

# V Early Modern English

## 37 Early Modern English: Phonology

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### Abstract

*In the Early Modern English (EModE) period, English underwent a number of substantial changes in all phonological subsystems, which transformed the Middle English system into a distinctly modern one. The present chapter highlights in turn changes in lexical stress patterns, the reduction of unstressed syllables, changes in the distribution of certain consonants and their allophones (in particular /h/, [ç], [x], /r/), the reduction of consonant clusters (including the emergence of the novel /ʒ/ and /ŋ/ phonemes) and changes in the vowel system. A large part of the chapter is devoted to the important shifts undergone by the latter category of sounds in the Early Modern era; yet it excludes the massive turnover known as the Great Vowel Shift (which is treated in Krug, Chapter 48). The vowel changes are, for expository purposes, subdivided into unconditioned and conditioned changes; the subsystems of long vowels, diphthongs, and short vowels are treated separately. The chapter describes the most important qualitative changes in long vowels (beyond the Great Vowel Shift), the monophthongization of many ME diphthongs, the development of some of the short vowels, and the interfering effect of certain consonantal environments, partly leading to phonemic splits.*

### 1 Introduction

In the EModE period, English underwent a number of substantial changes in all phonological subsystems. As a result, by the end of the period, English had evolved from the distinctly old-fashioned state of affairs preserved in Middle English to a system largely representing Present-day English. The language manifested shifts in the location of lexical stresses (see Section 2); it had cemented the phonological contrast between stressed and unstressed syllables (see Section 3); some distributional changes, a few new acquisitions as well as cluster reductions had yielded the present-day consonant system (see Section 4); and the vowel system had changed almost beyond recognition, now being characterized by an asymmetric relationship between long and short vowels and an almost complete renewal of the set of diphthongs (see Section 5). Yet further changes were to follow before the vowel system reached its present-day state. All of these aspects will in turn be highlighted in the following sections.

However, what makes the descriptive task undertaken in this article easier than, for instance, a comprehensive outline of the phonology of Middle English, is the fact that Early Modern English was also a time of standardization: after an era of dispersion and dialectal diversity, the English language had regained most of the functions taken over by French in the centuries following the Norman Conquest. From the EModE era date numerous grammars, proposals for spelling reforms, rhyming dictionaries, shorthand guides and materials developed for teaching English, all of which provide useful sources for the reconstruction of EModE phonology (see the monumental work by Dobson 1968, drawing together much of this evidence). As a consequence of the generalized use of English for official purposes, the standardization of spelling, begun by the Chancery in the 15th century, continued at increasing speed, making written texts difficult to assign to any particular region. Of course, the standardization of written usage went considerably further than that of spoken dialects, which varied as a function of the social status of the speaker. In an often-quoted passage defining the origin of the newly risen English standard, Puttenham (1589) recommends

the vsuall speach of the Court, and that of London and the shires lying about London within lx. myles, and not much aboue. I say not this but that in euery shyre there be gentlemen and others that speake but specially write as good Southerne as we of Middlesex or Surrey do, but not the common people of euery shire ... (Puttenham 1589: 120–121).

Not surprisingly, it was thus the variety used in the political, cultural, and economic centre that set the norm to which other dialects were attracted, while differences persisted particularly in spoken usage.

Possibly as part of this standardization process, the phonological makeup of many high-frequency words stabilized in one way or the other. While Middle English had been an era characterized by an unprecedented flexibility in terms of the presence or absence of variable segments, Early Modern English had lost these options. A word-final <e> was no longer pronounceable as [ə]; vowel-final and consonant-final forms of the possessives *my/mine*, *thy/thine*, and of the negative *no/none* were increasingly limited to determiner vs. pronoun function, respectively; formerly ommissible final consonants of the prepositions *of*, *on*, and *in* became obligatory, and the distribution of final /n/ in verbs was eventually settled (e.g. infinitive *see* vs. past participle *seen*). In ME times, this kind of variability had been exploited to optimize syllable contact at word boundaries by avoiding hiatuses and consonant clusters (e.g. *my leg* but *min arm*, *i be hous* but *in an hous*, *to see me* but *to seen it*). The increasing fixation of word forms in Early Modern English came at the expense of phonotactic adaptability, but reduced the amount of allomorphy; in other words, phonological constraints were increasingly outweighed by morphological ones (cf. Schlüter 2009b).

## 2 Word stress

Stress assignment has since ME times been a hybrid of two conflicting systems of different origins. Throughout the history of English, native Germanic lexemes have as a rule had their stress on the first syllable from the beginning (unless they carried a stressless prefix). In contrast, Latin and French loanwords arrived with a stress system that counted syllables from the end and assigned stress to the first stressable (or heavy)

syllable from there, with the final syllable as a rule being skipped in Latin. Predictably, Early Modern English, which contained and continued to adopt vast numbers of Romance loanwords, was characterized by a considerable vacillation with regard to the location of main accents.

Application of the French stress rule led to accent on final syllables, e.g. *parént*, *précept*, *colléague*, where Present-day English has in many cases developed initial stress. Overall, educated speakers can be expected to have stuck to this rule longer than the less educated part of the population, who commonly generalized the initial stress rule, e.g. *párent*, *précept*, *cólléague*. In some cases, the initial stress rule was extended to items where it did not eventually become established, giving pronunciations like *cónvenient*, *défective*, *pérpective*, and *súggestion* (examples from Levins 1570). The aphesis of unstressed initial vowels attested in EModE loans like *lárumb* (< *alárum*) and *spáragus* (< *aspáragus*) seems likewise due to an overextension of Germanic initial stress. Alongside these Romance stress rules on the one hand and fully anglicized stress patterns on the other, the EModE system contained numerous exceptions. Thus, stressable final syllables and word-initial syllables in some cases remained unstressed, while word-medial syllables received the main accent, e.g. *démónstrate*, *embássage*, *illústrate*, *retíne*, *sonórous*. In the course of the later history of the language, the variability in terms of word accent that characterized the 16th and 17th centuries largely subsided in favor of stable patterns that were often a result of the history of individual words.

Furthermore, for much of the Early Modern period, lexemes of three or more syllables tended to carry a relatively prominent secondary stress, separated by at least one syllable from the primary one (indicated here by grave accents). As a consequence, speakers tended to alternate between realizations like *ádvértize* and *àdvertíze*, *állegórical* and *àllegórical*, *ácessòry* and *àccessóry*, *páramòunt* and *pàramóunt*, *partícipáte* and *participáte*. It is only in the 17th century that pronunciations that had lost the secondary stress began to compete with those that preserved it. In British English, the innovative variants ousted the older ones in subsequent centuries, while in American English secondary stress survives in many lexemes.

### 3 Syllable reduction

Since the period under discussion, the presence or absence of stress has had important consequences for the phonological makeup of a syllable, in particular of its nuclear vowel. As early as Middle English, there had been a tendency for unstressed vowels to be reduced (which had gone to completion in final syllables), but the trend only gained considerable momentum in Early Modern English. At that time, vowels in non-primary stressed syllables could be of at least three kinds, corresponding to different degrees of reduction. In realizations that preserved secondary stress, long vowels and diphthongs were retained, e.g. *púrpòse* /o:/, *ópenly* ~ /əɪ/, *hístory* ~ /əɪ/, *glóriòus* /əʊ/, *émeròur* /əʊ/, *cértain* /eɪ/, *cáptain* /eɪ/. Even when short and stressless, vowels remained clearly distinct in careful speaking styles, e.g. *cóuntenance* /a ~ æ/, *víllage* /a ~ æ/, *kíngdom* /u/, *séldom* /u/, *cáptain* /e ~ ε/, *ópenly* /i/, *émerour* /u/. In less conscious styles, however, all vowels merged under one or two realizations, a centralized vowel /ə/ or /ʌ/, and a slightly higher /ɪ/, depending on the variety, the segmental context, and the lexeme. In appropriate contexts, unstressed vowels could be dropped completely (as is still the case in Present-day English): For one thing, in combinations with nasals or liquids, vowels could disappear in

favor of a syllabic quality of the consonant, e.g. in *bottom*, *garden*, *bottle*, *double*, *acre*, and *slender*. For another, they could disappear in medial position of initially stressed words (which was in some cases indicated by the spelling), e.g. *evry* ~ *every*, *sentry* (< *century*), *curtsy* (< *courtesy*), *fancy* (< *phantasy*). (Note that these examples present a mixed set: While *evry* is a purely orthographical indication of syncope, the other three are instances of a beginning orthographic differentiation of a polysemous word, eventually resulting in a meaning split.)

Phonological reduction up to and including the loss of unstressed vowels has since EModE times also characterized function words (prepositions, pronouns, auxiliaries etc.). Depending on factors such as speaking rate, formality, prosodic prominence, and syntactic independence, speakers had strong and weak forms at their disposal, e.g. *and* [and/ən], *have* [hə:v/vəv], *would* [wəuld/wud], *my* [məi/mi], *through* [θrəʊx/θru], *you* [jəʊ/jʊ]. Moreover, in high-frequency collocations, two function words could be contracted, leading to the loss of either the first (e.g. *'tis*, *'twas*, *'twill*) or the second vowel (e.g. *they're*, *we'll*, *you've*, *can't*). While the phenomenon is not unknown in Old and Middle English (e.g. *cham* < *ich am*, *het* < *he it*, *nabban* < *ne habban*, *nas* < *ne was*), its currency increased considerably in the Early Modern period, and it is obvious from the examples given that the inventory of possible contractions underwent considerable change.

## 4 Consonants

Compared to the vowel system, the consonant system remained fairly constant in the EModE period. The distribution of one or two consonants changed significantly, two phonemes were newly formed, and several initial and final clusters were simplified.

### 4.1 Distributional changes

Initial /h/ had always been part of the English system, but had almost become extinct in ME times, with the exception of East Anglia and the Northeast. Thus, most early ME varieties spoken in England and Wales were completely /h/-less, not only in unstressed function words (where standard Present-day English still drops the /h/, e.g. *he*, *his*, *him*, *her*, *has*, *have*, *had*, etc.), but also in initial position of content words of Germanic origin (e.g. *hand*, *heart*, *hair*, *house*, *husband*, etc.). While the weakening of initial /h/ had been a natural continuation of its Old English demise in less prominent positions, and the arrival of French loanwords with mute <h> (e.g. *habit*, *hazard*, *heir*, *history*, *horror*) played at most an auxiliary role, a reversal of the trend is traceable to later Middle English (from about 1350 onwards) and gained considerable momentum in the EModE era (cf. Schlueter 2006, 2009a). The comeback of initial /h/ in Germanic as well as Romance words – spanning the 14th to 20th centuries – was certainly helped by the consistent preservation of <h> in the spelling. In large part, it was however a naturally occurring process whose functional motivation may be seen in the restitution of a consonantal syllable onset (which is universally preferred to vowel-initial syllables). The reinforcement of /h/ was retarded by factors such as the Romance origin of the lexeme, a high token frequency, and the absence of stress on its initial syllable, and it was speeded up by its native Germanic origin, a low frequency, and a primary stress on the first syllable (cf. Schlueter 2009a). Throughout the Early Modern period, the

realization of /h/ thus remained highly variable; witness numerous spellings like *an hundred*, *myn husband*, *thy humble servant*, *non history*, etc., but it strengthened continuously long before /h/-dropping became stigmatized in the 18th century.

In contrast, /h/'s allophones [ç] (following front vowels) and [x] (following back vowels), which occurred in word-final position and before /t/, were lost in all southern English dialects in the course of the EModE era. The palatal variant [ç] possibly disappeared somewhat earlier (15th to 17th centuries) than the velar one. It was vocalized and thus led to a compensatory lengthening of a preceding short vowel (e.g. *high*, *night*, *thigh*). Velar [x] was from the 14th century in some dialects replaced by the acoustically related consonant /f/, most typically when following /u/. For a while, /f/ had a wider spread in standard English than today, occurring for instance in *daughter*, *bought*, *naught*, *taught*, etc. By the mid-18th century, the modern distribution had been reached (*cough*, *enough*, *laugh*, *rough*, *tough*, *trough*, *draught*, and *laughter*).

A distributional change that was to have important repercussions in the vowel system was the weakening of /r/ in non-prevocalic contexts. The process affected the southern British English standard and related dialects, but did not occur in Scotland, Ireland, most of the United States or Canada, which remained /r/-pronouncing (rhotic). It is assumed that the phonetic weakening of /r/ proceeded from an original trill or flap via an approximant stage to a complete loss of the consonantal closure. The first sporadic spellings testifying to /r/-loss occur in late Middle English of the 15th century, further evidence comes from EModE private writings, but the main changeover happened only in the 18th century, that is, after the end of the period focussed on here (cf. Lass 1999: 114–116). While Early Modern English was thus mostly rhotic, /r/-loss nevertheless deserves to be mentioned here because when following a stressed vowel, the weakening /r/ vocalized to produce a transitional /ə/ or led to a compensatory lengthening of the vowel as early as the 16th and 17th centuries. In addition, a following /r/ interfered significantly with the major reshuffling of the vowel system known as the Great Vowel Shift (see Section 5.2.1).

Further consonantal changes concerned phonotactics, i.e. the ways in which consonants could be combined into consonant clusters. Cluster reduction, in particular, led to the creation of two new members of the consonant system, /ʒ/ and /ŋ/, which are therefore treated in Section 4.2.

## 4.2 Cluster reduction

The reduction of onset clusters pursued the road already taken in Middle English. The consonant clusters /hr/, /hl/, /hn/, and /wl/ had shed their first members in early Middle English. The combination /hw/, with its first member weakening, continued to be distinguished from /w/ in general usage (though no longer in the southern dialects), so that *which* and *witch*, *whine* and *wine* were kept apart up to the 18th century (and continue to be in certain dialects, including Scottish and Irish English as well as a few American and Canadian accents). The reduction of the /wr/-cluster in items like *write*, *wrong*, and *wrist* began in the 15th and 16th centuries and was completed in the 17th. The clusters /gn/ in *gnash*, *gnat*, *gnaw* and /kn/ in *knee*, *knit*, *know* persisted somewhat longer, possibly in the form of assimilated /dn/ or /ŋn/ for /gn/ and /tn/ for /kn/. The simplification to /n/ began in the 17th century and was generally accepted in the South of England only in the early 18th century.

An addition to the consonant inventory of Early Modern English resulted from an assimilation of the consonant sequence /zj/, occurring in medial position of French loan words like *vision*, *occasion*, and *leisure*. In the 16th century, the two components assimilated to form a new consonant /ʒ/. Comparable assimilatory simplifications affected the clusters /sj/, /tj/, and /dj/ in unstressed syllables. Rather than producing novel consonant phonemes, these added to the numbers of the existing /ʃ/, /tʃ/, and /dʒ/-phonemes, respectively. The 15th century saw the appearance of /ʃ/ in words like *session*, *obligation*, and *mathematician*, and the 17th century the rise of /tʃ/ in words like *Christian*, *creature*, and *mutual* and that of /dʒ/ in words like *soldier*, *Indian*, and *grandeur*. All of these new realizations, in particular the new /ʒ/-phoneme, took a long time to become accepted into the standard, and in some cases variation between consonant clusters and assimilated pronunciations persists to the present day.

Further phonotactic changes concerned the reduction of final consonant clusters, which did not, however, become ubiquitous. Word-final /mb/ had already been reduced to /m/ in Middle English in items like *bomb*, *dumb*, *lamb*, *plumb*, *tomb*, etc. In the late 16th and 17th centuries, /g/ was deleted after the velar allophone of /n/, making /ŋ/ phonemic. This loss occurred first in word-final position (e.g. *sing*, *ring*, *strong*, *long*) and then also in morpheme-final position (e.g. *singer*, *ringing*) except before adjectival inflections (e.g. *stronger*, *longest*). In the unstressed present participle ending -*ing*, /ɪŋ/ was further changed to /ɪn/ in many standard dialects. However, in later centuries, the /ɪŋ/-realization was enforced in standard usage and /ɪn/ restricted to rapid or colloquial speech.

Finally, a minor consonantal change limited to a certain number of lexemes and dating to Early Modern English is the disappearance of /w/ when following another consonant and preceding a rounded back vowel, e.g. in *sword*, *two*, and *who*, and somewhat more systematically in unstressed syllables, e.g. *Southwark*, *conquer*, *answer*. In some further items, e.g. *swollen*, *swoon*, *swore*, *awkward*, *boatswain*, *forward*, *housewife*, and *pennyworth*, /w/ was later restored on the basis of the spelling or of related words.

After the re-establishment of initial /h/, the loss of its allophones [ç] and [χ], and the introduction of /ʒ/ and /ŋ/, the EModE inventory of consonants was practically identical with the present-day one. All in all, the consonantal system of English has, however, remained relatively stable, in particular when compared to the fundamental turnover undergone by vowels in the same period of time.

## 5 Vowels

The vowel system Early Modern English inherited from Middle English was very much unlike that of Present-day English. In EModE times, many changes happened that gave rise to a much more “modern” system. At the beginning of the period, the system was largely based on quantity contrasts that were inherited from Old and Middle English: many monophthongs occurred in pairs of long and short members, and the lengthenings and shortenings created by ME sound changes persisted, even within individual paradigms or word families, e.g. *keep* : *kept*, *child* : *children*, *holy* : *holiday*, *wise* : *wisdom*, *wild* : *wilderness*. The short vowels distinguished three and the long vowels four heights (both front and back). In addition, Middle English had a few closing diphthongs, whose second element was either /ɪ/ or /ʊ/. In the course of the Early Modern period, long and

short vowels developed in different ways, giving rise to quality differences in addition to the quantity differences. Many of the former diphthongs monophthongized, thus giving the English vowel system a less diphthongal character than it had either before or after Early Modern English. Some instances of the monophthongs, in particular ME /ɛ:/ and /o:/ (corresponding to EModE /e:/ and /u:/), shortened, which accounts for those cases where the Present-day English spellings indicate length, but the vowels are pronounced short, e.g. *bread, flood*. In addition, many vowels underwent conditioned sound changes in specific phonological contexts, above all before /r/ and /l/. The most important changes will be discussed in what follows. The sections focus on unconditioned and conditioned changes, respectively, and treat long monophthongs, diphthongs, and short monophthongs in turn, but since these classes are to some extent interconnected through sound changes, this separation serves only expository purposes and will be deviated from in some places.

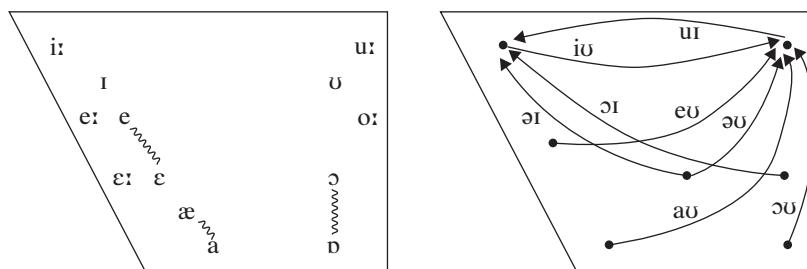


Figure 37.1: Early Modern English stressed monophthongs and diphthongs around 1600 (adapted from Görlach 1994: 53)

Figure 37.1 depicts the location of monophthongs and diphthongs in the vowel chart around the middle of the EModE period. Some of the changes mentioned had already taken place at this time; some others were yet to come. Wavy lines in the diagram on the left show changes under way at the turn of the century; arrows in the diagram on the right indicate the starting points and targets of diphthongal realizations (but not the directions of diachronic changes).

## 5.1 Unconditioned changes

The most momentous unconditioned change affecting all the long monophthongs in the Early Modern period is the Great Vowel Shift (GVS). The GVS raised ME /a:/, /ɛ:/, /e:/, /ɔ:/, and /o:/ by one step each, and the two ME vowels that were already maximally close, namely /i:/ and /u:/, diphthongized. Since the changes are assumed to be causally connected, the GVS represents a showcase example of a chain shift. While the initial signs of the shift go back at least to the 15th century, the first stage was completed in the 16th century. The results of this systematic shift can be seen in Figure 37.1, illustrating the status quo around the year 1600. Despite its systematic character and reasonably detailed documentation in contemporary orthoepic descriptions, the precise mechanics continue to be debated among linguists. Since the present volume contains a chapter expressly devoted to the GVS, this important part of EModE phonology will be omitted here (see Krug, Chapter 48).

### 5.1.1 Long vowels

Depending on what is included under the concept of the GVS, the end point of the shift is also open to discussion (cf. Lass 1999: 80–85). After 1600, the long vowels continued to evolve, and the focus of the present discussion will be on these subsequent changes of the second half of the EModE period.

While no mergers happened as part of the GVS chain shift, /i:/ (going back to ME /e:/) and /e:/ (going back to ME /ɛ:/) fell together in /i:/ around the year 1700, though variation continued during the 18th century. This merger eliminated the opposition between items like *see : sea* and *meet : meat*.

Another partial merger resulted from the further evolution of /ɛ:/ (going back to ME /a:/) as in *make, ale, ape, bake, drake, hate, knave*, etc.: the sound raised to /e:/ in the 17th century and diphthongized to /eɪ/ around 1800. At the same time, not all instances of /e:/ (going back to ME /ɛ:/) had in all dialects completed the rise to /i:/, so that they merged with items from the /ɛ:/ class. In the 18th century, this merger became limited to a few lexemes in standard pronunciation, in particular *grate : great* and *brake : break*, while raised realizations came to prevail for other members of the /e:/ class, e.g. *reach, leaf, clean* (unless they had previously been shortened; see Section 5.2.1).

ME /ɔ:/ as in *boat* or *no* had, by virtue of the GVS, moved to /o:/. In the late 16th and 17th centuries, it was joined by ME /u/ as in *blow* or *know*. Whether the vowel resulting from this merger was monophthongal or diphthongal is debatable and without doubt varied from one dialect to another (see Section 5.1.2). From the 18th century onwards, the diphthongal realization /ou/ prevailed in the standard (and became Received Pronunciation /əʊ/ around 1920).

The ME monophthongs /i:/ and /u:/, which had diphthongized under the GVS, provide a transition to the field of the EModE diphthongs. The exact quality of the sounds resulting from the diphthongization is controversial. The versions with a centered initial element given in Figure 37.1, namely /əɪ/ and /əʊ/, represent the time-honored view still adhered to by most linguists, which has however been challenged by others – see, for instance, Faiß (1989) and Lass (1999), who reconstruct /eɪ/ and /əʊ/ (for further discussion, see Krug, Chapter 48). Be that as it may, in the second half of the EModE period, the new diphthongs continued to develop in a way to widen the distance between their first and second components. The modern situation, with /aɪ/ for the front diphthong and /aʊ/ for the back one was reached in standard British English in the 18th century.

### 5.1.2 Diphthongs

Many of the diphthongs inherited from Middle English changed into monophthongs in the Early Modern era. The only two that remained were /ɔɪ/ and /uɪ/, which merged into /əɪ/ by the end of the period. The diphthong /ɔɪ/ occurred mostly in loan words from Old French such as *choice, joy, noise, toy*, while /uɪ/ was typical of the Anglo-Norman dialect of French that brought words like *join, boil, coin, point, poison*, and *toil* into Middle English. EModE texts show some variation between <oi> and <ui> forms (e.g. *point/paint, poison/puison*), but the latter were less frequently used than the former and were eventually given up around the end of the 17th century. In a transitional phase, some members of the /uɪ/ group apparently merged with the reflexes of ME /i:/, when the latter reached the /əɪ ~ əɪ/ stage. Thus, *loin : line* and *point : pint* became

homophones. This realization was however stigmatized as a provincialism and given up in favor of /ɔ:/ in the 19th century.

As already mentioned, all the other ME diphthongs are in standard accounts assumed to have turned into monophthongs in the EModE era, though in some cases, new diphthongs were established in the later evolution (cf. Barber 1997: 114–115; Görslach 1994: 55–56; Lass 1999: 91–94; Nevalainen 2006: 123–124). (Note, however, that there is no consensus among historical linguists concerning the evidence for the assumed monophthongizations of /ɔu/ to /ɔ:/ and of /ai/ to /ɛ:/ and their subsequent re-diphthongizations. It is probably more judicious to assume that the monophthongizations were only completed in some dialects, while others preserved more or less markedly diphthongal realizations and played a role in their establishment in the Late Modern English standard.)

To start with, /au/ became /ɔ:/ in the mid-17th century, thus filling the gap in the open back corner of the long vowel system (Figure 37.1), and later changed into /o:/, e.g. in *cause*, *law*, and *taught*. Second, /ɔu/ monophthongized in the second half of the 16th and first half of the 17th century to /ɔ:/ and took part in the GVS-conditioned raising to /o:/ (which became /ou/ in Late Modern English), e.g. in *bowl*, *flow*, *know*, *low*, and *soul*. Third, the ME /ai/ diphthong narrowed to /ɛi/ and subsequently monophthongized to /ɛ:/, which joined the GVS-raising to /e:/. As a result of this merger with former /a:/ as in *make*, a large number of homophones were created in the mid-17th century, e.g. *days* : *daze*, *hail* : *hale*, *raise* : *raze*, *tail* : *tale*. In Late Modern English, the monophthong developed into a new diphthong /ɛi/, representing the modern state of affairs.

In addition, Middle English had two diphthongs, /eu/ (occurring in words like *beauty*, *dew*, *few*, *hew*, and *newt*) and /iu/ (occurring in words like *chew*, *due*, *hue*, *new*, and *true*), that eventually collapsed under /ju:/. Phonetically, the change proceeded by a raising of the first component of /eu/ to /i/ and a shift of the vocalic centre of the diphthong from the first to the second component. As a result, /i/ was reanalyzed as the glide /j/ and assigned to the onset, while /u/ lengthened to compensate for the loss of vowel quantity. The chronology of the merger of /eu/ and /iu/ on the one hand and the development from diphthong to glide plus long monophthong on the other is somewhat disputed. In Lass's (1999: 99–100) account, the merger and the development of /ju:/ coincided in the second half of the 17th century. In contrast, Dobson's evidence indicates that the development of the glide began as early as the late 16th century, while the loss of the distinction between /eu/ and /iu/ proceeded slowly south- and westwards and was completed in the standard by the last third of the 17th century. According to this chronology, the realization /ju:/ must have appeared earlier for the /iu/ words than for the /eu/ words, but the difference should have been neutralized by the late 17th century (cf. Dobson 1968: 700–713, 798–799). On the basis of the corpus study provided in Schlueter (2006), both datings of the relevant changes stand in need of revision. For one thing, the emergence of the glide in the reflex of ME /iu/ can be traced back at least to the late 16th century (confirming Dobson thus far). For another, former /eu/ words show the first signs of an emerging glide only in the late 18th century and keep lagging behind /iu/ words as late as the end of the 19th century. This suggests, pace Lass and Dobson, that the merger was not completed until the 20th century. Furthermore, it indicates that while the evolution of the /j/ onset in /iu/ words is properly part of an account of EModE phonology, the merger of (former) /iu/ and /eu/ as well as the adoption of /j/ by the latter belongs to later chapters of the history of English. The

same is true of the dropping of /j/ that later reduced /ju:/ to /u:/ in certain environments. The reduction occurred early after /r/, /dʒ/, and /tʃ/, as in *rude*, *June*, and *chew*, at the beginning of the 18th century extended to /l/ and /s/ as in *clue* and *suit*, and in American English further to /t/, /d/, and /n/ as in *tube*, *due*, and *new*.

### 5.1.3 Short vowels

Turning to the set of short vowels, the spontaneous, unconditioned changes that occurred in the EModE era were much less dramatic than the GVS or the large-scale reduction of diphthongs to monophthongs. Among the three short front vowels, we find a moderate degree of variation with regard to height. There is some disagreement in the literature on whether the close vowel /i/ as in *bit*, *thin*, and *give* was the first or the last one to move. Many authors hold that it lowered and centralized to /ɪ/ as early as Middle English (Faiß 1989: 33–34; Nevalainen 2006: 124; Stockwell and Minkova 1990, 2002), while Lass (1999: 88) concludes from contemporary descriptions that the change occurred only towards the end of the Early Modern era. In some dialects, including London, /i/ lowered even further, leading to spellings like *menysters* ‘ministers’ and *cete* ‘city’, but these variants were not adopted into the standard. Similarly, the precise quality of the vowel of *bed*, *set*, and *rest*, occupying the middle height, is somewhat unclear. Opinions diverge on whether the ME vowel was /e/, which lowered to /ɛ/, or conversely, /ɛ/, which raised to /e/ in the first half of the EModE period (cf. Lass 1999: 87 vs. Barber 1997: 109 and Nevalainen 2006: 124, respectively). Concerning the lowest among the ME short vowels, instantiated in *bad*, *man*, and *rap*, linguists disagree about its history before the present-day state of /æ/ was reached in the mid-17th century. The widespread view according to which Middle English /a/ raised to /æ/ in the early 17th century (Faiß 1989: 36; Lass 1999: 85; Nevalainen 2006: 124) is contested by Minkova (2001: 85), who concludes from scribal and rhyme evidence that a higher /æ/ vowel survived from Old English in southern dialects of Middle English.

Both of the short back vowels became more open in Early Modern English. The mid-low /ɔ/ as in *dog*, *hot*, and *rob* lowered further to /ɒ/, which was well established by 1670. Occasionally, it merged with the more front /a ~ æ/ in fashionable realizations of the second half of the 17th century (cf. contemporary spellings like *plat* ‘plot’ and *Gad* ‘God’). In most Northern American dialects, /ɒ/ pursued a different path: it lengthened and unrounded to /ɑ:/ in the late 17th or early 18th century. Finally, as in the case of /i/ > /ɪ/, the change of the high back vowel from /u/ to /ʊ/, which is generally dated to (late) Middle English (Faiß 1989: 39; Stockwell and Minkova 1990), is argued by Lass (1999: 88) to have occurred only towards the end of the 17th century. As a rule /ʊ/ lowered and unrounded to /ʌ/ not long after the year 1600 in the standard dialect (though not in the Midlands and the North of England). In certain conservative environments, however, it remained as /u/. (The specific environments concerned and the resulting phonemic split will be discussed at the end of Section 5.2.2.)

As is obvious from the above discussion, it is virtually impossible to assign to the short vowels of Early Modern English a precise location in the vowel chart. While it can be considered certain that short vowels were more lax than long vowels at the end of the period, it is unclear if and to what extent the same was already true at its beginning. The many controversies revolving around the issue are doubtless due to the fact that by their very nature, short vowels tend to have less extreme realizations

than long ones and are therefore harder to describe, a problem that is exacerbated by the fact that the short-long pairings of vowels, characteristic of earlier stages of the language, were lost by virtue of the outcomes of the GVS.

## 5.2 Conditioned changes

In addition to the general trends outlined in Section 5.1, both long and short vowels were implicated in a large number of conditioned sound changes. The present section concentrates on the most important sound changes conditioned by specific phonological environments.

### 5.2.1 Long vowels

While unconditioned changes generally left vowel quantities intact, conditioned (or combinative) changes could involve quantities, qualities, or both. In many cases where the modern spelling with a double vowel grapheme indicates a long vowel but the vowel is pronounced short, it was shortened after 1400, which is about the time when English spelling conventions were fixed. In the EModE era, shortenings concerned, above all, the vowels /e:/ and /u:/ and occurred in monosyllabic words ending in /d/, /t/, /θ/, /f/, /k/, or /v/. Examples of the reduction of /e:/ to /e ~ ε/ include *bread*, *dead*, *lead* (N), *sweat*, *death*, *breath*, and *deaf*; examples illustrating the reduction of /u:/ to /u ~ u/ are *good*, *stood*, *hood*, *foot*, *book*, *took*, and *look*. The reduction process was not a monolithic one, but reached individual lexemes at different points in time. This becomes evident when it is seen against the background of the unconditioned change from /u/ to /ʊ/, which has been dated in Section 5.1.3 to a time shortly after the turn of the 17th century: Consequently, the items *flood*, *blood*, and *glove* must have been shortened by the early 17th century to take part in the change to /ʊ/; the items mentioned above (*good*, *stood*, *hood*, etc.) were shortened later than that and therefore failed to undergo lowering and unrounding; finally, items retaining long /u:/, like *mood*, *food*, *rood*, and *shoot* resisted the reduction to /u ~ u/.

As mentioned in Section 4.1 above, the presence of a following /r/ often interfered with the regular evolution of long vowels under the GVS. While rhoticity was largely preserved throughout the EModE period, the /r/ had a variety of effects on the preceding vowel. First, as early as the 15th century an additional [ə] appears to have been inserted between a vowel and the /r/. This has eventually resulted in the modern centring diphthongs, e.g. /ɪə/ in *dear*, /ɛə/ in *bear*, and /ʊə/ in *poor*. Second, due to the complex articulatory movements involved in the production of /r/ – Lass (1999: 108) describes it as an alveolar or post-alveolar approximant with a velar plus a pharyngeal secondary articulation – it often exerted a lowering and rounding influence on the preceding vowel, but in some cases it also had a raising effect.

The lowering effect of postvocalic /r/ in particular had the potential to counteract the raising of vowels under the GVS. Developments in the rows of front and back vowels will be treated in turn here since shifts in vowel height often led to (partial) mergers within these rows. For instance, /e:r/ was partly lowered to /ɛ:r/ in the 15th and 16th centuries. Therefore, instead of the expected spellings *deer* and *heer* for the reflexes of OE *dēore* and *hēran*, we find *dear* and *hear* today, bearing witness to the lowered realization. In the examples given, the normal development to /i:r/ and later /ɪə/ has eventually

prevailed. In contrast, lexemes containing /ɛ:r/ did not in general undergo raising under the GVS and thus did not merge with the former class. They preserve unraised /ɛ:/ to the present day, e.g. *bear*, *pear*, *swear*, *wear*. There are however a few lexeme-specific exceptions to this rule, including *shear*, *spear*, *fear*, *ear*, whose vowels did raise and merge with /ɛ:r/ in Early Modern English, giving PDE /ɪə/. The /ɛ:r/ (> PDE /ɛə/) group was partly joined by the reflexes of ME /a:r/, which closed to /æ:r/ and /ɛ:r/ under the GVS, involving examples like *bare*, *fare*, *hare*, *pare*, and *share*. Thus, while ME /ɛ:/ as a rule merged with higher /e:/ (the merger of *sea* and *see*; cf. Section 5.1.1), before /r/ it collided with the next lower ME vowel /a:/.

The changes undergone by the row of back vowels under the influence of a following /r/ were even more unpredictable. Starting from the lowest member, ME /ɔ:r/ raised temporarily, approximately between 1650 and 1750, to /o:r/, only to lower again to /ɔ:r/, where it stayed, evolving into PDE /ɔə/ around 1800, e.g. *oar*, *lore*, and *more*. At the same time, some instances of ME /o:r/ raised to and merged with /u:r/ around the year 1650, giving PDE /ʊə/, as in *poor* and *moor*. Most members of both the raised and the unraised groups later, around the year 1700, lowered to and merged with /ɔ:r/, thus also ending up as /ɔə/, e.g. *door*, *floor*, *whore* and the alternative pronunciation of *poor*. Finally, ME /u:r/ developed regularly to /aʊə/ and then /auə/, as in *flower*, *shower*, and *our*. However, when followed by another consonant, it lowered and merged with /ɔ:r/ and then /ɔ:/ as in *court*, *mourn*, and *source*.

A last combinative change interfering with the regular development of a long vowel concerns ME long /u:/. After the glides /w/ and /j/ and in the context of labial consonants, it did not diphthongize, as would have been normal in the Early Modern period, but remained /u:/ instead. Examples include *you*, *youth*, *wound*, *swoon*, *room*, *stoop*, *droop*, *loop*, and *tomb*. This arrest of the regular development can be clearly attributed to functional constraints opposing a dissimilation of articulatory gestures.

## 5.2.2 Short vowels

This section surveys conditioned changes in the area of short vowels, which again involved quantitative as well as qualitative changes that were frequently interconnected. What is more, in a few cases the changes led to the creation of new phonemes out of conditioned allophones, in particular when the conditioning environment was lost or one or the other set of allophones was augmented by additional members as a result of an independent sound change.

Once again, a following /r/ played an important role as a factor interfering with regular developments. For instance, the short vowels /ɪ/, /ʊ/, and /e ~ ε/ became indistinct before an /r/ in final position or followed by another consonant, e.g. in *bird*, *firm*, *sir*, *murder*, *hurt*, and *curb*. The three vowels collapsed under a mid-central /ʌ/ or /ə/, which after the loss of rhoticity evolved into /ɜ:/, and thus added a new phoneme to the set of long vowels. This change first affected /ɪ/ and /ʊ/ and only later reached /e ~ ε/; it started in the North and East in the 16th century, reached London by the 17th century and was complete only by the turn of the 19th century. However, in some items, /e ~ ε/ had been lowered to /a/ in the 15th century and thereby escaped this change (if only temporarily). Typical spellings from the long period of vacillation that indicate this realization include *clark*, *dark*, *far*, *harvest*, *heart*, *starre*, *saruant*, *sarvice*, and *marcy*. As can be inferred from these examples, the lowered realization was

generally retained in Germanic words, whereas /e ~ ε/ was reintroduced (along with the elimination of spelling variants with <a>) in most loan words, where it eventually merged with /ɔ:/.

The remaining two short vowels, /a ~ æ/ and /ɔ ~ ɒ/ did not change to the same extent. Their lower allophones were favored in the context of a following /r/ and were lengthened to EModE /a:/ and /ɒ:/, respectively. Around 1800, the front /a:r/ changed into /a:ə/, which was then reduced to /a:/, as in *arm, bar, cart, garden, harm, mark*, and *sharp*. Similarly, the back /ɒ:r/ evolved into /ɒ:ə/ and was reduced to /ɔ:/ at the beginning of the 19th century, e.g. *border, corn, for, horse, and north*.

Apart from /r/, the other liquid /l/ in the English consonantal system had comparable, though less pervasive effects on preceding vowels, in particular on /a ~ æ/ and /ɔ ~ ɒ/. When /l/ was followed by a word boundary or another consonant, an additional /ʊ/ glide was inserted between it and the preceding /a/ or /ɒ/ in the 16th century, resulting in the formation of the closing diphthongs /au/ and /ɒʊ/. Where the /l/ was followed by another consonant, it was in addition totally assimilated to the /ʊ/; in other words, it vocalized. Subsequently, the new diphthongs were variably reduced to monophthongs, alternated with them throughout the 17th century and were ousted by them after the end of the Early Modern period. More precisely, /au/ became /a:/ when it preceded (assimilated /l/ and) a labial consonant as in *alms, balm, calf, calm, half, and palm*, and it became /ɔ:/ elsewhere, e.g. in *all, ball, call, balk, chalk, stalk, talk, and walk*. On the other hand, /ɒʊ/ became /o:/, which joined the regular post-GVS diphthongization, turning into /ou/ and later /əʊ/, as in *roll, toll, colt, folk, holm, and yolk*.

A further combinative sound change concerned the evolution of /a ~ æ/ after /w/. Where /a/ followed /w/ and did not precede a velar plosive (/k/ or /g/), it did not raise to /æ/, but backed and rounded to /ɔ/ in the course of the 17th century, e.g. in *what, warm, wand*, but not in *whack* and *wag*. Like the lack of diphthongization of long /u:/, mentioned above, the velarizing effect of /w/ is explained by the velar articulation of the glide itself.

Turning now to some further changes conditioned by specific phonological contexts, we witness the creation of two new vowel phonemes, one short and one long. First, as already pointed out in Section 5.1.3, short /ʊ/ lowered and unrounded to /ʌ/ in an unconditioned change taking place at the beginning of the 17th century. However, /ʊ/ remained in many cases after labial consonants (/p/, /b/, /f/, and /w/) and before /l/ or /ʃ/, though this arrest of the change did not apply across the board. For instance, /ʊ/ was preserved in *bull, full, bush, put, and wolf*, but /ʌ/ established itself in *but, buff* and *fuss*. In addition, as mentioned above, lexemes containing shortened /u:/ increased the numbers of both /ʊ/ (e.g. *good, stood, hood*, etc.) and /ʌ/ (e.g. *flood, blood* and *glove*). As a result, the former short /ʊ/ phoneme split in two, namely /ʊ/ and /ʌ/, contrasting, for instance, in *look* and *luck*.

Second, the short /a ~ æ/ was lengthened in the South in the 17th century where it preceded one of the voiceless fricatives /s/, /f/, or /θ/ (but not /ʃ/) or the clusters /ns/ or /nt/, for instance in *glass, pass, castle, last, chaff, staff, bath, path, dance, and plant*. This produced a new low front phoneme /a: ~ æ:/ in a slot that had been vacated as a result of the GVS. The lengthened realization was stigmatized to some extent, so that it retracted in some lexemes, but became established in others. In 18th-century British English, the novel phoneme backed to /a:/, where it was later joined by instances of /a ~ æ/ that had lengthened before /r/ (*arm, bar, cart, garden*, etc., discussed above).

This change did not happen in American English, which preserves /æ:/ to the present day.

A related change affected short /ɔ ~ ɒ/, which was lengthened at the same time and in the same environments as /a ~ æ/, i.e. before voiceless fricatives. Examples include *loss*, *off*, and *cloth*. Rather than creating a new phoneme, in the late 17th century the sound merged with /ɒ:/ (which resulted from the monophthongization of ME /au/ in the middle of that century). For a while, long and short versions coexisted side by side, but again the long ones were partly stigmatized. In contrast to the lengthened /a ~ æ/, short /ɒ/ was eventually restored before voiceless fricatives (except for some speakers of southern dialects).

Summing up Section 5.2, it turns out that, compared to the set of long vowels, short vowels were considerably more liable to conditioned changes. While phonotactic contexts mainly interfered with GVS-related raisings in long vowels, their influence on short vowels did not remain as limited: they led to important qualitative and quantitative changes, a large-scale merger before /r/ and a phonemicization of two (and after the EModE era, three) allophonic contrasts, namely /u ~ ʊ/ vs. /ʌ/ and /a ~ æ/ vs. /a: ~ æ:/ (and later /ɪ/, /ʊ/, and /e ~ ε/ vs. /ɜ:/). The functional reason for the greater lability of short vowels to conditioned changes can be found in the fact that their articulatory targets are not as clearly defined as those of long vowels.

## 6 Summary

To sum up, Early Modern English has revealed itself to be a period of massive changes, even discounting those subsumed under the Great Vowel Shift (Krug, Chapter 48). For one thing, the considerable variability in the domain of lexical stress patterns was limited in favor of one or the other pattern along the lines of either Germanic or Romance stress rules. For another, syllables not carrying the word accent were increasingly reduced, giving English the stress-timed rhythm that characterizes it today. And for another, the inventory of consonants acquired its present structure, albeit without undergoing any massive changes. The loss of the palatal and velar allophones of /h/, [ç] and [x], is counterbalanced by the establishment of the phonemes /ʒ/ and /ŋ/. In addition to many consonant clusters given up in Middle English, a few further combinations were simplified by dropping their first or second member, in particular /wr/, /gn/, /kn/, and /ŋg/, or by assimilating both into a single consonant, as in the case of /zj/, /sj/, /tj/, and /dj/.

The area that underwent the most dramatic changes in EModE phonology were the vowels. Among the short vowels, there was a limited amount of variation and change. But even beyond the GVS, the long monophthongs continued to change, which gave rise to noticeable qualitative differences between short and long vowels: both /e:/ and /ɛ:/ raised further, in the first case leading to the *see : sea* merger, and the trajectory of the newly formed diphthongs /əɪ/ and /əʊ/ (or /εɪ/ and /ɔʊ/) widened to /aɪ/ and /aʊ/. Most of the ME diphthongs monophthongized, with the exception of /ɔɪ/ (< /ɔɪ/ and /uɪ/). Last but not least, an important number of conditioned vowel changes took place in the Early Modern era, involving certain shortenings and lengthenings in addition to qualitative changes (or the arrest of such changes). The contexts responsible for these combinative changes were, above all, a following weakening /r/, but also a following /l/, a preceding /w/, a preceding labial consonant, or a following voiceless fricative, plus some further segmental environments. What were allophonic differences at the

outset evolved into novel phonemes in the cases of /a: ~ æ:/ and /ʌ/ (and, after the loss of non-prevocalic /r/, also /ɜ:/).

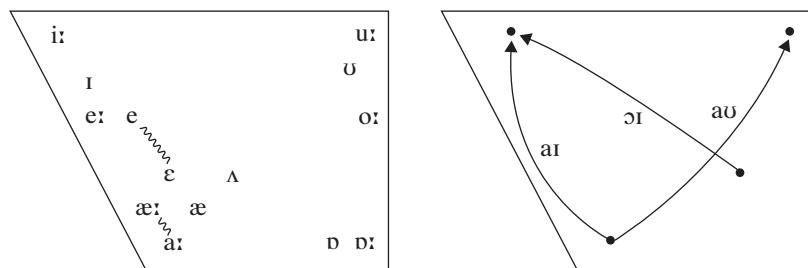


Figure 37.2: Early Modern English stressed monophthongs and diphthongs around 1700

Despite these massive changes, the vowel system at the end of the period, represented in Figure 37.2, was still markedly different from the Present-day English one. It remained for later periods to develop the strongly diphthongal ring that characterizes English vowels today.

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## 38 Early Modern English: Morphology

- 1 Nominal inflectional morphology
- 2 Verb morphology
- 3 Derivational morphology
- 4 References

### Abstract

*By the end of the Middle English period there is already considerable loss of inflectional morphology, and in Early Modern English we see the last reflexes of a shift from synthetic Old English to analytic Modern English (Lass 1999: 139). In fact, the inflectional system of Early Modern English is not very different from what we have today (Görlach 1991: 79). The changes in inflection which do take place between 1500 and 1700 show marked sociolinguistic differentiation and are the subject of well-known case studies in sociohistorical linguistics. The derivational morphology of Early Modern English, on the other hand, is considered to demonstrate much more wholesale and radical change in the form of new Latin prefixes and suffixes reanalyzed from borrowed lexis. The rate of integration of these word-formation processes is not, however, very uniform, and capturing this diversity is a major aim of this survey.*

### 1 Nominal inflectional morphology

#### 1.1 Nouns

Gender marking on nouns was already lost by late Middle English. The only case marking left by 1500 is the genitive -s with the same allomorphs (/ɪz/, /s/, and /z/) as the plural morpheme (Barber 1997: 145). The use of the apostrophe s (‘s) for the spelling of the possessive singular is not common until the late 17th century, and the s apostrophe (s') for the possessive plural is not common until the late 18th century (Barber 1997: 143; Görlach 1991: 82). The analytic variant, the *of* genitive, is available from late Middle English but becomes markedly more popular over the Early Modern period. The -s genitive tends to occur with human nouns and on modifiers in subjective relation to the head (*the boy’s arrival*) and the *of* genitive tends to occur with inanimate nouns and on modifiers in objective relation to the head (*the release of the boy*). This pattern remains quite