *sanctus* thus might be [saŋktUs], [saŋgtUs], [saŋtUs], or [santUs][35].

PH. Probably as [f] in singing, but *sph* as [sp][36].

QU. As [kw], but *quu-* = [ku][21,37].

S. Generally [s]. But between vowels or voiced consonants (notably *m, n*) a light [z], easier for singing, had been used for centuries: the voicing needed for vowels is then continuous. Examples are *eleison, gloriosus, baptisma*[38].

TH. This was more naturally pronounced as [θ], but French influence may have led to some use of [t] until at least the fourteenth century[39].

TI + vowel: generally as [sI], but *sti* = [stI] in words with *-stio, stia.*

V, consonantal: as [v][21].

XT could become [st][40].

Z As [dz] (or possibly [ts]) until the early thirteenth century, then [z][21,41].

[31] 5/44, 19: or perhaps (Dr A. Wray suggests) [d] + faint [z], or [t] + faint [s]).
[32] 5/51, 21. Allen, 109, says that French schoolmasters in England will have taught ñ but that their pupils may have compromised on [ŋn].
[33] 5/22, 52, 53; *Bele buche,* 21.
[34] See p. 313f; 5/1, 55. M.K. Pope points to northern French influence on Anglo-Norman in raising [e] to [i] before palatal [s] or [z], as in *orison.*
[35] 5/58; Gimson, 80.
[36] See 5/49; later evidence at Bu14, Ly15, and (in a classical context) E37.
[37] 5/28.
[38] 5/60, 39; Grandgent, 105, 124.
[39] 5/61.
[40] 5/62.
[41] 5/63. Biblical names could follow the Vulgate (*Ezra as Esdra*).

iii. England, 1400–1650

There is more material to work on in this period: we have various perspectives from Chapters 4–8: phonetic development, rhymes, puns and spelling, and the writings of contemporaries. There is a further tentative strand however: it concerns ancient practices which continued into living memory when Brittain recorded them in 1934. I rehearse the background.

Edward VI's Act of Uniformity, introducing the 1549 Book of Common Prayer, provided that public services were all to be in English (though it does not mention anthem texts). But at the universities, 'for the further encouragement of learning in the tongue', services other than the Mass might be said in Greek, Latin or Hebrew[42]. Mary Tudor had restored Roman Catholic worship in England; moreover she married Philip II of Spain.

Early in Elizabeth's reign such worship was again forbidden, and the use of Latin decreased again, though Latin polyphony was not illegal. It was high treason for a priest to celebrate the Mass, and for anyone to 'assist or comfort him'. But groups of Catholics continued to meet, sometimes with a degree of tolerance from the authorities; conditions became more difficult when the government felt threatened by foreign Catholic powers, and (after Elizabeth's excommunication in 1570) by the newly-arrived Jesuit mission. Many emigrated to Catholic countries, particularly the southern Netherlands; colleges were started to train priests and missioners for the reclamation of England to Catholicism. These colleges clung to the tradition of their (English) sixteenth-century founders. Douai, for instance, continued as an English and conservative Catholic enclave until the abbey and school were able to move to England in 1794[43].

Brittain says that the seminarists who came back to England when conditions eased in the late eighteenth and early nineteenth centuries seem not to have imitated Continental Latin. Their pronunciation differed from the 'Old Style' which had developed in English schools and in legal practice (pages 198f, 277–82), and they kept it in use despite heavy pressure from the numerous, energetic and influential Anglican converts, who pressed for a Roman style in everything. At Downside (school and abbey) the Benedictines continued the seminarists' style of Latin until the late nineteenth century; earlier English sounds to long *a*, *e*, and they spoke Latin as though it were

---

42 See *Latin in Church*, 60–70. I have abstracted the Statutes on pp. 269–71.

43 *Oxford Dictionary of the Christian Church*, under 'Douai' and 'Allen'. Brittain (preceding reference) says that the Catholics still in England had churches (when this became possible at all) which were plain, without statues of the Virgin; they spoke of 'prayers', not of 'Mass', and had denied papal infallibility. Brittain says they would have been regarded as 'frightfully Protestant' by the Anglo-Catholic converts of the Oxford Movement (1845 onwards), who followed Italian (particularly Roman) styles and to whom the hereditary English Latin was anathema. On the background see pp. 266f.

English, but they gave continental or *i*[44]. *O* and short *u* had current English sounds. *Ejus* was 'ayjuss' (probably [e:dʒʌs]). They used barely enough variation from current English to preserve the medieval rhymes. (Brittain, writing in the early 1930s, was able to consult scholarly Roman Catholics who had known the pronunciation which had been supplanted 30-40 years earlier.) The English Jesuits had a slightly different liturgical pronunciation, and kept it until the early twentieth century; they gave the *j* a 'y' sound, [j], and pronounced *ti* before a vowel as [ti] (a reformed usage?).

This evidence gives us a 'fix' to supplement the earlier writers, from a long-lived practical tradition tenaciously held from the time of the Reformation. This pronunciation of the Catholic exiles evidently missed some of the changes in English and English-Latin speech - in particular, in the quality of the diphthong in long *i*, and the completion in the eighteenth century of the change to [i:] of the earlier open long *e* in 'sea'. The conservatism and isolation of the traditional English Catholics suggests that their pronunciation was not far from pre-Reformation Latin, and that which Tallis and Byrd would have tried to keep. This continued while Anglican Latin largely lapsed. The 'hereditary Catholics' who remained in England, worshipping under varying degrees of penalty, were presumably more affected by vowel changes. (References to their Latin probably exist, and I should like to hear of these or of oral family traditions from before Pope Pius's 1903 move to Italianate Latin.)

In England there were anomalous periods when Queens and Princes (sometimes Roman Catholic) had their own chapels and singers. Catholic services were held at the Court in the Queen's Chapel for Charles I's Queen, Henrietta Maria (sister of Louis XIII of France). The (Catholic) Richard Dering was appointed as organist, and also as one of the King's musicians. The service was no doubt as French in style as the Queen could make it, and she had at least one singing boy specially trained[45].

Comparing fashions of singing, Ornithoparcus/ Dowland says 'The English doe carroll'; the Germans and Italians fare worse (see page 70 above).

I now put all these sources together and discuss the Latin singing pronunciation of 1400-1650, which is itself a period of change. (For Latin music in English sources see Hofman and Morehen (Bibliography, page 320).

---

44 Cf. macaronic rhymes in 5/10, 13.

45 This provoked outrage both because toleration had not been restored in England and because Louis was attempting to destroy the Huguenots: *Grove*, 3rd edn, v. 2, 30.

Dr A. Ashbee, in a paper read to the Viola da Gamba Society, 5 November 1987, has found that payment was made to Philip Buramachi for 'breeding up' boys in France for Henrietta's Chapel. See *Records of English Court Music*, v. 3, published by Dr Ashbee at 214 Malling Road, Snodland, Kent ME6 5EQ.

VOWELS ['Short'/ 'long' ($\bar{A}$, $\breve{A}$, etc.), lax/ tense, length, quality: see pages 16f, 20-2 and 26-31.]

$\breve{A}$ Hart[46], 1569, prescribes wide opening of the mouth, as in a yawn, relating the sound to 'Have Adam' (in contemporary pronunciation).

Hart's yawn was not, I suggest, the kind which is associated with deep sound from the back of the mouth ('aah'). He refers to the Italian *riputatione*, which (in modern Italian at least) is far from being a back vowel. John Baret (Cambridge, 1573) and Alexander Hume (Dunbar, 1617) threw more light. Baret: 'A ... (they say) we may easily perceyue in the first voyce of confuse crying of yong infants, which soundeth in the eare most like to *A*. ... And the prophet *Jeremy* ... answered againe, *A,A,A, Domine Deus infans sum, nescio loqui* [Lord God, I am a child, I know not how to speak]. So speaking like a childe.' Hume: 'Their sound of it is not far unlyke the sheepes bae'. He adds that they (the English) use the vowel in 'bare' not only for the long *a* but also in open syllables, as in *amabant*[47].

'Lily' describes the 'fault' of *Ischnotes* (page 63, Ly10) as being 'a certain slendernesse of speaking' which made *aliquis* and *alius* start as if with *el-* . In 1529 Tory[48] had gone even further in complaining that when the English speak Latin they pronounce *a* as [French] *e*, and in 1625 we have[49] '*A*, se prononce *ai* ou *é*, quasi comme le premier *E* du verbe *Estré*. The Latin will have reflected current pronunciation of English, though the tight vowel quoted by Tory may at that early date have been an affected usage. It is possible that, in writing 'erent' for *erant*, he chose the only orthography available to a Frenchman for the English sound [æ].

These descriptions and the known development of English[50] suggest that in **polyphony** the English Latin short *a* was a forward [a], not far from the French forward *a*, but possibly brighter, on the way to [æ].

In **chant** (compare discussion for $\bar{A}$, below) the **accented** vowel might have closed in the early sixteenth century from [a] to [æ] or even an affected [ε]; the unaccented $\breve{a}$ could be around [ə], particularly in a closed syllable (*gloriam*), but in an open syllable (*gloria*) it could be [ε:].

46 H1, 6, 17, 18, 20, 23, 24; cf. general statements at E1, 3 and Lp5-8.

47 John Baret, *An Alvearie or Triple Dictionarie, in Englishe, Latin, and French,* discussing *A*. (It became a *Quadruple Dictionary*). The 14th-c. baby's cry was 'e'; is this a sex difference, or a sign that 16th-c. 'a' was close to the old 'e'? Cf. n. 24 above.
   Alexander Hume, *Of the Orthographic and Congruitie of the Britan Tongue* (E.E.T.S. 5, 1875) starts with comments on each vowel.

48 T1-3; and see 5/34.

49 'J P Gen. Ca.', *Alphabet Anglois*; he also wrote about pronunciation in *Le maistre d'escole Anglois* (London, 1580). (Was he a late follower of John Palsgrave, 'Gen. Ca.' ?= *causae genus*, 'the class or head to which a case is to be referred' (Dr Smith's *Smaller Latin-English Dictionary*), or *generis caput*, head of the breed of orthoepists?)

50 5/10d, 11; Barber, 295-8. The wider use of *a* = [ə], 100 years later, may have taken this usage to the English settlements in America.

Attempts at reform around 1550 brought about some changes in formal Latin pronunciation[51], but they did not affect most singers.

It is quite possible that closer vowels like [ɛ:] were sometimes used for ā in polyphony also. This is more fully discussed below and on pages 292-5, where the pronunciation of specimen texts is worked out.

Ā The table near the beginning of this chapter shows that this is one of the vowels where big changes have taken place over the centuries. By the fifteenth century the 'raising' of the vowel had started (that is, higher tongue and perhaps jaw), and the vowel began to be 'fronted' in the mouth. The rhymes on pages 38f (and 33n) suggest that in the fifteenth century ā had come to be spoken as [æ:], moving to [ɛ:] in the early sixteenth century (much earlier in the north and east)[52].

There were three pronunciations in spoken Standard English:

i. [æ:], as in 'bad', which was normal in careful speech before 1650;

ii. [ɛ:], as in *bête*, which was heard until 1650 only in less careful speech;

iii. [e:], as in the first part of the diphthong in Pres. (southern) Eng. 'late'; this was rare before 1650, and did not become Standard English until the early eighteenth century)[53].

How was this vowel sung? We have to judge how conservative the (professional) singing men and choristers were. Hart affirms that 'all English Musitians (as I can vnderstande)' use the 'due and proper sounds' of the vowels[54] (which he then describes). Did choirmasters, therefore, try to insist that ā should be sung as [æ:] and not as a more closed vowel? However, at a time when English vowels were changing (and for ī a diphthong had emerged), the purists were under siege, and the training in the older vowels will have become increasingly difficult, as indeed it is today. But after Latin services in public ceased, the very strong attachment of Catholic musicians to their tradition may suggest that those who remained - notably Tallis and Byrd - held to a conservative vowel sound (not, certainly, the [ɑ:] of modern Southern English 'father').

So for **polyphonic** and other choral music from 1400 to 1650 I suggest that ā had started as [a:] and moved in the fifteenth century towards [æ:], which we can take as its value for the rest of this period.

[51] Dobson, *Phonetic Works of Robert Robinson*, xix, 27 (n.b. 1617, not Elizabethan).

-AS as an accusative plural (*gratias agimus tibi*) had a short vowel in English Latin, [as], despite being long in Cl. L. For the use of a neutral vowel in *-AS*, *-AM* see 5/7, and p. 33, n. 5; similarly Smith (S5) gives *amare/* 'omare'. There are *-A* endings in [æ:] or [ɛ:] in 5/10, e-g. but not in Robinson, 1617.

[52] B.O.E. Ekwall, *A History of Modern English Sounds and Morphology* (Oxford, 1975), 16, suggests [ɛ:] for c.1600. See p. 30; also 5/35 (*caret/* carrot). Du Guez (p. 258) says that open Fr. 'E' is 'almost as brode' as Eng. 'A'.

Later reports are hate us/ *paratus* (1614), wager/ *Ursa Major* (1650). Hume (see p. 137, n. 4) says the sound of Eng. 'A' 'is not far unlike the sheepes bae, ... βη not βα' - i.e. [ɛ:] or [e:], not [a:].

[53] Barber, 289-294; Dobson, ii, 594-600.

[54] H18, 20.

But in (pre-Reformation) **chant** by priests or monks, and in **carols**, the vowel of contemporary speech, [ɛ:], probably crept in: so one might hear [laudɛ:mUs], rather as in our Old-Style Latin. In a collegiate or monastic community, where the members were both participants and congregation, vowels close to speech, carried by the chant, would be more natural and intelligible[55]. Consider, for instance, the sound of *in pace.* There would be no motive for pronouncing the vowel differently from that of French or Norman *paix*, [ɛ], or the English 'peace', [ɛ:], and the nearness to the vernacular word might indeed make for a greater immediacy in worship. Familiarity and long acceptance were reasons which were strongly in Bishop Gardiner's mind when in 1542 he forbade the use of reformed Latin and Greek in Cambridge (see page 74): it is not irrelevant to our choice of pronunciation today.

AE 'Lily' says[56] 'we commonly do pronounce e'; see *E* below. *Haec/hec* = [hɛk].

AU. This was a period of transition from the medieval diphthong [au] to the open [ɔ:], as in 'naught'. In careful speech in the sixteenth century the diphthong still survived, as [au] or [ɑu]; it moved to [ɒu] in the seventeenth century, but a single open vowel in the region of [ɒ:] then became more common[57]. I suggest that one should sing the diphthong [au] for music up to the early seventeenth century, so as to include all the great Catholic composers, whose sung vowels may well have been conservative. The [a] in [au] can be somewhat backward, to give a smooth transition to [u].

Ĕ There is no conflict between reformers and traditional Latin, and the descriptions of the position of jaw and tongue broadly fit the modern English 'short e', though the modern [ɛ] is very open[58]. *-ES* and other closed unaccented syllables might use [ə] or [ɛ] but open unaccented syllables [i, I].

Ē close vowel. Latinists in the fifteenth and sixteenth centuries had assembled the views of classical grammarians about vowel production, and Erasmus and Hart follow these[59]. Dobson suggests [e:] for early medieval

---

55 I explored this distinction between pronunciation in choral music and in solo plainsong in *Singing Tudor Latin: practical application of a contemporary source* [i.e. John Hart], presented to the Conference on Medieval and Renaissance Music, Southampton, 1987. See discussion on pp. 293f.

56 Lyl. Baret, *An Alvearie*, discussing open and close E, says that 'men are of diuers mindes' 'whether *E* should euer be sounded full like *æ* diphthong' [meaning digraph?] or whether it 'be raither a diphthong' [i.e. two vowels blended]. He concludes 'and therefore I will not presume to determine thereof ... until I sée the Uniuersitie of the learned better resolued & agreed about the same'. Robinson (1617) gives [ɛ] in *præstet*, where the syllable is closed. (Note that he wrote after the partial reforms of Latin pronunciation designed to suit classical verse (as in his example), not medieval liturgical texts.)

On *AE, OE, AU, EU.* see Sargeaunt, S.P.E. Tract IV, 9.

57 5/9; S6; Dobson, ii, 783, 788 n. 2, 3. (I use 'open [ɔ:]' for Dobson's [ɒ:].)

58 E5, 6; H2, 20. Note *Hamlet*, V, i, 'argal' for *ergo*: cf. French broadening, H50.

59 Starting with Laurenzio Valla (d. 1457), Nebrija (p. 176), and Thomas Linacre (p. 75, n. 29); p. 55, n. 3, gives some origins of the descriptions of these classical vowels, and see p. 111, n. 1.

English songs in Latin; he says that in later medieval times it varied but was often [ɛ:]. In the sixteenth and seventeenth centuries the open vowel was part of the Cambridge humanist reforms in pronunciation, and applied only where they were adopted[60]. The singing vowels *ut, re, mi, fa, sol, la*, taught (Hart says) by musicians everywhere, were similar to the reformed vowels[61].

But by the fifteenth century the long close 'e' in English (as in 'green') had moved to [i:] (page 30). This was the pronunciation of the English Church, as Gardiner's indignation with the Cambridge reformers shows[62]. School-masters, according to Dobson, would find it expedient to teach the long Latin vowels i, e/æ, a as [əi], [i:] and [e:], 'thus preserving a distinction between the sounds which would help to ensure accuracy in spelling Latin words and their English derivatives'.[62] (This suggests that Latin endings would otherwise have been pronounced less meticulously, as in Smith's example below.) John Baret (1573)[63] adds corroborative detail:

'in old time they did *Deeus meeus*' ... more thinly like *ee*', rather than 'sounded full like *æ* diphthong'. And Smith[64] refers to '*Domine ne in furore* with the Italian *e* and not as we used to with the English *e*, even if the most learned John Colet [and the Scots] spoke it so'.

Bullokar (1580) says that only the open 'e' is used in English Latin, but this is clearly part of a reformed pronunciation (Smith's 'Italian *e*'); by now ecclesiastical Latin, spoken or sung, was rarely heard by 1573 or 1580.

Fifty years earlier we have the instruction-book on French pronunciation by Gilles du Guez: 'Ye shal pronounce your *a*, as wyde open mouthed as ye can; your *e* as ye do in [reformed] latyn, almost as brode as ye pronounce your *a* in englyssh; your *i*, as sharpe as can be; *o* as ye do in englyssh, and *v* [i.e. *u*] after the Skottes, as in this word *gud* (page 258 below).

---

[60] Dobson and Harrison, 50, 321. Hart (H14, 15) complains that when the English want to write the sound 'ee' (as then said) they use two *e*'s, which (given his model for 'e', 'Set the net') should sound as [ɛ:]. But he tends to overlook quality differences between 'long' and 'short' vowels, perhaps influenced by Italian Latin heard from humanists (pp. 172-4). He also complains that the English pronounce 'ee' 'in the sounde of *i*' (that is, as [i:]), and that they do this in naming *e*.

His example of the sound of *i*, 'Bring this in', gives [I], not [i].

[61] H18. The sounds were (and are) applied to the six notes of the hexachord (whose pattern is moveable through the gamut, the complete medieval range of notes. They originated with Guido d'Arezzo (Aretinus) in the eleventh century. Guido was a choir-trainer as well as a theoretical writer. His possible role in transmitting Italian 'A' and the open 'E' and 'O' into French and English musical education through his stay at St Maur-des-Fossés, a Cluniac monastery near Paris, perhaps deserves research; and was his [u] modified at St Maur to [y] before it came to England? (The open vowels were also taken into learned Italian Latin: pp. 172-4.)

J. Haar has pointed out that Cimello (1570) used *do* in place of *ut* (Conference on Medieval and Renaissance Music, Reading, July 1989).

[62] Pp. 74f, 79f; Dobson, ii, 617.

[63] *An Alvearie*. And as a orthographic reformer he wonders whether the 'fine *E*, *ee*, be to be vsed in the place of *I*' [because that is how it 'should be sounded (thei say)'].

[64] S4 (translated from Latin).

Sir Thomas Smith (and later Bullokar, who had just seen his work) appears to put English 'ee' between [ɛ] and [I][65]; as a long vowel, this would be around [e:]. But Palsgrave, writing 50 years earlier, says that the French never give to e the sound in 'bee', or 'we', for that sound 'both in frenche and latin is allmoste the ryght pronunciation of i'; he adds that French and Italian 'i' is 'a litel more soundynge towardes i as we sound i with vs'[66]. This and other evidence[67] suggests that by the early sixteenth century English 'long e' was a fairly tense bright vowel, very like the modern English sound. By the time of the Reformation *Deus* (for example) was [di:əs].

Was it so **sung**? There is a dearth of evidence but I think it probable that in trained pre-Reformation choirs, and later in recusant circles, **polyphony** was sung with 'long e', [e:], which fits in a common pattern with the 'short e', [ɛ]. But speech had developed rather fast, and, as with 'long a', the spoken 'long e' was a closer vowel than it had been. In **chant** the monks and priests, like Dean Colet, may well have sung 'long e' as [i:]. All the vowels however must hang together convincingly; to build up a feeling of coherent style one could experiment with different qualities of vowel in speaking English writing of the period, then use the same vowels in speaking the Latin text, and lastly add the chant melody. There are some key words like *Dei*, *die* which are an useful check on coherence.

On the tenseness of English [i:], Daines says it is produced 'not altogether with the tongue so restrained as in Italian and other European languages'[68].

EI. In *eleison*, [i][34], unless the underlay suggests [ei]: see pages 313f.

Ĭ. Hart describes its production and gives verbal examples[69]. There appears to be no problem: we can use modern English short *i*, [I]. For unaccented syllables (e.g. *deprecationem*), the vowel should be an easy [I], rather than a tense [i]. The exact placing may be governed by a need to project this vowel: it could approach [e] or [Y] if the spoken position proves unsuitable for singing: or, in any unaccented syllable, [ə].

Ī. This is another vowel which was changing greatly. The phonetic changes are summarised on pages 28-31. In spoken English (and therefore English Latin), *ī* had started to bespoken as a diphthong from 1400, following the habit in the north. By 1550 (after the main period of Latin church music) there had been attempts by Erasmus and his followers to remove this 'iotacism'. Hart's report shows a state of confusion, but the diphthong

65 S7, Bu3.

66 References P15, 21.

67 Dobson says that from early 15th c. *I* in foreign words came to be replaced by Engl. 'long E' (ii, 689f), and that Welsh sources c.1500 imply the same tense vowel (i, 4). 'Long E' was raised to [i:], at least in advanced speech (i, 113); 'all our evidence goes to show' that in the 16th c. 'long E' was [i:], and 'long I' was a diphthong (i, 60).

68 An E. Anglian teacher: *Orthoepia anglicana*, 1640 (Scolar Press, 1967); Dobson, i, 329.

69 E9; H3, 20. The Welsh identified [I] with their *y* or *U* (Dobson (i, 4)).

remained in general use, developing to the [ai] of modern English and 'Old-Style' English Latin. Final *i* was [əi], or early in the period perhaps [I][70].

Most grammarians said iotacism was wrong – that is, for the implicit purpose of restoring a classical pronunciation[71] – though Lipsius (1586) quotes a French-Roman scholar as saying that the English were the ones who had got it right; and Hume gave support from Scotland[72]. The truth about this does not matter to us as singers[73]; and in any case the partial reforms achieved by Erasmus and the Cambridge humanists were strongly opposed by traditionalists (pages 74, 79f), and can have had little or no impact on the way Latin church music and macaronic carols were sung[74].

For **polyphonic** and other music sung by trained choirs, we have to decide how far Guido's early medieval singing vowels, *ut, re, mi, fa, sol, la*[61], had been left aside in singing the services[55]. How was Latin singing taught in a choir school under, say, Taverner or Tallis? Let us assume that Hart was right about the singing training: he wrote not long after Latin services generally ceased. The choirmaster taught Guido's vowels (in whatever quality they had been handed down to him). But the grammarian, using 'Lily', taught the same boys some Latin at least, probably in the same choir-school; and even if he used reformed simple vowels in principle, often in practice he followed the common habit of using English vowels and diphthongs[75]. The 'singing men' had learnt their Latin this way too. Were the vowels of all these singers unaffected by the diphthongs of speech? Was *qui* pronounced as the simple vowel [kwI:] (or maybe [kwi:]): or was it a diphthong in the

70 Dobson, i, 4; ii, 659-662. Hart lists some words (H10, 21) which (mid-16th c.) were pronounced by 'many of late days' as simple vowels (some being in closed syllables); and some which were treated, apparently illogically, as diphthongs. The Erasmian reforms had only a patchy effect even when people adopted them: in 1617 Robinson gives [ei] in *licet* in a formal poem. For -*i* endings in carols see pp. 40-3 and n. 5 on p. 33).

71 Ly8, S10, 1; Ro4; W5.

72 Lp15; Hume (see p. 120, n. 47), 9: 'Among the auncientes [Cicero, Varro, both 1st c. B.C.] I find sum groundes for their sound'. It would appear to be a pre-classical usage. Palmer, *The Latin Language*, gives O. Lat. *mihei, tibei, sibei*.

73 Dobson (i, 1) explains that the critical investigation of the pronunciation of the classical languages aimed at the discovery and adoption by scholars of the ancient pronunciation in place of the 'corrupt' pronunciation then in use. We however retrieve this 'corrupt' pronunciation in order to find how the Latin in our repertoire was sung.

74 Byrd has *occīdit* (with long penult), 'strikes down', to distinguish it from *occidit*, 'falls down'. The relevant notes are short and unaccented: I do not think he intended a distinctive (diphthongal) pronunciation. See A. Brown, *Collected Works of William Byrd*, v. 2 (London, 1988), xiv and *O Domine adjuva me*, bars 67-80.

75 Grammar and singing were sometimes directed to be taught together. In Edward III's statutes for Windsor Castle (14th c.), one of the vicars was to instruct choristers in grammar and singing. John Colet (Dean of St Paul's 1505-19) provided that the eight boys of the new school should be under the supervision of an almoner (*elemosinarius*) to see that they were taught singing and reading so that they could be in every way fit for the service of God in the choir: the composer John Redford (d. 1547) held this post. Colet's Latin was traditional, not Erasmian (E8). See p. 278, n. 4, on Westminster (16-19th c.)

region of [kwli] or [kwəi]? We have to make practical decisions, and our solution must feel comfortable and sound convincing in practical singing.

'Short i', *ĭ*, had for centuries been associated with the long close 'e', and in Western Vulgar Latin [I] and [e] converged before the Romance languages developed[76], and at first sight this could explain the many references to 'ei' for 'long i' by the sixteenth century. But the weight of scholarship does not suggest that the form [ei] existed in standard speech. During the Norman period in England the 'long i' was, as in Romance languages, [i:]; Figure 2 (on page 30) shows how it moved through [Ii], then [əi], not far from the present [ai] (*O.E.D.* and *S.O.E.D.* indeed use [əi] for 'I', 'eye').

If in our period 1400–1650 the sung vowel was, as in speech, a 'falling diphthong', the sound on a sustained note was [I:i], later becoming [ə:i]; the sounds on which most of the time was spent, [I:] or [ə:], depended on regional accents. It is instructive to sing the two vowels just mentioned, and also [I:], on different pitches, and to find how little mouth and tongue movement is needed to change from one to the other (but how much is needed to reach the pure, tense, vowel [i:]). These small changes, together with the use of the lips, are used in present-day voice-training to modify vowels in order to give a full, clear and rich singing tone at different pitches: the same written vowel might be sung at a low bass pitch on [I:], but on [ə:] or [Y:] at a high treble pitch. It is not useful to be rigid in specifying the exact vowel that might have been sung in this area. But the best simple model is the 'i' in 'machine', suggested by Brittain and others[77], modified as is necessary for the pitch in question. This uses slightly forward lips (because the preceding [ʃ] has required it), and is distinct from the very bright tense [i:] in 'cheese' or 'see'. The vowel is not far from the [Y] of Fr. *volume* and Ger. *küche*; rather further from the [y] of Fr. *lune* and Ger. *grün.* In the phonetic key at the beginning of this book I have listed the symbol [I:] for this sound (a personal usage entered rather than standard I.P.A.)

At the end of the *ī* sound, whether it is [I:] or some closely related vowel, Anglo-Saxon voices easily introduce a 'glide' leading to the next syllable, making *vitam* into [vI:jtam]. Modern choir-trainers rightly get rid of diphthongs when aiming at Italianate Latin or at Romance languages; in Tudor Latin, if the choir is flexible enough, they may sometimes like to allow a glide on a stressed note or an ending (*Domini, Dei*), without necessarily using a full diphthong. (See also *U.*)

For chant there can be little doubt that monks and priests used the diphthong on stressed *ī* (*Venite*), and for endings; and so for medieval carols, which were sung by a wide range of people besides 'singing men'. The vowel-quality depended on the region[69] – in the north, it was roughly the present [ai]; in the midlands and south, perhaps [Ii] for the fifteenth and

---

76 Dobson, ii, 570; Palmer, *The Latin Language*, 156.

77 P. 118f; *Latin in Church*, 85, based largely on surviving oral traditions of Catholics returning from exile (dating from Henry VIII's Reformation); *Collected Works of William Byrd*, 2, xiv (A. Brown); 4, xii (P. Brett); 8, xii (W. Edwards). See p. viii, n. 3.

early sixteenth centuries, becoming [əi] some time before the Latin Mass and Offices ceased in 1549. (Mary restored them in 1553-8.)

As a further practical experiment, sing '[u:t] [rɛ:] [mI:]' and see what quality is reached on the third note, and how the mouth is placed. My own observation suggests that, except for the bottom of the voice, the sound is somewhat backward in the mouth compared with the forward [i:], and that the lips, having started on [u] and moved through [m], remain slightly rounded: and the same if *ut* is [y:t] or [Y:t]: see note 61 on page 123. (Singing the later 'doh ray me' seems to me to lead to a tenser and more brittle tone on the third note, sung on the tense [mi:].)

IS THE 'I' 'LONG' OR 'SHORT'?

On vowel quality the general statements on pages 20-2 may help: for instance (in case a ii) open antepenultimate syllables (*om-ni-po-tens*) have an open/ lax/ short vowel. But there were exceptions with *Ī* - *mi-serat*, *vir*, *viri*, and, I suspect (from its traditional Anglican pronunciation), *benedi-cite*. But (page 22, case c) open penultimate syllables had tense/ close/ long vowels (*a-mi-ca*). In *mihi* the vowels were lengthened; *tibi*, *sibi* the first 'i' became short around Hart's time[78].

-IS. This was pronounced [Is], even in the dative/ ablative plural (despite, presumably, efforts by the reformers)[79]. For a final long note (as in *excelsis*) one can sing with lips slightly forward, nearly as for 'machine' (see *Ī* above).

Ŏ. The reforming writers say that lips (or mouth) are rounded: this seems to have been true of English Latin (*hoc*/ cock/ hawk). The vowel of 'law', quickly said, fits the bill: or Italian open 'o'. So we can sing an open [ɔ]; *-OS* seems to have been [ɔs] or [əs] until reform[80].

Ō. Sir Thomas Smith gives examples of short and long 'o' in English which help us to know the difference in quality (e.g. 'hop' and 'hope'). Given that short and long 'o' were both rounded, the difference of quality may have been fairly narrow. Bullokar says that English Latin 'o' is always open. Although he may mean that this is what was now taught and practised where reform had caught hold, the open 'o' did persist in speech, alongside the newer form [o:], well into the seventeenth century.

For **polyphony**, 1400-1650, therefore, I suggest an open [ɔ:]. Singers from the north of England will have no difficulty with this; Londoners may have to train themselves out of diphthong [oʊ], or horrors like [ɛoʊ].

[78] Allen, 104f: 'short i' ('surprisingly') before *b*, and in *tibi*, *sibi*, *ibi*, *quibus*; compare H10 and 21 with the later statement quoted at the top of p. 278.

[79] 5/5, 7, and p. 33, n. 5; Ro16; p. 22, n. 22.

[80] 5/4; E11; S22; H4, 20; Bu8 (on *-os*); Ro16; W9. Some other writers may be too much under the shadow of reform for deductions about ecclesiastical practice: Bullokar (see next para.); Lipsius (1586) makes comparisons at Lp18 with Flemish and Greek, but he is aiming at classical Latin, as is Wallis (1653) at W10 with French and Greek.

In **chant**, open [ɔ:] would certainly be appropriate until the Reformation. Later, as in speech (see under Long *A*), the closer vowel [o:] might be used. It could become [oU], which taken to excess would be 'Plateasm' – *montes* = 'mountes'. Cf. 'Now is it Rome indeed and room enough'[81].

OE, Œ, AE, Æ were written as *E* in the Middle Ages, and the difference got effaced. In print *cæli* was sometimes spelt *coeli*, particularly in Germany; manuscripts normally used *celi*. *Oe* was sung as 'e'; *poeni* = [peni][82].

Ŭ. Hart describes a very close vowel with rounded lips, [u], usually lengthened in (British) English, as in 'fool'. In macaronic rhymes the sound is sometimes full, sometimes indistinct. Erasmus says that English priests often draw the tongue back, implying perhaps [U] as in 'full'. Lipsius gives four pronunciations of Latin 'u' (not particularly in England), including one that is nearly 'i' (not necessarily French 'u', [y]: perhaps the [Y] of *über*); this is probably what Lily calls Ischnotes, as in *nunc* = 'nync'. It is too early for the modern [ʌ][83]. A 1580 source (see note 49 on page 120) refers to 'V as the French do O (Vp, Vpon, upsydown)'.

When the syllable is **closed** I suggest the use of [u] in accented syllables (e.g. *buc-cinate, cun-cta*) in **polyphony**; for endings (*Dominus*) and other unaccented syllables *dul-cifera*) one can use [U]. (The Roman-style, and northwest German, pronunciation of *–us* as [u:s] sounds to me out of key with the rest of English Latin and with macaronic rhymes.) In **chant** a vaguer vowel like [ə] may have been used in *–us, –um*. The modern vowel [ʌ] only came in at the end of this period.

Ū. This is used in an **open** syllable: *u-nigenite, pu-er, sæcu-la, spiritu.* The English style from 1400, partly derived from the Norman, was to make this into [i:u], two distinct but fused vowels, not ideal for singing on. In the late sixteenth century this became the 'rising diphthong' [ju:] (i.e. more length on second element), as in 'you'. But after *r* or *j* ([dʒ]) the vowel remained [u:], as in 'rule' and 'June': *crucem, ruinas, jubilate.* Another usage was the single vowel [y:] (or [Y:]), especially before 1500[84]. Hart, like other writers, did not distinguish [y:] and the diphthongs. He called any departure from [u:] 'abuse', but diphthongs became the normal use, surviving the humanist reforms and emerging in modern (British) English and 'Old-Style' Latin. *O.E.D.* gives the name of *u* as 'ü', until the sixteenth century.

As with *ī*, we can use some musical discretion in choosing the vowel which conveys the word and allows good tone, within the range: [iu], (by 1600 [ju:]), or [y:]/ [Y:]. After *r* or consonantal *i/j*, the sound was [u:].

81 S12; Bu6-8; Dobson, i, xix; Ly11; Shakespeare, *Julius Caesar*, I, ii.

82 W. Brambach, *Hilfsbüchlein für Lateinische Rechtschreibung* (Leipzig, 1884), 4.

83 H5, 20; 5/7, 8, 33; p. 33, n. 5; E17; S23; Lp22; Ly10; W11. Dobson, i, 4, gives evidence of [ʌ] before c.1500, but in a Welsh text on English pronunciation.

84 H13; S14-16; Bu7; Lp20; Ro6; W12; Dobson, ii, 698-705. Cf. Devon speech.
   O.E.D. gives *sū* as [su:] when *s* = [ʃ] ('sure'), or = [ʒ]. (No Latin instances?)

Y. For *Kyrie* I suggest the [I:] described under $\bar{I}$ (in polyphony): similarly for other borrowed Greek words, using [I] in a closed syllable.

CONSONANTS

C before *e, i, ae, oe* as [s][85].

C before *a, o, u* or a consonant: as [k]; before *n*, sometimes softened to [g] (*sancta* could be [saŋgta])[86].

CC. As [ks][87]; *ecce* = [ɛksi].

CH. Before a vowel, Bullokar (1580) is clear that before reform the old style was to use the English [tʃ]. But before a consonant (*Christe*) it was [k]; *eucharistia* is found with *k*, and Shakespeare has *pulcher/* polecats. Salesbury seems to imply that 'Michael' had English 'ch', [tʃ] (as 'Mitchell') and that unreformed Latin *Michael* has [tʃ] (and so probably *Rachel*)[88].

D ending a syllable was sometimes modified: *apud* could be 'aputh', 'th' (perhaps voiced to [ð] as in 'this')[89]. Possibly [apUt] survived in some places.

G. Still as [dʒ] before *e* and (sometimes) *i*; *Gilbertus* and *gimel* (Hebrew letter in the *Lamentations*) have [g].
  Before letters other than *e* and *i*, use [g][90].

GN. Bullokar says that an additional 'n' was used before the 'g'; his careful example is on page 95 at Bu13. Caius (defending this English usage and following Erasmus) says the Romans insisted on pronouncing 'dingnum, pungnum, mangnum', so that difficulty and discord would be avoided. Salesbury (who was Welsh) in 1567 wrote 'I cal them perfite and Latinelike Readers as many as do reade angnus ... for agnus, ingnis for ignis'.

[85] The late medieval pronunciation of *c* continued (5/40) (see esp. Sir T. Smith, S28-31); also Bu8; Baret, *An Alvearie* 'before *E*, and *i*, we use as it were *S*'. This continued, despite efforts by Erasmus and Smith to introduce [k] and [tʃ] respectively, through the 16th-c. reforms, as Robinson's transliteration shows (*licet* as 'leiset', *ducit* 'diwsit', *dicere* 'disiri', etc.)

[86] As in medieval use; Bu8 (1580); Robinson (1617) indicates *c* = [k] in *calor, cohors*. These post-reform writers do not mention the [tʃ] which Smith wanted (n. 85 above).
  Softening to [g] ('peguniam') is mentioned by Caius as a fault: Gabel, *John Caius: De pronunciatione*, c.1570, 14; and in Ro13.

[87] As in medieval use; spelling variants *exc/ecc* continued to the late 17th c.

[88] Bu 11; 5/33; E28 (Erasmus wants 'kh', [x], in *Christus*); T3; Salesbury, 1550 (p. 140, Sa19), describing Welsh pronunciation: 'Ch, doeth whollye agree wyth the pronunciation of ch, also in the Germayne tonge, of the Greke Chy, or the Hebrue Cheth, or of gh, in Englyshe: And it hath no affinitie at al wyth ch, in Englyshe, excepte in these wordes, Mychael, Mychaelmas, and a fewe such other'. (Did these words have [x] in Eng., or did they have [tʃ] in Welsh? Hart (H27) tips the balance in favour of the latter.) See *H* below.

[89] P54 (*ad adiuvandum* = 'ath-athiuvandum'); Ly16 ('Our people do fowly erre').

[90] Robinson (1617) gives [dʒ] in *rigidque*. Bu12 has examples of soft and hard g's.

The added 'n' was [ŋ], as in the Standard English 'hang' [hæŋ]; in the north Midlands and in part of Kent it is [haŋg], as in macaronic rhymes 500 years before[91] – an instance of the durability of dialects.

Bullokar says 'a few of late, much resisted by old customaries' do not sound the additional 'n' [i.e. Cambridge reformers would say [agnUs]]: this confirms that he refers generally to traditional pronunciation.

It is possible that *ng* sometimes became [n][23]: but the common usage for *agnus* was [aŋgnUs]; similarly for *magnus, dignus.* This looks contorted, but the right sound will be found by remembering Caius's explanation above – this was a lazy usage aimed at softening the impact of [g] without removing it. (Those familiar with the regional speech mentioned above can base the Latin *ng* on the sound of 'hang-nail', complete with [g].)

H. The general indication is that initial 'h' was often sounded in English Latin, though not as strongly as in German Latin. The contributor on pronunciation to 'Lily', in the 1540s, says that *h* 'is properly no letter, but a note of aspiration. But with the [classical] Poets it hath sometimes the force of a consonant'. It is a fault to sound *h* softly at the beginning of a word; he gives examples. Caius, a conservative, says (in Latin) a generation later 'Thus if anyone should wish to teach privately the pronunciation homo rather than omo and hupsilon rather than ypsilon, or ipsilon, he should be tolerated as long as he does it for the sake of instruction and not of promoting that pronunciation in actual speech. ... h is not a letter, not in the same sense that a vowel is, which makes a sound, or a liquid, which flows; or a consonant, which resounds; or a mute, which murmurs. The h on the contrary is aspirated only so much as a breath or a light wind without sound.'[92]

The pronunciation of *h* seems to have been partly a matter of fashion of the time and social class, and probably of personal taste. I suggest sounding a light initial [h] unless there is reason not to. My own feeling is that using [h] in *nos homines* interferes with the vocal line (*h* merely indicates, as in French, that 's' does not join in liaison with the following vowel): but in *Confirma hoc Deus* [h] avoids an ugly glottal stop.

In *Hierusalem, Hieremias, Hieronymus,* the *Hi-* (Dr Rigg tells me) stands for English 'j', [dʒ], 'in an attempt to put "holy" into biblical names'.

Between vowels 'h' is strong – as Hart says, some grammarians used to spell *mihi, nihil* with *ch,* and the English used their *ch* sound, [tʃ], and the French theirs, [ʃ] (cf. *CH* above on *Michael, Rachel*). I suggest [tʃ]: alternatively, a sound between *mich* and 'loch', [ç] and [x][92].

91 Bu13; Caius/ Gabel, 20; 5/2. On [ŋn] (also the Ger. L. usage) see Allen, 108f.

92 Ly2, 15; Caius/ Gabel, 18; 5/4, 17, 36; H27; *Collected Works of William Byrd* (London, 1988), v. 2 (A. Brown), xiv. Dobson (ii, 991) says 'h' is a voiceless (or whispered) part of a vowel; and (1009) *Rahel* a mistaken treatment of 'ch' in M.E. and O.F.

Dobson (i, 4) gives, from Salesbury's 1567 *Treatise on Welsh Pronunciation* (including Welsh transliteration of English) *mihi* as 'meichei', and identifies the 'ch' with [ç] as in German *nicht*. But see n. 88 on previous page; and in 1500-20 Dunbar (admittedly a Scot) rhymes 'Michell' and 'nichell' (*nihil: Poems,* xxii, 71).

I/J consonantal. (There is no phonetic significance in the distinction between *i* and *j*.) As [dʒ] (*Iesu, iam, cuius, ejus, Ieremiæ* etc, or these words with *j*)[93]. In *eius* and *eia* the consonant may be treated as double, [d-ʒ], closing one syllable and opening the next (giving ĕ and [ɛd-ʒa] as in Norman Latin), or as single, giving an open syllable, and ē ([e:dʒUs], [e:dʒa]). This latter way is safer for 1400-1650[93].

The *i/j* in *Alleluia/-ja* is perhaps a glide, [j], rather than a vowel [i].

Kyrie or *Kyry*. The unreformed [kIri] opens Byrd's Mass for four voices (and Taverner's *Leroy Kyrie*); [kI:rie] is more usual in Byrd: see pages 313f.

NC, NG. Robinson's poem shows *cingunt* was then 'sing-gunt' (and this agrees with the earlier usage[35,94]). For *sanctus* see *C* above.

PH. As [f], but *sphaera* as [sp][95].

QU. As [kw] except that *quo* = [ko]; *quum* = *cum* = [kUm][96].

R. Smith says the English 'r' is like that of the Romans, which (if classical scholars are right - see Figure 12, pages 201f) means that it was trilled. The post-vocalic [r] (e.g. in English or Latin *-ER*) was still sounded[97].

S. As initial letter of a syllable, [s].

Between vowels. The Lambeth Fragment of 1528[98] reads 'S. betwene two vowelles, prounounceth by .Z. as mizericorde misericorde, vsage. and I beleue that by such pronuntiacyon, is the latyn tongue corrupte for presently yet some say mizerere for miserere.' 'Lily' says that many 'do corruptly sound s between the two vowels' (*visus* = 'vizus'); Bullokar says this is the sound 'most times' in English and in Latin. I suggest a lightly voiced sound between [s] and [z]. But compound words may need [s] between vowels: in Byrd's Proper anthems for Easter one sings *resurrexi, resurrecxionem, resurgentis, surrexit, surrexisse, resurgeret*. An initial *s* must be [s], and this strongly suggests [re-s] rather than [rɛz-] in the compound words.

The significance for Tudor composers of the two parts of the word *re-surgens* clear in Tye's use of the words 'Christ rising again'. It would perhaps be pedantic to sing [re:s] every time *resurrectionem* appears in the text, but there is a strong case for it (instead of the habitual [rɛ:z]) at least when, as in Byrd's Masses, the first syllable is set on a long note.

[93] H11; Bu4; Robinson's marking of a poem confirms for 1617 (*subiacet*). Brittain, *Latin in Church*, 69, says the Benedictines who returned to Downside from exile abroad pronounced *ejus* as 'ayjuss' until late 19th c. See also *H* for *Hierusalem* etc.

I am grateful to Professor W.S. Allen for advice on *eia*: cf. Dobson and Harrison, 321: 'probably pronounced *eya* (as it is sometimes spelt)'. See p. 147, n. 142.

[94] Ro 12, 13.

[95] Bu14; Ly15; and note E37 on classical pronunciation.

[96] Bu16.

[97] S34; Gimson, 83.

[98] E.E.T.S., new series, 14 (1871), A.J. Ellis, 'On Early English Pronunciation'), 816.

As a final letter the [s] should be light (Shakespeare makes fun of the strong Welsh final 's'); and the sound can be voiced to [z] if this leads more easily from the preceding vowel to the sound which follows. (In English, *-es* became [əz] in the fourteenth century.) Voicing would normally occur before a vowel or a voiced consonant[99].

SC before *e* or *i* remained as [s] (otherwise [sk]). Caius earlier derided 'dischipulus' (no doubt heard from Cambridge Italianate reformers). Brett notes 'desendit' in Byrd[100].

T, TH. The sound of final *t* seems to have been soft, sometimes [θ][101]. Hart and Bullokar give examples of borrowed Greek words in Latin with *th*, usually as initial letters; some are pronounced with *t* and some with *th*, and no rule is apparent; later usage is unlikely to be a reliable guide because of reforms in the sixteenth and nineteenth centuries. In English the sound and the orthography were both in transition; Welsh sources around 1500 indicate [t] in the English word 'throne' but slightly later sources have [θ][102]. This was an area of muddle at the time, so there is a choice for *thronum.*

TI + vowel continued to be spelt also with *ci*, implying that *ti* was sounded [si]. Around 1600 the use of [ʃi-] began, but may not have been followed by traditionalist Catholic musicians. Anglican choirs singing Latin anthems (in royal chapels for instance) may have followed fashion, and made *-tio* into [ʃiɔ] or [ʃɔ] in the first half of the seventeenth century[103].

V. 'Lily' says this is confused by some with *f*, so we know it was sounded approximately as [v] rather than [w][104].

99 Ly14; Bu8; Ro7, 8; S35. Bullokar gives 'singulóz vicit'), but Robinson's examples do not all conform. Smith remarks, not helpfully, that English 's' is like the Latin and is uttered in every position. The instances in Robinson/ Dobson's transcription of the poem (*The Phonetic Works of Robert Robinson*, 27f, are as follows. The S is [S] in *tenuisque*; [z] in *facilesque; terribilesque*; [S] and then [Z] in *cunctis/ Imposui*. It is [Z] in *decus/ Et*, but [S] before *c* (= [S]) in *frigus cingunt* and S in *latus,/ Quos si*; [S] in *sapiens nectat* but [Z] in *vires? nomina*. Robinson gives [S] for all the following: *potestas:/ Per; Deus instituit; cohors, mea; expers ratione: Qualis ego; artis cunctæque; discriminis varij; cælos &; fructus mors; reliquis, liceat; missis:/ Non.*

   Robinson gives *-os* in this poem a (reformed) ō; Bullokar's *singulóz* is ŏ.

100 Robinson's transliteration of verse gives *inscitiam* with *sc* = [S]; Caius/Gabel, 14; *Collected Works of William Byrd*, v. 4, xiii.

101 On *t*: 5/3; Ly16; Baret, *An Alvearie* (1573): 'In times past within our memory, *T* hath bene pronounced as though it were *th, ameth, caputh, vocath, &c.* Which abuse is now well vanished; but in english wordes I neuer found T so corrupted with such absurditie'. (Ecclesiastical use of Latin was now rare.)

102 H29; Bu18.

103 Cf. *Poncio* (15th c.) for *Pontio*: A.C. Cawley, *The Wakefield Pageants in the Towneley Cycle* (Manchester, 1958), 50. Later, Robinson's verse transliteration (1617) implies that *ratione* was [raʃoni]. The Puritan Thomas Gataker (1641, aged 67), says 'we falsely pronounce' as [s] *t* before *i* followed by a vowel starting a syllable (Dobson, i, 216).

104 Ly13; Bu17 confirms consonantal sounding of *v*; P62 gives *V* as nearly = [f].

LIAISON BETWEEN WORDS? (*Gratias=agimus; et=in; tollis=peccata*)

Without documentary evidence (but with the benefit of Dr Barber's view), I think English practice was nearer to the French than to a Germanic glottal stop: gentle liaison. Incidentally, rolled [r] was used for *r* in all positions but not elsewhere: there was no 'intrusive r' between vowels ('Gloria=rin').

PRONUNCIATION AND THE TUDOR WORLD

Modern singers considering their approach to Tudor music have several choices to make. Among the consonants, *c* and *sc* before front vowels, *gn, h, i/j, r* and *ti-* require decision (my suggestions being on pages 129-32). The vowels, discussed at length on pages 120-129, are what are heard for most of the time, and especially in polyphony. The quality of the vowels and the voice-production used to sing them are what principally affects the colour of the music.

The historical evidence can point us in the right direction, and can exclude the use of some sounds: but it is bound to leave us short of exact evidence for the various sound-colours: should we, for instance, lean towards bright vowels in an Italian fashion, or 'back vowels' of a north European colouring? At this stage we should, I suggest, explore in at least two ways. We have to spend time singing, and listening critically to, Tudor works sung with different vowel-patterns, judging clarity, volume, and quality of tone. It is however not obvious what the test of satisfactory and appropriate quality is: we are much too far away from the Tudors to rely on any continuing tradition, even in an ancient cathedral or college. We have to start again, trying to acquire a 'feel' of the period, from the sound of the spoken language and the content of its poetry and oratory, the brightness or sombreness of paintings or of costume; the frame of mind of the people (desperate, oppressed, excited and so on). Did they believe literally what was said and sung in church; did they feel it their duty to express and proclaim this, or was professional singing a perfunctory routine? How far were the musicians insular or even local in their outlook, and did they know continental sounds and the practices of other English choirs?

The modern singer or conductor has not only a critical but a subjective and creative job to do in judging what musical and verbal colourings cohere with the whole historical picture. We are in two sorts of danger. One is the trap of circularity: in using our imaginative picture of Tudor England – or any other country or period – to guide us towards the colouring of the music (of which pronunciation is a part), we must accept that part of that picture comes from having heard and sung Tudor music, performed in certain ways. Our second trap is that we are deeply conditioned by knowing Bach, Beethoven and the rest, and indeed earlier music forgotten or unknown by the Tudors. And we may have known works such as Byrd's Masses for much longer than was possible for him or his contemporaries: furthermore, in singing them, we are free of persecution. We cannot quite escape our wide knowledge, nor always achieve freshness and surprise; if we are not open to

new perceptions and to the often hard facts of the sixteenth century, we may get locked into seeing the music in a self-verifying way, whether romantic or arid. A conductor who can shed most of his acquired experience and still be excited by Byrd's assumptions and intentions will day throw new light on works we thought we knew. Pronunciation is one dimension helping to enliven the music, and it needs a delicate and penetrating judgement.

A CHANGE IN TUDOR CHORAL SOUND?

It is just worth considering how much difference in vocal sound was inevitable in 1549, when Latin services gave way to English. In discussing what happended after the English Reformation, Professor Wulstan has used as a basis of comparison a pre-1549 Restored Classical Latin pronunciation, and post-1549 modern standard English. He explains how the physical formants of vowel sounds determine their brightness, and concludes 'Thus the change from Latin to English at the Reformation would have resulted in considerable dulling of the vowel spectrum'.[105]

Perhaps this overstates the change in sound. English singers did not sing Latin with the reformed pronunciation, whether Erasmian or Italianate. The discussion in this chapter has suggested what the vowels may have been: perhaps in polyphony 'long i', if it had been sung as [I:], had to change to [əi] when English words came to be sung: but for the rest the singing men had been using the English vowels in Latin, and they went on doing so with the English words. Tudor English vowels of course differed from ours: [ə] was certainly in use but was less widespread, and it could be used in Latin on an unstressed vowel. The modern 'short u', [ʌ], was unknown. And above all the 'long a' was not the back vowel [ɑ:] but a forward vowel: I have suggested [æ:], a definitely bright sound.

Byrd, using English words, could achieve both brilliance (*This day Christ was born*) and sombreness (*Turn our captivity*), and he could do the same in Latin (*Hodie Christus natus est*, and *Ave verum corpus*). Perhaps two other, linked, changes made more difference to the quality of choral sound than phonetic changes arising from the switch to English. These were the reformations, Protestant and Catholic, in the character of church music, whereby the old complicated polyphony and long melismas gave way to simpler textures which allowed the words to be heard; and the growth of the intensive, careful and sometimes emotional use of words in sacred music.

I take some of these arguments further on pages 292-5, in working out specimen pronunciations (*Gloria in excelsis* and *Magnificat.*) Later English pronunciation is covered in Chapter 11a (pages 194-203).

105 Wulstan, *Tudor Music*, 227-9.

106 Among the consonants, the two sounds of 'th' do change the texture of sound, but in Latin there had been some ambiguity between the sounding of 't' and of 'th'. To see whether a given text would have changed colour in the changes of the 1540s one would need to look at it in detail phonetically in Tudor Latin and the corresponding English.