

## 2 Phonology and morphology

Roger Lass

The history of the Victorian Age will never be written: we know too much about it. For ignorance is the first requisite of the historian – ignorance, which simplifies and clarifies, which selects and omits, with a placid perfection unattainable by the highest art.

Lytton Strachey, *Eminent Victorians* (1918)

### 2.1 History, change and variation

Any system  $S$  (a language, culture, art-style, organism . . .) can be understood in a number of complementary ways. Two of the commonest are:

- (a) Structural: what is  $S$  made of? How is it put together, and what are the relations among the different components?
- (b) Functional: how do the components of  $S$  work to fulfil the overall function of the system, as well as their own special functions?

Such understanding often feels incomplete without a third dimension:

- (c) Historical: where did  $S$  and its parts come from? How much change has there been to produce what we see now, and what kind?

This can be split into some interesting subquestions, which define one way of doing history:

- (d) How much of what we see at a given time is old, and how much is new?
- (e) Of the old: how much is doing what it used to? How much is doing new things? What is the new doing (e.g. has it taken over any old functions, or developed novel ones?); does anything appear to be ‘junk’, not doing anything at all?

The attempt to answer such questions can yield a rich and densely textured understanding. But there is a downside: the longer the history, the more data there are, and the less clear the overall picture becomes. Historians have to steer a difficult course between clarity and detail. Limitations of space encourage the former – a clean narrative line – rather than the latter. So my picture will be ‘true’

in the main, but also misleading and oversimplified. A better name for this chapter might be ‘Great Moments in the history of English phonology and morphology’. I will restrict myself to a series of major events and transitions, each of which either contributes some crucial feature to the modern picture, or makes historical sense of what looks like enigmatic residue. But to keep myself honest and the reader sufficiently ill at ease, I will focus on the often remarkable complexity and disorder of real historical data whenever the story appears to be getting too clear.

A history should start at the beginning; but that is too far off to fit comfortably in this compass. The earliest attestations of English date from the seventh century; but since I have to end up in the twenty-first, I will gloss over much of the history of Old English itself, and begin with a quite late stage. What did the cluster of varieties we call ‘English’ look like in the late tenth or early eleventh century, and what does it look like now? What has happened during more than a millennium of continuous transmission, and when and how? The history of any aspect of an evolving system will show what biologists call ‘punctuated equilibrium’: long periods where little is happening, interspersed with sudden bursts of change. Our story is not only about change, but about the strikingly inhomogeneous language states that exist between the major episodes of change, and in fact enable them.

Around 1380, Geoffrey Chaucer remarks in *Troilus & Criseyde* (II, 22ff):

Ye knowe ek that in forme of speche is change  
 Withinne a thousand yeer, and woordes tho  
 That hadden pris, now wonder nyce and straunge  
 Us thinketh hem, and yet thei spake hem so,  
 And spedde as wel in love as men now do;  
 Ek for to wynnyn love in sondry ages,  
 In sondry londes, sondry ben usages.

Compared to a sample of Modern English, this passage itself illustrates precisely what Chaucer is talking about. Here is a crude line-for-line prose translation:

You know also that in (the) form of speech (there) is change  
 Within a thousand years, and words then  
 That had value, now wonderfully curious and strange  
 (To) us they seem, and yet they spoke them so,  
 And succeeded as well in love as men now do;  
 Also to win love in sundry ages,  
 In sundry lands, (there) are many usages.

Actually, if one *heard* this text it would be even harder to understand, even less like Modern English – the conservatism of our spelling hides some massive changes. For instance:

(1)	<i>Chaucer</i>	<i>ModE</i>
	knowe [knəu(ə)]	know [nəʊ]
	speche [spɛ:tʃ(ə)]	speech [spi:tʃ]
	thousand [θu:zənd]	thousand [θaʊzənd]

woordes [wɔ:rdəs]	words [wɜ:(r)dz]
wonder [wʌndər]	wonder [wʌndə(r)]
pris [pri:s]	price [praɪs]
ages [a:dʒəs]	ages [eɪdʒəz]
do [do:]	do [du:]
that [θat]	that [ðæt]

Most stressed vowels have changed; initial /kn/ is disallowed; some dialects have lost postvocalic /r/; [ə] has dropped finally and in the plural ending except before certain consonants (*ag-es* vs *word-s*); the final consonant of the plural ending is now [z], not [s]; while initial voiceless [θ] remains in *thousand*, it has been voiced to [ð] in *that* and similar grammatical items. And we can no longer rhyme *usages* and *ages*; there has been an accent shift, as Chaucer must have *ages: uságes*.

Morphological changes are apparent on the surface, without the specialist knowledge required to determine Middle English pronunciation. The second-person pronoun no longer has the plural *ye*, but *you* for both numbers. Verbs had a suffix to mark agreement with plural subjects (*hadd-en, be-n*). The present third singular verb ending was *-th*, not *-s*. The infinitive was marked by a suffix *-en* (*to wynn-en*); the verb ‘to be’ used the *be-* stem for present plural (*be-n*) rather than modern *are* (though its ancestor existed in other dialects); the past of *speak* is now *spoke*, not *spake*; the third-person plural pronoun was *thei* in the nominative, but *hem* in the accusative. *Year* was a zero plural like *sheep*, whereas now it belongs to the ‘regular’ *s*-plural class.

There is also considerable grammatical variability. In modern standard Englishes it so happens that inflection is categorical (though in other dialects it is not): most verbs always take *-s* in present third-person singular, and a tiny subset never do (*he walk-s* vs *he can*). Chaucer’s plural verbs sometimes have the *-en* ending (*woordes . . . hadd-en, sondry be-n*), sometimes not (*theyspake . . . spedde*). Such variation is of great historical interest; it often indicates change in progress, and in fact is a necessary (but not sufficient) condition for there to be any change at all. That is: change is not simple ‘transformation’, in which X suddenly becomes Y. Historically, a language is best conceived, like a species or an art-style, as *a population of variants moving through time*, with differential selection pressures operating on different variants. A language is a heterogeneous system, where some categories exist in only one form, and others are sets of more and less common variants. And new variation is constantly being created. Sometimes the variation is unstable, and simply vanishes; sometimes it remains stable for centuries. But often – and this is what creates history – one variant is gradually selected at the expense of another. Because of the vicissitudes of survival we never have the entire population of variants at hand; and even if we did there would not be space in the compass of a short chapter like this to treat it in detail. But I assume it as background and illustrate it where useful.

The fact that all normal speech communities have some variable categories, and that change proceeds by gradual selection of variants, makes ‘locating’ particular

changes in time nearly impossible. It forces historians to characterise complex changes with long temporal extensions as more or less punctual ‘events’. All readers of all histories, whatever the subject, should take note of this piece of wisdom from Virginia Woolf’s diaries (18 February 1921):

But indeed nothing happens at one moment rather than another. The history books will make it much more definite than it is.

## 2.2 The extent of change: ‘vertical’ and ‘horizontal’ history

So in the five centuries or so since Chaucer change has continued, and English now looks very different. Yet his language and ours (or more accurately, the kind of language that this chapter is written in and the spoken varieties of its users) are still – if at times with some difficulty – recognisable as ‘the same’. But consider this text from about a century less before Chaucer than we are after him:

- (2) Foxas habbað holu, and heofonan fuglas nest; soþlice mannes sunu næfð  
hwær he hys heafod ahylde.

The average modern reader would not recognise that this is even English, much less a familiar quotation from the New Testament. Even some of the letters are different, e.g. <þ, ð, æ>, and there are combinations we do not allow like <hw>. In fact this is the opening of Matthew 8:20, from an Old English translation of c. AD 1000. In the familiar Authorised Version (‘King James Bible’) of 1611 it reads:

- (3) The Foxes haue holes, and the birds of the ayre haue nests; but the sonne of man hath not where to lay his head.

Even this early Modern English (eModE) version, though more like our own English than Chaucer’s, is still somewhat ‘foreign’: we now write *have*, *air*, *son*, not *haue*, *ayre*, *sonne*; we no longer say *hath* but *has*. But these differences are relatively superficial, not like the Old English ones; the relative ‘modernness’ is brought home by the fact that this text (here in its original form) is now usually printed with modernised spelling, but no changes in grammar. So we can take this, with a few minor reservations, as being as close to ‘our English’ as makes no real difference. Or so it seems from the written form. But even at this late date, there are still major phonological differences (using the modern spellings for convenience):

- |     |       |             |                       |
|-----|-------|-------------|-----------------------|
| (4) |       | <i>1611</i> | <i>ModE</i>           |
|     | have  | [hav]       | [hæv]                 |
|     | holes | [hɔ:lz]     | [həʊlz]               |
|     | birds | [birdz]     | [bɜ:(r)dz]            |
|     | son   | [sun]       | [sʌn], Northern [sʊn] |
|     | lay   | [le:]       | [leɪ]                 |

Some important historical points emerge from a more detailed consideration of the earliest version. Here is a literal translation of the Old English (with morpheme divisions marked, and rough glosses for grammatical endings):

- (5) *Fox-as habb-að hol-u and heofon-an fugl-as nest*  
 fox-nom.pl have-pres.pl hole-acc.pl and heaven-gen.sg bird-nom.pl nest  
*soþ-lic-e mann-es sun-u n-æf-ð*  
 true-ly-adv man-gen.sg son-nom.sg not-have-pres.3.sg  
*hwær he hys heafod ahyld-e*  
 where he his head lay down-pres.subj.sg

Here is another translation of the same passage, in ‘a different language’ (the standard German Bible, based on Martin Luther’s sixteenth-century translation):

- (6) *Füchs-e hab-en Grub-e und die Vögel unter de-m*  
 fox-nom.pl have-pl hole-acc.pl and the-nom.pl birds under the-dat.sg  
*Himmel hab-en Nest-er aber de-s Mensch-en Sohn*  
 heaven have-pl nest-acc.pl but the-masc.gen.sg man-gen.sg son  
*ha-t nicht da er sein Haupt hin-leg-e*  
 have-pres.3.sg not there he his head down-lay-pres.subj.sg

The German does not look much (if at all) further from the later English than the Old English; it is an index of the extent of intervening change that we find our own distant ancestor more like German than like Modern English.

Further, both OE and German have a genitive in *-n* (*heofon-an*, *Mensch-en*), and Old and early Modern English (and ModE) and German a genitive in *-s* (*hy-s*, *hi-s*, *de-s*). And both Old English and German have a present subjunctive singular marker *-e* (*ahyld-e*, *hinleg-e*).

We are looking at a complex web of relationships: languages may be related ‘vertically’, as OE, ME and ModE are, by what Darwin famously called ‘descent with modification’; or ‘horizontally’ in genetic networks, the way all stages of German and English are (i.e. there is a single common ancestor). Different languages may wander along divergent pathways from a common beginning; this is the source of both temporal and spatial linguistic ‘biodiversity’.

## 2.3 Tale’s end: a sketch of ModE phonology and morphology

### 2.3.1 Principles

On the face of it, histories should be narrated in ‘proper order’: start at the beginning . . . But this may not always be the best way. Any reader of this chapter will have some idea of ‘what English is’; but how many, even native speakers, could produce a vowel or consonant inventory of any ModE dialect? Or have the details of ModE inflectional morphology (such as it is) at their fingertips? For this reason I am going to tell the story in two directions. I will start by

characterising a kind of ‘prototypical’ ModE phonology and morphology, and then go back to OE and show (roughly) how we got where we are.

ModE dialects are more diverse phonologically than any other way, and more so in their vowels than their consonants. This leads to a major difficulty in defining ‘English’ – beyond the easy ‘I know it when I see it.’ But we have to make some choice; as the editors of this volume say in their ‘Overview’, it is not easy to answer the question of what this volume is ‘a history of’. There are, as they note, ‘many different Englishes’; but I need to target some specific variety to write any history at all. My choice – a ‘prototypical’ dialect of a broadly Southern English standard type – is the clearest endpoint for the story I have to tell, and the best basis for deducing the properties of others. Many readers will speak such dialects; all will be familiar with them. Those who speak quite different ones should not have much trouble mapping their own onto my exemplar. The purpose of this mini-phonology is essentially to name the characters in the story. Here, since the choice of symbols is skewed, for narrative reasons, to the southeast of England, the best way to interpret the keywords, even if the symbols look phonetically inappropriate, is as ‘the vowel/consonant I have in word X’. For the most part this will make the history relatively transparent.

But there is still a profound equivocation: even with these stipulations I am taking one modern variety cluster as the target of a history which is not at all ‘aimed’ at it. There is, to start with, no Old English regional variety clearly ancestral to the language this chapter is written in. The same goes for the bulk of Middle English recorded before the fourteenth century. And yet historians appear to assume an unproblematic lineal connection. Conventionally we adopt the fiction of ancestry, and palliate the fiction by assuming that whatever is attested in early times can ‘stand for’ an ancestor. In a broad typological sense this is true enough to be relatively harmless – as long as we acknowledge it.

### 2.3.2 ModE vowel inventories

Defining the parameters for English vowel description is contentious; I choose a conservative model here, as close to the ‘phonetic surface’ as possible. I also generally avoid the term ‘system’ in favour of the more neutral ‘inventory’. This is because I prefer not to ally myself with any theory that takes ‘fixed’ or ‘exhaustive’ systems of contrasting entities to be the basis for phonology. This preference is founded on a deeper principle: that the classical dichotomy between the ‘synchronic’ and the ‘diachronic’, between current states and their histories, is not a useful one (see Lass, 1997: ch. 1). I will often talk as if there were such things as ‘vowel systems’ in one or other classical ‘structuralist’ sense (as indeed on one level of exposition there perhaps ought to be: though see the arguments in Bybee, 2001). But my main interest is history, and therefore variation and variability, not hard-edged specification of categories and status. I will nonetheless use standard notations like // vs [ ] – with the *caveat* that they are not to be taken all that seriously.

I divide the vowels into three types – short, long and diphthongal; but the diphthongs group with the long vowels, both historically and synchronically. Structurally both are /VV/ clusters; across dialects (which means historically, since variation in space is a function of time) a ‘long’ category like *bone* can have either a long vowel like [o:] or one of a huge range of diphthongs, e.g. [əʊ, oʊ, œʊ . . .]; but whatever the phonetic quality of the *bed* vowel is, e.g. [ɛ] or [e], it is always a short monophthong.

(7)

	FRONT		CENTRAL		BACK	
	long	short	long	short	long	short
High	i:				u:	
High mid		ɪ		ə		ʊ
Low mid		ɛ	ɜ:	ʌ	ɔ:	
Low		æ			ɑ:	ɒ

Diphthongs: FRONT-GLIDING: /ɛɪ/, /aɪ/, /ɔɪ/; BACK-GLIDING: /aʊ/, /əʊ/; CENTRING: /ɪə/, /ɛə/, /ʊə/; REDUCTION VOWEL ‘schwa’: /ə/ (only in some weak positions)

- (8) *Keywords* (multiple examples reflect multiple historical sources)  
 SHORT VOWELS: /ɪ/ *it, fill*; /ɛ/ *bed, head*; /æ/ *rat, cat*; /ʌ/ *son, blood*; /ʊ/ *full, good*; /ɒ/ *lot*; /ə/unstressed vowel in *Prussia*  
 LONG VOWELS: /i:/ *meet, be, read, week*; /ɜ:/ *nurse, heard*; /u:/ *goose*; /ɔ:/ *thought, all*; /ɑ:/ *father, heart, arm*  
 DIPHTHONGS: /aɪ/ *bite*; /ɛɪ/ *name, mate*; /ɔɪ/ *joy*; /aʊ/ *house*; /əʊ/ *bone, coal*; /ɪə/ *near, theatre*; /ɛə/ *fair*; /ʊə/ *cure*

I characterise ModE as ‘having contrastive vowel length’; most varieties do, though it has been lost in Scots and in many US dialects, at least away from the east coast. The choice of [u:] for *goose* is deliberately conservative: this ancient value persisted in most dialects of English until well into the twentieth century, but is now becoming increasingly rare. More modern dialects than not lack a high back vowel, and realise *goose* with central [ɯ:] or front [y:].

The *bird* vowel (a collapse of older /ir, er, ur/) is distinctive only in dialects that have lost syllable-final /r/; its phonetic range covers almost the whole centre of the vowel-space. I use [ɜ:] as a neutral and familiar placeholder. This collapse is absent or incomplete in Scots and Irish English. Contrastive /ʌ/ does not occur in Northern and North Midland dialects, nor in some forms of Irish English. These have the same vowel in *son* and *full*, so they are ‘one contrast short’ from a historical point of view – lack of this split is an archaism.

The *lot* vowel is often not rounded (West Country, Ireland, most of the US), and may be central or even front in areas of the US affected by the ‘Northern Cities Shift’, where *lot* has [æ] and *cat* [eə]. Many varieties have the same (normally short) vowel in *lot* and *bought*: Scots (Mainland and Ulster), Canadian English, and US dialects with a strong Scots input.

The centring diphthongs /ɛə/ and /ʊə/ result from changes before /r/, and occur only in words ending in orthographic <r>. This is not true of /ɪə/, which occurs

without following <r>, if only in a few loans (*theatre, idea, -rrhoea*). More advanced varieties merge /ʊə/ with /ɔ:/; many younger speakers (whether they have final /t/ or not) do not distinguish *poor* and *pour*; even those who keep these distinct do not generally distinguish *mourning* and *morning*, though if the development were fully regular they ought to. This highlights a crucial fact: *there is always a lexical element in phonological variation and change*. In a variable system not all words ‘with the same phoneme’ have the same variant sets, and changes frequently do not go to completion across the entire vocabulary.

### 2.3.3 ModE consonant inventories

The outline below holds for all dialects except in a few details. (In symbol pairs separated by a comma, the first is voiceless.)

(9)		Labial	Dental	Alveolar	Palatal	Velar	Glottal
	Stops	p, b		t, d	tʃ, dʒ	k, g	
	Fricatives	f, v	θ, ð	s, z	ʃ, ʒ		h
	Nasals	m		n		ŋ	
	Liquids			r, l			
	Semivowels	w		j			

For convenience I collapse palatals and palato-alveolars under ‘palatal’, and bilabials and labiodentals under ‘labial’, and take the ‘affricates’ as palatal stops; historically this conventional simplification loses no insights, and groups together categories that behave similarly.

Some dialects have a distinctive dorsal fricative we can call /x/. In Scots /x/ is a retained native segment of OE or Celtic origin (e.g. *nicht* ‘night’ /nixt/ < OE *niht*). ‘Judeo-English’ varieties have it in nativised Yiddish loans (*Chanukah* /xanəkə/ ‘Festival of Lights’). In South African English it occurs in loans from indigenous African languages (*quagga* /kwaxə/ from Khoe via Bantu); or from Afrikaans (e.g. *gemsbok* /xembok/). In some dialects (mainly Scots, Irish and eastern US), historical /xw-/, usually as a voiceless or partly voiced segment represented as [x̥], still contrasts with /w-/ (*which* < OE *hwilc* vs *witch* < *wicca*). The velar nasal is normally contrastive (e.g. *sin* vs *sing*); but in northwest England final /g/ has been retained, so [ŋ] occurs only before velars (such dialects pronounce *sing*, *singer* as [sɪŋg], [sɪŋgə]).

- (10) *Keywords* (relevant segments in bold; as under vowels above, multiple examples represent multiple origins)
- STOPS: /p/ **pit**; /b/ **bone**; /t/ **till**; /d/ **do**; /tʃ/ **chill, nature**; /dʒ/ **sedgē, joy**; /k/ **cat**; /g/ **goose**
- FRICATIVES: /f/ **few, rough**; /v/ **over, view**; /θ/ **thin**; /ð/ **this, other**; /s/ **sit**; /z/ **houses, zodiac**; /ʃ/ **ship, machine, ocean, nation**; /ʒ/ **vision, beige**; /h/ **hand**
- NASALS: /m/ **meet**; /n/ **new**; /ŋ/ **sing**
- LIQUIDS: /r/ **root, rough**; /l/ **lot, all**
- SEMIVOWELS: /w/ **woe**; /j/ **you**

### 2.3.4 Stress

In languages with word accent or stress, some syllable in the word is particularly prominent – in loudness, length, pitch, pitch-movement, or any combination. In most English dialects stressed syllables are marked by relatively greater loudness and length, higher pitch or more pitch-movement than unstressed ones. In some languages stress always falls on the same syllable in the word (the first in Finnish, the penult in Polish, the final in Persian). Others, like English, are more complex; in this case due to partial morphological conditioning and the competition over centuries of native and foreign accentuation.

On the surface, ModE stress looks ‘free’: primary word accent can apparently fall on the first syllable (*kettle*, *character*), the second (*believe*, *divide*), or the third (*violin*, *anthropology*). Morphology is involved as well: some suffixes do not affect word stress, while others attract it (*believe/believ-er* vs *photograph/photograph-y/photograph-ic*). Looking at stress patterns from the right word-edge rather than the left, we find stress final (*violin*), penultimate (*photographic*) and antepenultimate (*photography*). Here a regularity does surface: the main word accent normally cannot appear more than three syllables from the end. In a rather constricted nutshell, English stress starts out ‘left-handed’: the location of stress is computed from the beginning of the word. But through massive contact with a language of a very different type, English has also incorporated a ‘right-handed’ system, calculated from the word-end. The two types have been in competition since Middle English times; neither side has won or is likely to. Despite decades of attempts to define ‘stress rules’ for English, it is probably safe to say that it has none, but a set of competing (rather loose) patterns.

There are also patterns involving secondary stress (here marked by `): words of four syllables or more typically have two accented syllables (*anthropology*, *anthropological*, *dictionary*). Above the level of the single word, primary and secondary stress may be sensitive to grammatical structure: a compound word like *blackbird* is left-strong, but a phrase like *black bird* is right-strong.

### 2.3.5 Modern English morphology

In this chapter, morphology = inflection. That is, attachment to the edges of (or in some cases insertion into) lexical morphemes of markers that code categories or track grammatical relations. Very little of earlier English inflectional morphology remains; it now has a minimal relic system.

(a) *Case*. ModE nouns are invariant, except for an apparent genitive (*cat* vs *cat's*, *cats'*). If we define an inflectional affix as a marker attaching to a *word*, then this is not a case marker but a clitic which marks its host as a possessive modifier. The *s*-genitive can attach not only to words (as above), but to phrases and clauses: in *[[cat]'s]* it looks like an affix, but in *[[the king of England]'s nose]* -s attaches at phrase level, and in *[[the man who lives next door]'s brother]* at clause level.

True case marking remains only in the pronoun: aside from the modifying genitive (*my book*, *your dog*), there is only a two-way contrast, nominative vs

objective or oblique: *I/me, he/him, she/her, they/them*. Even this vestige is lacking in the second person (invariant *you*), and the neuter third person (*it*: though this was unmarked even in Old English).

(b) *Number*. Number is coded on most nouns and all pronouns except *you*. (Though many dialects have reinvented a second-person plural, usually of the type /ju:z/, i.e. *you* + plural *-s*.) Most plural marking on native nouns is regular: there is a ‘sibilant suffix’ (the same as in the genitive) appearing as /-s/ after voiceless non-sibilants, /-z/ after voiced non-sibilants, and /-Vz/ after sibilants (*cats* vs *dogs* vs *kisses*: /V-/ stands for whatever weak vowel occurs in a given lect). Of the older native plural types, only a few umlaut plurals (*mouse/mice, foot/feet, etc.*), and some zero plurals (*sheep*) remain. Most others have been replaced by the *s*-plural, which is now the only productive form: foreign plurals are generally restricted to the loanwords they came with (*stratum/strata, kibbutz/kibbutzim*). There is a fragmentary number (and person) concord between verb and subject: a suffix *-s* (with the same allomorphy as the plural) appears on non-modal present verbs with third-person subjects.

(c) *Gender*. There is no grammatical gender; pronouns agree with the ‘natural’ or semantic gender of their antecedents, except in the few cases where non-human or inanimate nouns can be referred to by pronouns other than *it* (ships as *she* and the like). These are metaphorical, not grammatical.

(d) *Tense and aspect*. The only morphological markings are for past tense, the past (perfective) participle, and the present participle. Most verbs in the past take a ‘regular’ *-ed* ending, whose allomorphy is in principle the same as that of the plural and third-person suffix: /-t/ after voiceless segments except /t/ (*kick-ed*), /-d/ after voiced (*lagg-ed*), and /-Vd/ after /t, d/ (*fit-ed, hoard-ed*). There are however a good number of irregular past and participial formations, mostly relics of older, once regular alternations. Some reflect an ancient IE type that survived in a modified form into Old English (the ‘strong’ verbs, e.g. *ride/rode/ridden*); others have old length alternations which have become qualitative because of changes in long vowels that did not affect short ones (*keep/kept*: see Section 5.2.1). Still others are irregular in other ways, e.g. *buy/bought, seek/sought*.

## 2.4 Old English

### 2.4.1 Time, space and texts

The Old English record is fragmentary and discontinuous (see Chapter 1). The supposed ‘language’ Old English is actually a somewhat scrappy and often uncertainly provenanced collection of manuscript remains – much less unified than textbook introductions would suggest. A unitary Old English of course did not exist any more than a unitary Modern English; but since the remains are so scanty, what we really have is a collection of diverse scribal idiolects or ‘text languages’, and no very clear lines of descent. The apparently linear histories that

the handbooks give us, and that I will be presenting here in modified form, are historians' constructs; but as long as the problems remain at least as background discomforts, this is relatively harmless.

## 2.4.2 The Old English vowels

Many details of the Old English dialect picture are unresolved. The exemplary inventories here are the most likely input to the Middle English varieties that grew into the most widely distributed forms of Modern English. The vowel system was highly symmetrical, with all monophthongs in qualitatively identical long/short pairs. There were at least two pairs of diphthongs, also contrasting in length; these appear not to have been of the modern /ai, au, iə/ types, but had two elements agreeing in height. There is no evidence for central vowels, but only front and back, and three contrasting heights, as opposed to the ModE and ME four.

(11)

	FRONT		BACK	
	long	short	long	short
High	i:, y:	i, y	u:	u
Mid	e:	e	o:	o
Low	æ:	æ	ɑ:	ɑ

Diphthongs: long: e:o, æ:ɑ; short: æɑ, eo

(12) *Keywords*

SHORT VOWELS: /i/ *hit* 'it', *cild* 'child'; /y/ *fyllan* 'fill'; /e/ *bedd* 'bed', *mete* 'meat'; /æ/ *rætt* 'rat', *bæþ* 'bath'; /u/ *full* 'full', *lufu* 'love', *wund* 'wound'; /o/ *god* 'god', *nosu* 'nose'; /a/ *catte* 'cat', *nama* 'name'

LONG VOWELS: /i:/ *būtan* 'bite'; /y:/ *hȳdan* 'hide'; /e:/ *mētan* 'meet'; /æ:/ *lædan* 'lead'; /u:/ *hūs* 'house', *sūþerne* 'southern'; /o:/ *fōd* 'food', *gōd* 'good', *flōd* 'flood'; /ɑ:/ *bān* 'bone'

SHORT DIPHTHONGS: /æɑ/ *earn* 'arm'; *eall* 'all'; /eo/ *heorte* 'heart', *heofon* 'heaven'

LONG DIPHTHONGS: /e:o/ *bēon* 'be'; *brēost* 'breast'; /æ:ɑ/ *lēaf* 'leaf'

The notation for the diphthongs is conventional but misleading: the 'short' diphthongs were non-steady-state short vowels, and the 'long' ones were the same length as long vowels. Some readers may note the absence here of the two diphthongs spelled <ie> in the standard grammars and dictionaries (e.g. *hīeran* 'to hear', *ieldra* 'older'). These were largely restricted to early West Saxon (tenth century), and play no independent part in the development of any later dialect; they had merged with /i(:)/ or /y(:)/ well before earliest Middle English.

Note that there is no /ʌ/. ModE words with this vowel descend either from /u/ (*full*), or shortening of /o:/ (*flood* < *flōd*). The diphthong in words like *joy*, *poison* appears later, in French and other loanwords. The standard view is that there was also a /ə/ in unstressed syllables, but I think it safer to assume that all vowels have their ordinary qualities in all positions until at least the transition to Middle English.

### 2.4.3 The Old English consonants

The consonant-quality system was smaller than that of ModE, but differently organised; there was contrastive length for most of its members, a parameter now completely lost:

(13)		Labial	Dental	Alveolar	Palatal	Velar
	Stops	p, p:, b, b:		t, t:, d, d:	tʃ, tʃ:, dʒ dʒ:	k, k:, g, g:
	Fricatives	f, f:	θ, θ:	s, s:	ʃ	x, x:
	Nasals	m, m:	n, n:			
	Liquids			l, l: r, r:		
	Semivowels	w			j	

(14) *Keywords* (relevant consonants in boldface)

STOPS: /p/ **p**æþ ‘path’; /p:/ **æppel** ‘apple’; /b/ **b**æþ ‘bath’; /b:/ **cribb** ‘crib’;  
 /t/ **t**ellan ‘tell’; /t:/ **sette** ‘set’; /tʃ/ **cinn** ‘chin’; /tʃ:/ **wrecca** ‘exile, wretch’;  
 /dʒ/ **sengean** ‘singe’; /dʒ:/ **ecg** ‘edge’; /k/ **cynn** ‘kin’; /k:/ **brocces**  
 ‘badger’s’ (gen. sg); /g/ **gold** ‘gold’; /g:/ **hogg** ‘hog’

FRICATIVES: /f/ **f**æder ‘father’; /f:/ **pyffan** ‘puff’; /θ/ **þ**ēoh ‘thigh’; /θ:/  
**m**o**þ**pe ‘moth’; /s/ **s**ingan ‘sing’; /s:/ **cyssan** ‘kiss’; /ʃ/ **scip** ‘ship’; /x/ **h**ūs  
 ‘house’, **n**iht ‘night’, **d**wear**h** ‘dwarf’; /x:/ **hl**æ**h**han ‘laugh’

NASALS: /m/ **m**ann ‘man’; /m:/ **r**amm ‘ram’; /n/ **n**osu ‘nose’; /n:/ **c**ann  
 ‘can’

LIQUIDS: /r/ **r**ætt ‘rat’, **f**or ‘for’; /r:/ **f**eorr ‘far’, **d**eorra ‘dearer’; /l/ **l**ufu  
 ‘love’, **h**āl ‘whole’; /l:/ **e**all ‘all’, **f**eallan ‘fall’

SEMIVOWELS: /w/ **w**æter ‘water’; /j/ **g**eoc ‘yoke’

There are no distinctive voiced fricatives: /f, θ, s/ are voiceless initially, finally and in clusters with other obstruents (including geminates or self-clusters, i.e. ‘long consonants’), and voiced foot-medially (see Section 2.5.2.5); /ʃ/ is always voiceless. There is no distinctive /h/; this arises from the syllable-initial realisation of /x/ in the sixteenth to seventeenth centuries (Section 2.7.5.4). There is no phonemic velar nasal: [ŋ] occurs only before /k, g/.

The phonotactic restrictions were quite different from those of later periods. In particular there were a number of onset clusters that have subsequently been lost, including /kn, gn, wr, wl, xr, xl, xn, xw/. The first two remained as late as the eighteenth century in the southern standard. The /w-/ and /x-/ clusters were lost early in Middle English, except for /xw/, which persists in spelling as <wh> and may be distinct from /w/.

### 2.4.4 Stress

Old English stress was based on the Germanic Stress Rule (GSR), and a phrase-vs-compound rule more or less the same as the modern one. The general principles are: (a) primary stress is assigned to the first syllable of the lexical root (excluding prefixes), regardless of word length: *l*águ ‘law’, *l*óppestre ‘lobster’; (b) most prefixes are unstressed: *ge*-writen ‘written’, *wi*þ-sácan ‘contend’; (c) certain prefixes, mainly on nouns, were stressable, and these received primary stress,

with the root getting secondary stress: *wīðer-sàca* ‘adversary’; (d) the pattern in (c) was that of compound nouns and adjectives: as in ModE, the left element was strong (primary stress) and the right weak (secondary): *mánn-hàta* ‘man-hater’.

## 2.4.5 Old English morphology

### 2.4.5.1 The noun phrase: noun, pronoun and adjective

The ultimate ancestor of Old English, Proto-Indo-European (PIE), had eight noun cases: nominative, genitive, accusative, dative, ablative, locative, instrumental and vocative. In Germanic (by and large), nominative and accusative were already identical, the genitive remained distinct only in certain masculine and neuter declensions, and the dative, ablative, locative and instrumental had collapsed into a single case traditionally called ‘dative’ – though it often continues an old locative or instrumental. In some dialects fragments of an independent instrumental remain.

Old English also retains original grammatical gender (masculine vs feminine vs neuter), but with some irregularities. Gender is not ‘sex’: it is simply a classifying system, in which each noun has to belong to some category which predicts its agreement behaviour (forms of pronouns and adjectives). So *stān* ‘stone’ is masculine and takes *hē* as its agreeing pronoun, *cild* ‘child’ is neuter and takes *hit*, later *it*, *lufu* ‘love’ is feminine and takes *hēo*. Adjectives agree (roughly) in number, gender and case with the nouns they modify. PIE had three numbers (as still in Ancient Greek): singular, dual (two and two only) and plural. The dual remains only in the first and second personal pronouns.

There are many different noun paradigms; I illustrate with a few characteristic types, along with the so-called ‘definite article’ – really a determiner and pronoun that can also mark definiteness. Its plural is the same for all three genders, so I give it once only. (In general there are fewer distinctions in the OE plural than the singular: see pronouns and verbs below.)

#### (15) Some major OE noun-declension types

	<i>wulf</i> ‘wolf’ a-stem (m)		<i>scip</i> ‘ship’ a-stem (n)		<i>lufu</i> ‘love’ ō-stem (f)	
	sg	pl	sg	pl	sg	pl
nom	se wulf	þā wulf-as	þæt scip	scip-u	luf-u	luf-a/-e
gen	þæs wulf-es	þā-r-a wulf-a	þæs scip-es	scip-a	þære luf-e	luf-a
dat	þā-m wulf-e	þā-m wulf-um	þā-m scip-e	scip-um	þære luf-e	luf-um
acc	þo-ne wulf	þā wulf-as	þæt scip	scip-u	þā luf-e	luf-a/-e

	<i>sunu</i> ‘son’ u-stem (m)		<i>nama</i> ‘name’ n-stem (m)		<i>fōt</i> ‘foot’ umlaut plural (m)	
	sg	pl	sg	pl	sg	pl
nom	sun-u	sun-a	nam-a	nam-an	fōt	fēt
gen	sun-a	sun-a	nam-an	nam-ena	fōt-es	fēt-a
dat	sun-a	sun-um	nam-an	nam-um	fēt	fōt-um
acc	sun-u	sun-a	nam-an	nam-an	fōt	fēt

(The declension names confusingly reflect the original Germanic stem-classes: *wulf* is called an ‘a-stem’ because the endings were once connected to the root by an \*-a-: *wulf* < \**wulβ-a-z*. These names are just mnemonics for future reference.)

There is less here than meets the eye; OE was not, as usually portrayed, a ‘richly inflected’ language. More often than not even the nominative and accusative (which should signal the prime grammatical relation – subject vs direct object) are identical in the singular, and always are in the plural. The real work in OE is done not by the forms of nouns but by adjectives, determiners and referring pronouns (and of course syntactic grouping and word order). I give the personal pronouns (the major reservoir for our current forms), and some examples of adjective inflection, to illustrate how information was apportioned among adjectives, determiners, pronouns and nouns. In the paradigms below, I omit a number of variants for reasons of space: they were not as neat as they look. Some of the OE variation will be recalled later. For convenience I give the modern reflexes where they survived.

(16) *The OE personal pronouns*

1 PERSON				2 PERSON		
	<i>sg</i>	<i>dual</i>	<i>pl</i>	<i>sg</i>	<i>dual</i>	<i>pl</i>
nom	ic [I]	wit	wē [we]	þū [thou]	git	gē [ye]
gen	mīn [my/mine]	uncer	ūre [our]	þīn [thy/thine]	incer	ēower [your]
dat	mē [me]	unc	ūs [us]	þē [thee]	inc	ēow [you]
acc	mē	unc	ūs	þē	inc	ēow
3 PERSON						
	<i>masc sg</i>	<i>neut sg</i>	<i>fem sg</i>	<i>pl all genders</i>		
nom	hē [he]	hi-t [it]	hēo [?she]	hī(e)/hēo		
gen	hi-s [his]	hi-s	hire/heora [her]	hira/heora		
dat	hi-m [him]	hi-m	hire/heora	him/heom		
acc	hi-ne	hi-t	hī(e)	hī(e)/ hēo		

Note that there is no separate genitive for *it*, and no third-person plural *th*-forms (ancestors of *they*, etc.). These, along with *she*, are later developments. There is already considerable ambiguity: the feminine singular and all plurals show extensive overlap.

Our current determiner system comprises invariable *the* and two demonstratives (*this/these*, *that/those*); but in OE (see above) a great deal of syntactic information within the NP could be carried by determiners; the rest was handled by inflected adjectives. As to some extent in Modern German, the adjective acted as a kind of default: the less information carried by adjectives, the more by determiners, and vice versa. Thus the adjective had two paradigms: ‘strong’ (a mixture of old noun and pronoun endings), which marked a number of inflectional categories, and ‘weak’, rather like the paradigm of the *n*-stem noun, which marked very little. So even though the fully inflected masculine genitive singular of *gōd* ‘good’ would be *gōd-es*, the phrase ‘of the good man’ would normally be *þæ-s gōd-an mann-es*, where the *-an* says merely ‘oblique case’, but not genitive specifically. This system begins to fall apart in the transition to early Middle English, and the adjective becomes indeclinable by the fifteenth or sixteenth century.

### 2.4.5.2 The verb

The standard pedagogical Germanic verb paradigm is a complex historical accretion. It consists of the verb proper ('finite' = tensed and person/number marked forms), a deverbal noun in *-n* (the infinitive), and a deverbal adjective in *-t/-d* or *-n* (the past participle). The infinitive and past participle are traditionally 'part of' the verb; and indeed along with certain finite forms they constitute the 'principal parts', that set from which all other forms can be derived. This is clearest in the most archaic verb type, the so-called strong verb. These mark their major categories by root-internal vowel-alternations, and are generally divided into seven classes or 'ablaut series', as follows ('present' is represented by the infinitive; the hyphen before the past participle marks the attachment site for an optional prefix *ge-*):

(17)

<i>The OE strong verb classes</i>				
	<i>pres</i>	<i>past sg</i>	<i>past pl</i>	<i>pp</i>
I 'bite'	bīt-an	bāt	bit-on	-bit-en
II 'creep'	crēop-an	crēap	crup-on	-crop-en
IIIa 'sing'	sing-an	sang	sung-on	-sung-en
IIIb 'help'	help-an	healp	hulp-on	-holpen
IV 'bear'	ber-an	bær	bær-on	-boren
V 'break'	brec-an	bræc	bræc-on	-brecen
VI 'fare'	far-an	fōr	fōron	-faren
VII 'fall'	feall-an	fēoll	fēollon	-feallen

This system (which was not invariant even in OE) was quite irregularly restructured in Middle and early Modern English; the strong-verb vowel grades are still not fully reorganised or stable. Even within the same class, there are multiple types of histories: cf. *write/wrote/written* vs *bite/bit/bitten* vs *slide/slid/slid* vs *shit/shat/shat* or *shit/shit/shit*, all class I; and many verbs have appropriated bits of others (*break* has its past and past participle from the past participle of the *bear* type).

The weak verb, which forms its past and past participle by suffixation, is a Germanic innovation. There are a number of classes, but I will exemplify only by the two commonest. Here are the principal parts of three characteristic verbs of weak classes I and II:

(18)

<i>The main OE weak verb classes</i>				
		<i>pres</i>	<i>past 3sg</i>	<i>past part</i>
Class I	'kiss'	cyss-an	cys-te	-cys-t
	'travel'	fēr-an	fēr-de	-fēr-ed
Class II	'love'	luf-i-an	luf-o-de	-luf-od

The person/number endings vary from class to class, but here is an outline that will guide us through the succeeding history. I take as my example the endings of a class I weak verb with a past in *-d-*:

(19) *The OE verb endings (person/number/mood)*

	<i>pres ind</i>	<i>pres subj</i>	<i>past ind</i>	<i>past subj</i>
1sg	-e	-e	-de	-de
2sg	-(e)st	-e	-de	-de
3sg	-(e)þ	-e	-de	-de
pl	-aþ	-en	-on	-en

As in the noun, we see a much reduced system (virtually all these categories are distinct in Gothic, and the plural retains three persons in other early dialects, as it does today in Icelandic). The strong-verb conjugation differs in one important way from the weak: the past first and third singular are endingless, and the second-person singular has the vowel of the past plural with a suffix *-e*. So for *bītan* ‘bite’ the past singular would be *ic bāt*, *þū bit-e*, *hē bāt*. This difference explains one of the oddities of the modern modal auxiliaries, their lack of third-person singular *-s* (*he can*, \**he can-s*). The ancestors of these verbs (‘preterite-presents’) have an old strong past form as present, and a new weak past. Some examples:

(20) Preterite present verbs

	<i>pres sg</i>	<i>pres pl</i>	<i>past sg</i>
‘can’	cann	cunn-on	cū-ðe
‘shall’	sceal	scul-on	scol-de
‘may’	mæg	mag-on	mih-te

There are many other irregular-verb subclasses, including the so-called ‘anomalous verbs’ like *go*, *will*. The details can be found in any OE grammar. But one exceedingly irregular verb deserves separate treatment, because of its text frequency, complexity and many functions: the verb (or rather the three verbs) ‘to be’. This is made up of three paradigm fragments, a root in *s-*, one in *b-*, and one in *w-*.

(21) The verb ‘to be’

	PRESENT				PAST	
	<i>indicative</i>		<i>subjunctive</i>		<i>indicative</i>	<i>subjunctive</i>
	<i>s-root</i>	<i>b-root</i>	<i>s-root</i>	<i>b-root</i>	<i>w-root only</i>	
1sg	eom	bēo	sīe	bēo	wæs	wær-e
2sg	eart	bi-st	sīe	bēo	wær-e	wær-e
3sg	is	bi-þ	sīe	bēo	waes	wær-e
pl	sindon, sint, ear-on	bēo-þ	sīe-n	bēo-n	wær-on	wær-en

Non-finite forms: infinitive *bēon*, *wesan*; pres part *wesende*

Despite extensive reorganisation, the three roots remain; *are* < *earon* gradually took over the plural and second-person singular, and the *b-root* all non-finite forms. The *w-root* remains for the past. In late OE a new present participle *bēo-nd-e* (> *being*) appears, and in the eleventh century a past participle (*ge-*) *bēo-n* (> *been*).

## 2.4.6 Postlude as prelude

All this morphological detail is not given just for its own sake. These forms are the caterpillar innards that were remodelled by dissolution and reformation in the chrysalis of the next half-millennium. This larval material suggests some hypothetical but loaded questions, which touch on both phonology and morphology. For instance, recall the masculine and neuter dative pronoun *hi-m*, the dative determiner *þē-m*, the dative plural noun marker *-u-m*, and the accusative pronoun *hi-ne* and determiner *þo-ne*. Apparently *-m* marks dative and *-n* accusative. Now what would happen if syllable-final *-m* and *-n* tended to collapse in *-n*? For one thing, the dative/accusative third-person singular pronouns would merge. And if vowels in weak positions also tended to merge, the infinitive ending, the past indicative plural and present and past subjunctive plural of verbs and the oblique cases of weak nouns would become similar or identical. These processes were already beginning in OE. As early as the tenth century we find texts with the past plural, dative plural and infinitive marker (variably) collapsed in *-an*. But it was only about two centuries later that these changes went to completion.

## 2.5 The 'OE/ME transition' to c.1150

### 2.5.1 The Great Hiatus

Between the end of the eleventh century and the latter part of the twelfth, English textual attestation (apart from the continued copying of OE texts in some centres) appears to be sucked into a black hole. Oversimply, this is a historical contingency deriving from the change of administration after the Norman Conquest; this led to about a century of French-speaking hegemony and the dominance of French and Latin in the learned and public spheres. There is thus a period when very few texts composed in English come down to us; around the middle of the twelfth century English appears – falsely – to have been ‘reborn’ as something resembling OE in some ways but quite different in others. There was of course an unbroken transmission of the spoken language; but the habit of writing English was for a while largely superseded by different demands, which led to more writing in Latin and French than in English. Many of the major developments are therefore invisible – though we can tell pretty well what they must have been. Much of the surviving material, well into the thirteenth century, shows a mixture of Old English tradition and French and Latin devices, as well as considerable, often startlingly sophisticated, invention.

### 2.5.2 Phonology: major early changes

#### 2.5.2.1 Early quantity adjustments

Many ModE words have the historically ‘wrong’ vowel: e.g. *child*, *field*, *bound* ought to have short vowels, and *southern*, *breast*, *kept* long

ones. These oddities are especially salient in alternations: e.g. *south/southern*, *child/children*, *keep/kept*, where one member does not have the expected quantity. The source is a set of irregular shortenings and lengthenings that took place during the OE period, and were complete by the beginning of ME. The internal history and timing are generally unclear.

(i) *Homorganic lengthening*. Short (especially high) vowels tended to lengthen before clusters of nasal or liquid + homorganic voiced obstruent e.g. *cild* ‘child’ > *cīld*, *būnden* ‘bound’ > *būnden*. This failed if a third consonant followed: hence *cīld* vs pl *cildru*, giving modern *child/children*.

(ii) *Pre-cluster shortening*. Long vowels tended to shorten before clusters other than those in (i), including geminates. So *cēpan* ‘keep’, past *cēpte* > *cēpan/cēpte*, *brēost* ‘breast’ > *brēost* > *brēst*. This often failed before clusters of a kind that could serve as onsets as well as codas, especially /st/: hence short *breast* vs long *priest* < *prēost*.

(iii) *Trisyllabic shortening*. Long vowels shortened in the antepenults of trisyllabic words. There appear to have been two phases: first only if two consonants followed the vowel in question, and later also if one followed. Most of the clear examples are from the second phase (probably eleventh century). This can stand for the process as a whole, which has had important morphophonemic implications, and was late enough to affect French loanwords as well. Examples: OE *sūþ* ‘south’, *sūþerne* ‘southern’, later *sūþerne*; French *divīn* ‘divine’, *divīniti*, later *diviniti*. (On these quantity adjustments in general see Ritt, 1994.)

### 2.5.2.2 The old diphthongs, low vowels and /y(:)/

Beginning around the eleventh century the diphthong and low vowel systems were radically altered. First, /æ(:)a/ monophthongised and merged with /æ(:)/, and /e(:)o/ > /ø(:)/ (or so they say: but see below). At the same time short /æ/ merged with /a/, while long /æ(:)/, itself now the product of a merger, remained unchanged, as did long /a:/.

According to the handbooks, the reflexes of /e(:)o/ remained mid front rounded in the more westerly parts of the country, but elsewhere merged with /e:/. Similarly, /y(:)/ remained unchanged in these areas, whereas elsewhere (N, EML) it either unrounded to /i(:)/, or came down as /e(:)/, reflecting a change that had already occurred in the southeast in OE times. Thus England is neatly divided into three areas by the reflexes of OE /y(:)/. The texts chosen for most collections are usually short enough and ‘typical’ enough so that this appears really to be the case; but a close examination of the actual spellings in a large enough manuscript sample suggests something quite different. Here for instance are the accented vowel spellings for some OE /y(:)/ words from Oxford, Bodleian Library, Digby 86 (Worcestershire, thirteenth century). This is an area in the SWML that according to the handbooks ‘retained [y]’, spelled <u>:

- (22) *dyde* ‘did’: <u> 6x, <e> 6x; *yfel* ‘evil’: <u> 1x, <e> 7x; *þyncan* ‘seem’: <u> 1x, <i> 7x, <e> 5x; *cýning* ‘king’ 13x; *hlystan* ‘listen’ <e> 4x

Curiously, no matter what the preponderant reflex of OE /y/ is in any area, the word ‘king’ always has <i>. The story of /y(:)/ has not yet been properly told, and that of /eo(:)/ looks to be even more complicated. I am sure the standard accounts are wrong. Rather, /y(:)/ simply merged with /u(:)/ in those areas where it is spelled <u>, and /e(:)o/ simply split and merged with either /e:/ or /o:/. There is no solid evidence that any front rounded vowels survived into ME (Lass & Laing, 2005.) Like much else dealing with early ME in this chapter, this is an interim report, which may (or may not) be corrected when the *Linguistic Atlas of Early Middle English (LAEME)*, being prepared at Edinburgh, is completed.

It would be nice to be able to put all these changes in a chronological sequence; but they appear to overlap, as they do with a series of developments that produced a new set of diphthongs.

### 2.5.2.3 The new ME diphthongs

During this murky ‘transitional’ period, probably starting in the eleventh century, a new series of diphthongs were developing, from two sources:

- (a) ‘Middle English Breaking’. High vowel epenthesis between a non-high vowel and a velar or palatal continuant: /i/ after front vowels except new /a/, /u/ after back vowels and /a/. So *feohtan* ‘fight’ > *fehhtan* [feçten] > [feiçten] *feizten*, *sōhte* ‘sought’ [so:hte] > [souhte] > [souxte] *souhte*.
- (b) Vocalisation. Syllable-final voiced continuants [j, w] became vowels, and [ɣ] (the intervocalic allophone of /g/) merged with /w/: so *dæg* ‘day’ [dæj] > [dæi] > [dai], *boga* ‘bow’ [boɣa] > [bowe] > [boue] > [boue].

The eventual result was five diphthongs, all of the ‘new’ type with high second elements. With exemplary ModE forms and their OE sources:

- (23) /ai/ *day* < *dæg*, *way* < *weg*; /au/ *draw* < *dragan*, *saw* < *seah*; /eʊ/ *shrew* < *scrēawa*; /iu/ *rue* < *hrēowan*, *snow* < *snīwan*; /ɔʊ/ *own* < *āgan*, *know* < *cnāwan*, *dough* < *dāh*, *daughter* < *dohtor*, *grow* < *grōwan*, *sought* < *sōhte*

Some French diphthongs (and a triphthong) fell in with these: e.g. /au/ simply merged (*fault*), /ieu, yi/ (*rule*, *fruit*) > /iu/. French also contributed two diphthongs of its own, which occur only in foreign lexis: /oi/ (*joy*) and /ui/ (*poison*). These remained separate until the seventeenth century, though some words crossed from one category to the other (Section 2.7.4.7).

### 2.5.2.4 Weak vowel mergers

Vowel attrition in weak syllables had been occurring all through the history of Germanic; in OE historical /æ, e/ had already largely merged in /e/, long vowels were excluded from inflections, and only /i, e, u, o, a/ could occur in weak final syllables. Over the tenth to thirteenth centuries, these vowels merged, leading to a majority spelling <e> in most areas by 1400. The scholarly consensus

suggests collapse in a ‘neutral’ /ə/; but neutralisation in /e/, without invocation of a special new vowel, is at least as likely for most regions except parts of the SWML, where there may have been some merger in /u/. (I will however represent this vowel as /e/ for convenience.) There is also evidence for a second, higher weak vowel throughout the rest of the history of English, especially before dentals; this is suggested by the frequent <-is/-ys>, <-id/-yd> plural and past spellings in the fourteenth to fifteenth centuries, and rhymes like Chaucer’s *speres: here is* (PF 67ff).

### 2.5.2.5 The fricative voice contrast

In ModE, both voiced and voiceless fricatives can appear in any word position: *few/view, offer/over, staff/stave*. This is the contingent result of several unrelated changes converging over a considerable period. To arrive at the modern distribution, [v, ð, z] must be able to appear initially and finally, and [f, θ, s] medially. And this requires loss of consonantal length (in OE only long voiceless fricatives appeared between vowels).

French loans in *v-*, *z-* (*veal, virgin, zeal, zodiac*) began to appear after 1066: native/French pairs like *feel/veal, seal/zeal* became possible. Initial /v, z/ were established by about 1250. (The situation in parts of the south and SWML was rather different, since initial /f, s/ were voiced in late OE if not earlier: in these dialects what had to be established was initial /f, s/, which began to drift in from other areas during the ME period.) The initial /θ/: /ð/ contrast followed a different route: around the fourteenth century initial /θ/ started to voice in grammatical words (*this, though, thou*, etc.).

The word-final contrast develops mainly through loss of /-ə/; this began about 1100 and was completed during the fourteenth century. The original intervocalic environments were destroyed, exposing voiced fricatives in final position: OE *nosu* /nosu/[nozu] > [nɔːzə] > [nɔːz] ‘nose’, etc. Other instances are due to analogy: e.g. *drīfan* ‘drive’, past *drāf* should give ModE *drive*/\**drofe*; the /v/ has been extended from the present system.

The length contrast began to decay in the thirteenth century, and was lost by the fourteenth. Contrasts like [-f:-] vs [-v-] (*offrian* vs *ofer*) now became [-f-] vs [-v-], making voice distinctive between vowels. Like so many changes that can be described as if they were ‘immediate’, the restructuring has a long and irregular history.

## 2.6 Middle English, c.1150–1450

### 2.6.1 The problem of ME spelling

The monophthongisation of the old diphthongs, the low vowel mergers, and the neutralisation of weak vowels produced an orthographic surplus: more potential symbols than sounds. This opened the way for two stylistic approaches to inventing spelling systems: ‘economical’ (choose – roughly – one symbol for

each phoneme), and ‘profligate’ (allow for variation, even delight in it). One of the knottiest problems in interpreting early ME texts is trying to figure out what the profligate writers are doing, and whether the mass of orthographic distinctions we find match anything phonetic. What we appear to find is ‘Litteral Substitution Sets’ (LSSs: i.e. sets of graphs that appear to be interchangeable) for particular etymological categories, sometimes particular lexical items (see Laing, 1999; Laing & Lass, 2003). Here are some twelfth-century examples, from the *Peterborough Chronicle* (Final Continuation, Oxford, Bodleian Library, Laud Misc 636; spellings as in MS, but runic ‘wynn’ substituted by <w>):

- (24) OE *wāron* ‘be’, pret pl: wæron 11x, uuæren 1x, wæren 1x, uueron 1x, uuaren 1x, waren 1x  
 OE *wāre* ‘be’, pres subj sg: uuare 1x, ware 1x  
 OE *bēam* ‘tree, beam’: beom 1x  
 OE *ēode* ‘go’, past: gæde 1x, iæde 1x (sg), ieden 1x (pl)  
 OE *eorl* ‘earl’: eorl 20x, æorl 1x  
 OE *fēran* ‘carry’, past: ferde(n) 9x, feorde(n) 2x  
 OE *-on*, verb past pl: -en 29x, -an 2x, -on 2x, -æn 2x, -e 1x, -i 1x, zero 1x

There are strategies for sorting out such complexity, which I will not go into here; but anybody interested in the history of English should have some idea of the apparent messiness of much of the primary material – especially as most readers will, sadly, have encountered Middle English only in sanitised and edited ‘literary’ versions.

## 2.6.2 Phonology

### 2.6.2.1 The vowels: MEOSL and the story of OE /ɑː/ (*bone*)

By the twelfth century OE /æː/ had raised to /ɛː/. At around 1100, then, excluding the diphthongs and the front rounded vowels if they survived, the overall shape of the monophthongal vowel system in all dialects was probably this:

- (25)      i: i      u u:  
           e: e      o o:  
           ɛ: □    □ □  
           □ a    □ α:

The inventory is now spread over four heights rather than three (as still in most modern dialects). And, as the boxes indicate, there are now potential ‘empty slots’ in certain regions of the vowel space. There is of course no reason why a system has to become symmetrical, or pack its vowel space to any particular degree; but in English a number of these slots did get filled, and much of the ancient symmetry was restored, if with rather different results.

The vowel system was first reshaped by two changes, one virtually exceptionless, the other sporadic. The first was raising and rounding of OE /ɑː/ to /ɔː/ (except in the north); the second was lengthening of vowels in certain open

penultimate stressed syllables, so-called Middle English Open Syllable Lengthening (MEOSL).

There are signs of the /ɑ:/ > /ɔ:/ change as early as the twelfth century; but it begins to stabilise – if variably – in the next. Here is a sample of OE /ɑ:/ items from two thirteenth-century texts, one from the west and one from the east:

- (26) (a) *Laȝamon A* (London, British Library, MS Cotton Caligula A.ix, hand A: Worcestershire)  
 OE *bān* ‘bone’: ban 4x, bon 2x  
 OE *hlāford* ‘lord’: lauerd 11x, lauard 1x, læuerd 1x, louerd 1x  
 OE *lāþ* ‘loath’: lad, lað 11x, laeð 11x, loað 1x, lod 1x, loð 1x
- (b) *Vices and Virtues* (London, British Library, MS Stowe 34: hand A: SW Essex)  
 OE *gāst* ‘ghost’: gast(e)- 26x, gost(e)- 11x; *gāstlice* ‘ghostly, spiritual’: gastlich(e) 10x, gostliche 1x  
 OE *hālig* ‘holy’: hali(g)- 130x, holi(g)- 14x

This looks like an early stage of diffusion, typically variable and lexically specific. That is, as usual in the earlier stages of a change we cannot say that ‘X has become Y’, but rather that ‘X is becoming Y variably in particular lexical items’. Only after the change is completed (if it ever is) can we say ‘has become’. This is not what histories like to say, but such things happen even in modern standard languages. Just as one could not properly ask of *Vices and Virtues* ‘what vowel/spelling does “holy” have?’, one could not ask of my own dialect ‘what vowel does “rather” have?’ The answer in the latter case would be ‘mostly [æ], less often [a:] or [ɑ:]’.

Open syllable lengthening is described in the handbooks as categorical: short (non-high) vowels lengthened in stressed open penults, and the mid vowels lowered by one height. Thus OE /nama/ ‘name’ > /namə/ > /na:mə/, /nosu/ ‘nose’ > /nozə/ > /nɔ:zə/. In forms like these the final /-ə/ dropped (see below); if the final syllable was closed, it tended to remain (*naked* < *hnacod*, *beaver* < *beofor*). But MEOSL never went to completion; only a little over 50 per cent of the items that could show it actually do, and these are (with considerable statistical likelihood) ones that have lost final /-ə/. Retention of the following weak syllable militates against lengthening: note short vowels in apparent prime candidates like *camel* < *camel*, *otter* < *otor*. Lengthening of high vowels was uncommon except in the north; but a number of words show lengthening and lowering, particularly of /i/: *week* < *wicu*, *beetle* < *bitela* (ModE /i:/ here presupposes ME /e:/).

We can diagram the results of the two changes discussed here, at any point in their implementation:

- (27) Results of /ɑ:/ > /ɔ:/ and OSL: \* = added V-type, † = lost V-type
- |     |    |   |     |
|-----|----|---|-----|
| i:  | i  | u | u:  |
| e:  | e  | o | o:  |
| ↙   |    | ↘ |     |
| ɛ:  |    |   | ɔ:* |
|     |    | ↑ |     |
| a:* | ←a |   | ɑ:† |

(The lower mid vowels from OSL do not always fall in with the originals; they are still distinct in some north midland dialects.)

English now has two low vowels in front and none in back; the symmetry (in some dialects) is restored in the seventeenth and nineteenth centuries by other changes. There are also two pairs of long mid vowels.

From this point onward the connection to ModE is clearer; I will give a set of keywords for this system and the diphthongs, but in modern form, since there are so many possible ME spellings. This is based on the OE keyword list in Section 2.4.2, and once again illustrates possible mergers and splits.

- (28) *Middle English keywords*  
 SHORT: /i/ *it, fill*; /e/ *bed, breast, heart*; /a/ *rat, bath, cat, arm*; /u/ *full, love, southern*; /o/ *god*  
 LONG: /i:/ *bite, hide, child*; /e:/ *meet, be, week*; /ɛ:/ *lead, meat, leaf*; /u:/ *house, bound*; /o:/ *food, good, flood, wood*; /ɔ:/ *bone, nose*; /a:/ *name*  
 DIPHTHONGS: /ai/ *day, way*; /au/ *draw, saw*; /ɛu/ *shrew*; /iu/ *rue, snow*; /ɔu/ *own, know, dough, daughter, grow, sought*

### 2.6.2.2 ‘Dropping aitches’ and postvocalic /x/

At least since the late eighteenth century omission of word-initial /h/ has been a stigmatised vernacular feature. But contrary to the received wisdom, loss of /h/ is not a ‘Cockney’ innovation; it continues a process that had been going on since the eighth century. The real innovation is the uniform *pronunciation* of /h/ in the standards – largely a development fostered by schools and normative grammars.

Recall that OE [h] was the weak syllable-initial allophone of /x/. By the thirteenth century, many text languages indicate variable loss, if not everywhere at least in a large number of lexical items. The evidence is not only lack of <h> where it might be expected, but the opposite: <h> in positions where it could not have occurred historically, so-called ‘inverse spelling’. For instance, in MS BL Cotton Otho C.XIII (‘Lazamon B’), ‘arm’ and ‘harm’ are both spelled <arm-, harm->, ‘am’ is spelled only <ham>, ‘after’ is <after, hafter>, and ‘high’ is <heȝe-, eȝe->. Many [h-] words on the other hand are spelled only with <h-> (e.g. ‘hand’), and many vowel-initial words only with <V-> (‘all’). Such distributions can be replicated in early ME texts from all regions, and this practice persists, at least in informal writing, well into the seventeenth century.

Modern native words with medial or final <gh> go back to earlier forms with a velar or palatal fricative: *through* < late OE *pruh* [θrux] (metathesised from *purh*), *night* < *nih*t [niçt]. The usual story is that postvocalic /x/ was retained throughout most of ME, and then either deleted – leaving behind a long vowel (*night, through*) – or became /f/ (*rough* < *rūh*, *dwarf* < *dwearh*). The earliest <f>-spellings are from c.1300, and not always in words that have retained it: aside from *dwerf* ‘dwarf’, *thurf* ‘through’ is also attested, and the variant *dafter* for *daughter* was still current in the early eighteenth century. But the picture even in early ME was more variable and complex than is usually assumed. Consider

these spellings of OE *-ht* words in the output of one thirteenth-century scribe – Hand A of Cambridge, Trinity College B.14.39 (323). (In the examples below <-s-> does not mean [s], but [x] or [ç]; this is a ME device based on the fact that in French – which these scribes also wrote – [s] before [t] became [x/ç], later [h]; some English writers adopted <s> as a possible representation of the reflex of OE /x/ in this position as well.)

- (29) ‘bright’: brist(e) 6x, brithe 1x, brit 3x  
 ‘brought’: brout(e) 15x, brot 1x, brouthe 1x  
 ‘bought’: bousten 1x, bocðthe 1x, bouthe 1x  
 ‘light’: list(e) 12x  
 ‘might’ (n): mist(e) 8x, miththe 1x  
 ‘night’: nist(e) 4x, nict 1x, nicst 2x  
 ‘right’: rist 20x, ricst 1x  
 ‘wight’: viit 1x, viste 1x, vichit 1x, wist 2x

Despite the complexity, it is clear that there are at least two variant types: one with some fricative before the /t/, and one without. (The forms in <th> may indicate [θ], but this is uncertain.) Some words show one type only (e.g. ‘night’, ‘brought’); others show both. And most interestingly, in a poem in this manuscript, the scribe has a quadruple rhyme on ‘bright’: ‘might’: ‘wight’: ‘night’, spelled *brit: mist: vichit: nicst*. The spellings suggest that he is acknowledging the presence of variation in his readership, and saying as it were that it doesn’t matter much whether you pronounce a fricative or not (or perhaps, if you do, which one) – as long as you use the same variant type for all four words (cf. Laing & Lass, 2003). This is not an eccentric idea: a modern non-rhotic English poet rhyming *fort: sport* is implicitly making the same kind of allowance if he expects to be read by Scots or rhotic Americans; on the contrary, a rhyme *sport: sought* forces a pronunciation, and will feel like a non-rhyme to these same readers. This variation in /-xC/ words persists into the seventeenth century.

### 2.6.2.3 Loss of final -e

Deletion of final weak vowels (complete by the end of the fourteenth century) was the culmination of a tendency stretching back to Proto-Germanic: the OE third-person verb endings *-eþ*, *-aþ* go back to *\*-i-þi*, *-a-nþi* (cf. Sanskrit *-e-ti*, *-a-nti*). The first environment for loss is in hiatus (two vowels back-to-back): there are a few OE attestations like *sægdic* ‘said I’ < *sægde ic*. By the 1180s metrical practice shows this to be common. In the *Ormulum* (c.1180), a marvellous source of evidence because of its obsessively regular versification, weak final *-e* deletes regularly before another vowel (or <h>, suggesting initial [h]-dropping). Thus *sun-e* and *mon-e* (OE *sunn-e*, *mōn-a*) and *son-e* *ongann* ‘soon began’ (OE *sōn-a*) scan [ / x / x ] and [ / x / ] respectively ( / = strong syllable, x = weak). The *-e* in *sun-e* and *son-e* must be deleted.

By the late fourteenth century, final weak *-e* was most likely gone in ordinary speech (except in proper names like *Cleopatre*, *Athene*). But it was available for

poetry, as we can see from careful versifiers like Chaucer. Here are examples from *Troilus and Criseyde* illustrating three options: total retention, partial retention and total deletion. In these examples pronounced final *-e* is represented as *-ĕ*, and deleted *-e* as *-(e)*:

- (30) (a) Han felt that lov-ĕ dorst-ĕ yow disples-ĕ (27)  
 (b) O blynd-ĕ world, O blynd-(e) entencioun (211)  
 (c) Among this-(e) other-(e) folk was Criseyda (169)

Since many final *-e* were vowels that had triggered MEOSL, their phonological loss made available a new diacritic for indicating vowel length in writing. Given *name* /na:m/ < /na:mə/, etc., length could be marked with a ‘silent’ final <e>, even in originally monosyllabic words like *wrote* < *wrāt*. Similarly, after degemination, pre-cluster shortening allowed double consonant graphs to be diacritics for shortness: *otter*, *hammer* < OE *otor*, *hamor*.

#### 2.6.2.4 Stress

The *cóntroversy* or *contróversy* about how to pronounce this word, as well as British *rotáte* vs American *rótate*, are remnants of a complex pattern of variability. The heyday of the conflict was the period from about 1600 to 1780, when both codifiers of the emerging standard and speakers in general were struggling with the relics of a complex history. But the seeds were already present in Middle English, as we can see from this Chaucerian line:

- (31) In *dívers* arts and in *divérse* figures (CT 2:1460)

Such doublets were available to later poets as well (here Shakespeare):

- (32) The *Réuennew* whereof shall furnish vs (*Richard II*, I.iv.46)  
 My manors, Rents, *Reuénues*, I forgoe (*Richard II*, IV.i.212)

Two stress systems coexist, one old and one new. To understand the later developments, we must go back to Old English. Let us imagine accentuation as a kind of ‘scanning’ procedure that inspects a word – either from the beginning or the end – looking for certain specified syllables to make prominent. Recall that OE stress was assigned by the Germanic Stress Rule (GSR), which counts from the *left-hand* word-edge, and stresses the first syllable of the *lexical root*, ignoring prefixes (except special ones defined as stress-bearing). Examples (major lexical categories like N, V, A have brackets at each end; affixes have only one bracket; ⇒ marks the ‘start’ of the scan):

- (33) *input* *stress*  
 ⇒#[<sub>N</sub>hánd]] #[<sub>N</sub>hánd]]  
 ⇒#[#ge-<sub>A</sub>hend]-e] ‘at hand’ #[#ge-<sub>A</sub>hénd]-e]

Items with stressable prefixes and compounds are treated the same way: the rule scans the leftmost element first and assigns primary stress; then repeats the procedure for the right-hand element and assigns secondary stress (\* marks a stressable prefix):

(34)	<i>input</i>		<i>stress</i>
	⇒[#wɪp-[vsac-]-an] ‘to contend’		[#wɪp-[vsác-]-an]
	⇒[#*wɪpɛr-[vsac-]-a] ‘adversary’		[#wɪpɛr-[vsàc-]-a]
	⇒#[ <sub>N</sub> hand] ⇒[ <sub>N</sub> belle] ‘hand-bell’		[# <sub>N</sub> hánd] [ <sub>N</sub> bèlle]

This system, then, is ‘left-handed’, sensitive to morphology, and insensitive to syllable structure.

Starting in the eleventh century, increasing numbers of Romance and Graeco-Latin loanwords began to enter English. At first right-strong forms tended to be accented according to the old Germanic pattern (L *candēla* > OE *cándel*); but over time increasing numbers were imported with their original accentuation, which was of the Romance type, as it is now called. This is quite different from the Germanic, since (at least in its most elaborate form) it takes syllable weight or quantity into account. A syllable is heavy (in older literature ‘long’) if its rhyme (nuclear vowel plus any following material) consists of a long vowel, a diphthong, or a short vowel + two or more consonants; otherwise it is light (‘short’: this is a somewhat controversial definition, based on a particular syllabification; see Lass, 1992).

Romance accentuation (the Romance Stress Rule, or RSR) counts from the *right-hand* word-edge, and selects the syllable to be stressed as follows (orthographic representations: ¯ = heavy, ˇ = light; examples from the General Prologue to the *Canterbury Tales*):

- (35) (a) Stress the final syllable if it is heavy or the only syllable; ignore the final consonant:

<i>input</i>		<i>stress</i>
lɪc̄our#] ←		licóur#]
swich#] ←		swích#]

- (b) If the final syllable is light, stress the penult if it is heavy or the only other syllable:

<i>input</i>		<i>stress</i>
ɛnḡɛndrɛd#] ←		engéndred#]
chap̄ɛl#] ←		chápel#]

- (c) If the penult is light, stress the antepenult regardless of weight:

<i>input</i>		<i>stress</i>
Zɛph̄írüs#] ←		Zéphirus#]
párdön̄ɛr#] ←		párdoner#]

In contrast to the GSR, the RSR is right-handed, insensitive to morphology, and sensitive to syllable weight. It also incorporates an ancient Indo-European constraint, the ‘three-syllable rule’: the main word accent may not be any further back than the antepenult.

One reason the RSR pattern was so easily adopted is that its output would often be indistinguishable from that of the GSR. Romance *Zéphirus*, *párdoner* and native *brétherhed*, *néighebor* would have the same accentuation under either system, as would Romance *en-géndred*, *chápel* and native *bi-gýnne*, *príketh*. Where different accentuations would be produced, both were often available; in the first Chaucer example given above, *dívers* and *divérse* show respectively Germanic and Romance treatments of the same word (as it happens a Romance loan). The Germanic/Romance interaction, with new complications, reappears in Section 2.7.6.

### 2.6.3 ME morphology

#### 2.6.3.1 The story-line

The story of English inflectional morphology from about 1100 is one of steady attrition. Its outcome, for both noun and verb, is restriction to one ‘prototypical’ category for each: number and tense respectively. The concordial categories vanish: gender and case in the noun and all inflection in the adjective, marking of the verb for person and number of the subject (except in one marginal case).

#### 2.6.3.2 The morphology/phonology interaction

Since languages are more or less ‘seamless’ rather than tightly ‘modular’, any structural component may interact with any other. A classic case is the relation between sound change and morphological restructuring. Here is a simplified version of how they interact. Consider the paradigm of an OE *a*-stem masculine noun, *stān* ‘stone’:

(36)		sg	pl
	nom	stān	stān-as
	gen	stān-es	stān-a
	dat	stān-e	stān-um
	acc	stān	stān-as

Now recall two late OE/early ME changes: final /m/ > /n/ and unstressed vowels collapse in /-e/. Just these alone, with no actual morphological changes, would produce this paradigm:

(37)		sg	pl
	nom	stān	stān-es
	gen	stān-es	stān-e
	dat	stān-e	stān-en
	acc	stān	stān-es

The dative singular and genitive plural have merged, as have the genitive singular and the nominative/accusative plural. The dative plural is now identical with the oblique forms of weak nouns: all the old *-an* endings have become *-en*, including the dative plural. Is phonological change driving morphological change, or is a change in morphological type allowing the phonological changes to take place? The most likely answer is both, simultaneously. Still, I will tell the story mainly in morphological terms, because those are the surface appearances of interest.

### 2.6.3.3 The noun phrase: gender, case and number

In some OE nouns, ‘grammatical’ and ‘natural’ or ‘semantic’ gender agreed: *mann* was masculine, *fē̄mne* ‘virgin, bride’ feminine, *hūs* ‘house’ neuter. In others there was clear disagreement: *wīf* ‘woman’ was neuter. In the majority gender was arbitrary, since the semantic notions of ‘femininity’ or ‘masculinity’ were inapplicable: masc *stān* ‘stone’, fem *hild* ‘battle’. In addition, nouns could have the historically ‘wrong’ gender, or more than one gender even in the same text: in the tenth-century *Lindisfarne Gospels*, for example, *endung* ‘ending’ appears as masculine (abstract nouns in *-ung* are historically feminine, as they remain in German), and *stān* is both masculine and neuter.

There was also a steadily increasing tendency for semantic gender to override grammatical, particularly in human nouns. From a late tenth-century text (*Elene*, 223):

- (38) Wæs sōna gearo wīf [n] . . . swā hire [f] weoruda helm beboden haefde  
 ‘the woman [n] was immediately ready, as the protector of troops [=God]  
 had commanded her [f]’

By the eleventh century, OE certainly still had grammatical gender (nouns belonged – if not uniquely – to concord classes); but referring personal pronouns in particular tended to adopt sexual reference with human antecedents.

An OE noun in isolation is rarely recognisable as belonging to a particular gender: e.g. a termination in *-u* could mean feminine *ō*-stem (*gief-u* ‘gift’), masculine *u*-stem (*sun-u* ‘son’), or neuter plural (*scip-u* ‘ships’). But with certain other markers (e.g. an *s*-genitive which in ‘classical’ OE at least excludes feminine), or in the presence of marked determiners or anaphoric pronouns, the identifications are relatively unambiguous. This is still largely true in many thirteenth-century ME texts. The scribe known as the ‘Worcester Tremulous Scribe’ (*Worcester Fragments*, MS Worcester Cathedral Library 174), shows a typical ‘transition’ system. The original three genders are mostly retained, and explicit concord allows identification; yet we can see the beginnings of the later system. Consider, for instance, the italicised forms in the following:

- (39) (a) *þt* *soul-e* hus ‘the soul’s house’  
 (b) seiþ *þeo* soule soriliche to *hire* licame ‘the soul says sorrowfully to her body’  
 (c) saeiþ *þe* soule soriliche to *hire* licame

In (39a), the *e*-genitive marks *soule* as feminine, as the determiner *þæt* (a crossed thorn in the MS = *þæt*) marks *hus* as neuter (the original OE genders). In (b), the determiner *þeo*, while not an OE form, does suggest feminine (cf. *hēo*, *sēo*), which is confirmed by the anaphoric pronoun *hire*. In (c) the determiner is the genderless *þe*, but again *hire* says ‘feminine’.

When he marks gender, the Tremulous Scribe fairly regularly shows what would be ‘expected’. But of course there are many nouns that as far as *we* can tell could be any gender: they occur in the plural, with no determiners, have no referring pronouns, and/or are marked with the uninformative *þe*. The increasing incidence of *þe* (which already appears as a variant of masculine nominative singular *se* in some ninth-century texts) marks the attrition of both the gender and case systems.

Loss of gender follows a characteristic regional path throughout the ME period. Almost everything new begins in the north and percolates down through the east midlands. The southwest midlands and the southeast remain the most conservative; as late as the 1340s there are still some traces of gender in Kent.

The loss of case marking goes along with the restructuring of noun declension. In the end there is a nearly complete takeover by the masculine *a*-stem type (recall that by the twelfth century this has *-(e)s* in the genitive and nominative/accusative plural), with competition from the *n*-stems (plural *-en*). The ideal narrative would compare two stages of the same regional type; but given the available materials I will compromise, and sketch the main features of two not strictly comparable sources, one from the twelfth and one from the fourteenth century. The first is the *Ormulum* (Lincolnshire, c.1180); the second is a ‘consensus’ of the best Chaucer MSS. While the latter do not of course tell us ‘what Chaucer wrote’, they are a fair sample of late fourteenth- to early fifteenth-century London English.

In the *Ormulum*, most plurals, regardless of case, are in *-ess* (Orm doubled consonant graphs after short vowels). This is so regardless of the original type: *as*-plurals (*clut-ess* ‘clouts’), feminine *e*-plurals (*sinn-ess*) and neuter zero plurals (*word-ess*). The original types however remain as variants (*sinn-e*, *word*). Replacement of the dative plural by an unmarked ‘general plural’ can be seen in *amang Godspellless word-ess*, and of the genitive plural in *menn-ess* ‘of men’. A few vocalic genitive plurals remain, sometimes varying with forms in *-ess*: *neddr-e/neddr-ess streon* ‘generation of vipers’ (OE *næddr-a*).

The genitive singular is almost always in *-ess*, except for a few feminines like *sawl-e* (as in genitive plural). The dative singular has become a general ‘prepositional case’ in *-e*: *o lifft-e* ‘in the air’, *þurh trowwþ-e* ‘through truth’, but also *o þe lifft*, *till þatt tun* ‘to that town’. The *-e* responds to metrical and environmental constraints: it is available when a syllable is needed.

By the end of the next century, except for some minor relic types like zero and umlaut plurals, the declensional variety and case and gender specificity of earliest ME are gone. There are now two noun cases, genitive and ‘common case’, no inflection of the article, and only minimal adjective inflection. Virtually all nouns have gone over to the *s*-genitive and plural, except for weak nouns that retain *-en* (these increase for a while in some regions but then recede).

Chaucer looks much more ‘modern’ than Orm. The dominant plural is *-(e)s*, with *-e* deleted after vowel-final stems, and often in polysyllables: *book-es*, *soul-es*, *tree-s*, *herte-s*, *argument(e)s*. Loss of final *-e* (except in a few cases described below) rules out *e*-plurals. A number of nouns were attracted into the weak class, so that not only did original *n*-plurals like *oxe-n*, *eye-n* remain, but there were *n*-variants for original *s*-plurals (*shoo-n/-s* ‘shoes’) and *s*-variants for original *n*-plurals (*bee-s/bee-n* ‘bees’) and zero-plurals as well (*hors-es/hors*).

The genitive singular is usually in *-s*, though a few zero genitives occur, either from historical feminine *e*-genitives (*his lady grace*) or original zero (*my fader soule*). The dative singular has virtually disappeared; post-prepositional *-e* occurs mainly as an option at line-ends (*fro yer to yeer-e*). So except for some relics of old non-*s* genitives and dative singular *-e*, and some different assignments of nouns to declension classes, late fourteenth-century London English has virtually the same noun morphology as its modern descendants.

Recall that in OE there were two adjective inflections: an ‘informative’ strong declension marking case, gender and number, and a more generalised weak declension. During later ME the strong/weak opposition decayed, along with loss of case and gender marking on the article. For most of the period there is just a simple opposition: inflected adjective in *-e* vs uninflected. This is variable as early as the twelfth century: Orm has *[pat haffeþþa33 [‘aye’] god wille/pat hafeþþ god-e wille*. By the fourteenth century inflection was responsive only to definiteness and number. In Chaucerian usage *-e* usually occurred after definite determiners (*the cold-e steele*), vocatives (*O fals-e mordrour*), and in attributive plurals, whether pre- or postnominal (*the long-e nyghtes*, *shoures sot-e* [‘sweet’]). Zero forms occur in singular predicate adjectives (*it was old*), after indefinite determiners (*a good wyf*), and when there are no determiners. By the fourteenth century this alternation was restricted mostly to monosyllabic adjectives; longer ones were endless everywhere.

#### 2.6.3.4 The personal pronoun

This is the only nominal that retains some inflection not only for number but case and gender. The OE pronoun was inflected for three numbers, four cases, and gender only in the third-person singular; like the noun, it had only one (non-gendered) plural. During ME the dual was lost; dative and accusative merged in a single form; new *she* and similar forms replaced *hēo*; and a new third person plural in *th-* gradually replaced the old *h*-forms.

The OE personal pronoun distinguished dative and accusative singular for all three genders: (*him/hine*, *him/hit*, *hēo/hī(e)*). In early ME the masculine accusative was still retained in the west, but not in the (usually more advanced) east: the *Peterborough Chronicle* in the twelfth century has already merged the two under the old dative:

- (40) (a) te folc *him* underfeng ‘the folk received *him*’ (direct object: accusative)  
 (b) abuten *him* ‘about *him*’ (prepositional object: dative)

while later SWML languages like that of the Tremulous Scribe (thirteenth century) still make the distinction:

- (41) (a) for deap *hine* haep 'for death has *him*' (direct object: accusative)  
 (b) mid/from *him* 'with/from *him*' (prepositional object: dative)

The usual explanation for the emergence of *she* is 'avoidance of ambiguity'. Even in OE the feminine nominative singular pronoun *hēo* was not maximally distinct from the all-gender nominative/accusative plural, and where /e:ɔ/ and /e:ɪ/ merged it would fall together with masculine *hē*. Such 'functional' considerations are always problematical, and in this case parochial: many languages (e.g. Finnish, Zulu) get along perfectly well with only one genderless third-person pronoun. So whatever the reason for its emergence, we cannot say that *she* was a 'forced choice'. And indeed there is a long manuscript tradition (particularly in the west) in which pronoun ambiguity is quite acceptable. It is always instructive to look at what manuscripts actually have; here are two early inventories (reference is to textual semantic gender, not historical grammatical, as function is what concerns us here):

- (42) *Worcester Tremulous Scribe*  
 (a) fem nom sg: heo 9x  
 (b) neut nom sg: hit 86x; he 57x; heo 10x  
 (c) masc nom sg: he 145x  
 (d) nom pl: heo 158x; he 7x; ho 1x; hoe 1x
- Trinity 323, hand A*  
 (a) fem nom sg: heo 19x; he 2x; hoe 2x; ho 1x; ha 2x  
 (b) neut nom sg: hit 10x; hid 1x; it 7x; he 1x; heo 1x; ho 1x  
 (c) masc nom sg: he 148x; heo 9x  
 (d) nom pl: heo 38x; he 16x; ha 4x; a 4x; hoe 4x; ho 1x; it 1x

These writers apparently did not care very much what forms their pronouns had, or whether one form appeared in all categories. Others had different preoccupations, and as these happen to be eastern and part of the lineage of Modern English, they are more relevant for us – though given the data above we have to understand their choices differently. Here is the same material from the first forty folios of *Genesis & Exodus* (Cambridge, Corpus Christi College 444, Essex, early fourteenth century):

- (43) (a) fem nom sg: ghe 56x; gge 1x; ge 1x; che 1x; sge 1x; sche 1x; she 1  
 (b) neut nom sg: it 72x; he 2x; et 1x; t 1x  
 (c) masc nom sg: he 400x  
 (d) nom pl: he 87x; it 8x; ðei 1x

This scribe is clearly interested in keeping the feminine separate, but appears uninterested in distinguishing the masculine nominative singular from the plural, though there is one instance of the new *th-* type. Such data supports what I like to

think of as one of the Great Laws of language history: *no particular development is ever necessary*.

But still *she* was invented, and although we are not sure why (if that is even an askable question), we can ask how. That puzzle has not yet been solved to everybody's satisfaction. The sources invoked are normally either the feminine determiner *sēo* or the nominative singular pronoun *hēo*. Both are difficult but not impossible. The story is extremely complex and technical, but in outline the two accounts go like this:

- (a) *sēo*. Transfer of syllabicity from the second to the first element ('falling' to 'rising' diphthong; an acute marks the syllabic element): [séo] > [seó]. Then reduction of the non-syllabic [e] to [j], and lengthening of the [o] (to avoid a stressed open monosyllable with a short vowel): [seó] > [sjo:], and palatalisation of the [sj] cluster, giving [ʃo:]. This makes phonetic sense, but leaves us with the wrong vowel for the south (though it does account for the usual northern *scho*). The [e:] would have to be an analogical transfer from *hē*, which is plausible, since it produces a rhyming pair.
- (b) *hēo*. This invokes the 'Shetland theory', a development parallel to that of *Shetland* < OScand *Hjaltland*. The scenario is the same as (a) to begin with: [héo] > [heó] > [hjo:]. Then [hj] > [ç] (plausible: many ModE dialects have [ç] for /hj/ in words like *hue*, *human*). We then need a further change [ç] > [ʃ] (which is attested elsewhere in Germanic). In those areas of England where the Scandinavian influence was strongest, the 'Shetland' change shows up not only in place-names, but in ordinary lexical items like (*rose*-)*hip* < OE *hēope* and *heap* < OE *hēap* as [ʃu:p]. This goes along with [ʃu:] for 'she' in some of the same areas. We do need the same analogical transfer as in (a), to get the right vowel, but the source in a personal pronoun rather than a determiner, and the place-name and lexical backup are added support.

There is also a chronological problem with both of these accounts: *she*-types first appear (sparingly) in the mid twelfth century, but the original OE diphthongs had presumably monophthongised in the eleventh. This would require a rather long subterranean existence for the new form. Whatever the facts of the matter, it seems likely that *hēo* or *sēo* or both are somehow involved. And both accounts require an extra, purely morphological operation to get the right vowel. This seems like a lot of work for one pronoun; I reserve judgement, but have nothing better to offer. (The best treatment of this complicated matter, which I have skimmed here, is Britton, 1991.)

The story of the plural pronoun is simpler. The modern paradigm *they/their/them* is odd: an entire grammatical subsystem borrowed from another language. These come from Scandinavian *þeir* (nom) / *þeirra* (gen) / *þeim* (dat). This system was not, however, borrowed all at once; it took at least 400 years for

the new paradigm to be established in the dialect complex that gave rise to the modern standards.

The earliest northern texts (which are later than those from other regions) show the entire Scandinavian paradigm. Elsewhere there is a gradual southward movement, apparently one form at a time. Most early texts are extremely variable, but we can abstract a general three-phase story. The nominative enters the non-northern systems first, followed by the genitive, with the oblique case last. The nominative is established in the SEML by the middle of the fourteenth century; the others follow, variably as usual. On the basis of a conflated group of texts from the east midlands, we can sketch the history this way:

(44)		c.1380	c.1440	c.1480
	nom	þei	þei	they
	gen	her(e)	her(e) ~ ther	their
	obl	hem	hem	hem ~ them

(The sources are the Chaucerian consensus, *The Book of Margery Kempe*, and the prologues and epilogues of Caxton; in variation the first form is the commoner.) *Them* was finally stabilised in the first decade of the sixteenth century.

By the end of the ME period, then, the personal pronoun system in the London area would have looked like this (using modern spellings for identification):

(45)	<i>The late ME 1, 2 person pronouns</i>				
	1 person		2 person		
	<i>sg</i>	<i>pl</i>	<i>sg</i>	<i>pl</i>	
	nom	I	we	thou	ye
	gen	my/mine	our(s)	thy/thine	your(s)
	obl	me	us	thee	you
	<i>The late ME 3 person pronoun</i>				
	<i>masc sg</i>	<i>neut sg</i>	<i>fem sg</i>	<i>pl all genders</i>	
	nom	he	hit	she	they
	gen	his	his	her(s)	their(s)
	obl	him	him	her	hem/them

*Hers, ours, yours, theirs* appeared in the north during the thirteenth century, and in the south by the later fourteenth. The *-s* is presumably analogically extended from the noun genitive. The *n*-less forms *my, thy* first appeared variably when the following word began with a consonant (cf. ModE *a/an*); but up through the sixteenth century both could appear in all environments.

### 2.6.3.5 Verb morphology: introduction

Number is now the prototype noun inflection; that for the verb is tense. The only other regular inflection is *-s* for the present third-person singular. OE, on the other hand, marked two tenses (past and present), three moods (indicative vs subjunctive vs imperative), three persons and two numbers. So there could in principle have been 26 distinct forms for any verb: 3 persons x 2 numbers x 2 tenses

for indicative and subjunctive = 24, plus imperative singular and plural. But because of the loss of person marking in the plural and other historical developments, the maximum is actually 11. Various changes had produced considerable homophony within the paradigm, and the only material available was strong-verb vowel alternations: *-e*, *-(e)st*, *-eþ*, *-aþ*, *-on*, *-en* and zero. And of course after the ‘transition’ changes, *-eþ/-aþ* merged in *-eþ*, and *-on/-en* in *-en*, so besides zero ME has (schematically) only the strong-verb alternations, *-e*, *-st* and *-n*. None of the endings could be the source of the present third-person singular in *-s*, whose origin will be discussed later (Sections 2.6.3.7, 2.7.7.5).

### 2.6.3.6 The verb: tense marking

Even though the most radical changes in the ME verb involved number concord, a great deal happened to both strong and weak tense marking. The original weak verb suffix was probably a reduced form of the verb ‘do’, connected to the verb root by a ‘thematic vowel’ *\*-i-*, followed by person/number inflections. By late West Germanic we could represent it schematically as *\*-i-d-pers.no*, e.g. 1 sg *\*-i-d-a* > eighth-century runic *-i-d-a* > OE *-(e)-d-e*. The thematic vowel was generally retained after light roots, and deleted after heavy ones: so OE class I weak *ner-e-de* ‘he saved’ vs *dēm-de* ‘he judged’. Such verbs are called respectively ‘thematic’ and ‘athematic’. Class II weak verbs, for complex historical reasons, were all thematic regardless of root type: the theme in the past was *-o-*, hence *luv-o-de* ‘he loved’. Since in late OE weak vowels had fallen together, the *-e-de/-o-de* distinction disappeared: by ME times there are essentially two weak verb types, thematic and athematic; I will call them Type I and Type II pasts:

(46)		<i>infinitive</i>	<i>past I sg</i>	<i>past participle</i>
	Type I	deem-en	deem-d-e	(y-)deem-d
		seek-en	sou3-t-e	(y-)sou3-t
	Type II	ner(-i)-en	ner-e-d-e	(y-)ner-e-d
		luv(-i)-en	luv-e-d-e	(y-)luv-e-d

These generalised patterns were, like everything else, not as clear as one might wish. In later ME, given the instability of final *-e*, the type I/type II contrast eventually becomes a matter of whether the (potential) *-e-* comes after a past suffix (type I) or before (type II), or whether the past participle ending is syllabic (type II) or non-syllabic (type I).

All possibilities are found throughout the period, at least in verse (our only source for this information, since <e> is often written where not etymologically justified, and you cannot count syllables in prose texts). We do certainly find maximal type II trisyllables, as in the thirteenth-century *Poema morale* (London, Lambeth Palace Library 487):

(47)	þa þe luueden [lxx] unright & ufel lif leden
	‘those who loved unrighteousness and led (an) evil life’

By late ME increasing *e*-deletion ensures that monosyllabic verbs rarely have pasts longer than two syllables, and more commonly and increasingly only one. Here are some typical examples of variation in both type I and type II verbs, from Chaucer's General Prologue (scansion of the italicised examples in following brackets):

- (48) Type I (a) Another nonne with hire *hadde* [ / x ] she (163)  
 (b) This illke worthy knyght *hadde* [ x ] been also (64)  
 Type II (a) So hote he *loved* [ / x ] that by nyghtertale (97)  
 (b) Wel *loved* [ / ] he by the morwe a sop in wyn (334)

The (b)-forms eventually triumphed; the modern allomorphy is purely phonological and non-historical, though thematic types remained through the seventeenth century.

With the strong verbs we are concerned not with suffixes, but the distribution of root vowels ('grades') in the various tense/number forms. Recall that the OE strong verb had four 'principal parts': I repeat some examples of the first five classes here for reference:

(49)		<i>present</i>	<i>pret sg</i>	<i>pret pl</i>	<i>past part</i>
	I 'bite'	writ-an	wrāt	writ-on	-writ-en
	II 'creep'	crēop-an	crēap	crup-on	-crop-en
	III 'find'	find-an	fand	fund-on	-fund-en
	IV 'bear'	ber-an	bær	bær-on	-boren
	V 'break'	brec-an	bræc	bræc-on	-brecen

These alternations were affected by early changes, in particular homorganic lengthening and OSL: by the thirteenth century 'find' would have long vowels throughout (hence ModE *found* < *fīnd*), and 'bear' would have a long vowel in present, past singular and past participle, as would 'break' – again witnessed by the modern forms.

There are three main tendencies at work in the ME restructuring: reduction of the number of grades per verb; 'hybridisation' or class mixing; and shifting partly or wholly to weak. Many modern strong verbs show the latter two: e.g. *break*, *speak* with the past and past participle vowel of the 'bear' class, 'mixed' verbs with weak past and strong participle like *swell/swelled/swollen*, and original strong verbs that have become weak like *creep/crept*.

Change in the strong verb seems to have been driven by grade reduction. Increasingly throughout the ME period, the strong verbs adopted a new constraint: 'no more than three grades per verb'. This resulted in a loss of the singular/plural contrast as signalled by root vowels. There were two major strategies: merging past singular/plural under the vowel of the singular (ModE *rode*: OE sg *rād*, pl *ridon*), or under the vowel of the past participle (ModE *found*: OE sg *fand*, pp *-funden*). These mergers (and covariation between them and the original patterns) begin in the thirteenth century and increase over time. By the 1470s Caxton has no singular/plural distinction in any strong past. The story of the strong verb gains

further momentum in the early modern period; I will return to this in Section 2.7.7.3.

### 2.6.3.7 The verb: person and number

Recall that the OE verb in ‘classical’ varieties had two plural markings: present *-aþ* and past indicative *-on* and subjunctive *-en*. With the late vowel collapses, these would become *-eþ* and *-en*, the first homophonous with the present third singular, the second with the infinitive marker. In the singular, first-person *-e* was bound to be unstable, but second-person singular *-(e)st* and third-person singular *-(e)þ* were (relatively) protected by the final consonants. But given the variation and instability in early ME, we might expect some major restructuring of verb inflection. The two categories subject to the greatest change were the plural and – much later – the present third singular.

For the rest of the story to make sense, we must note that there was another type of OE verb inflection, very different from the ‘classical’ one illustrated earlier. Some Old Northumbrian (perhaps Scandinavian-influenced) texts show a quite different present system:

(50)	<i>sg</i>	<i>pl</i>
	1 -o, -e	-es, -as
	2 -as	-es, -as
	3 -es, as	-es, as

For second and third singular and all plurals, then, there was a northern form in *-s* available from earliest OE; we will see later how it migrated south (Section 2.7.7.4).

In early texts, the present and past plurals were typically still distinct, but with some variation. During the thirteenth century the present/past ending distinction gradually erodes, and each region adopts a single plural marker, either *-(e)n* or *-(e)þ* or the two in variation (*-(e)þ* is a southern type, gradually replaced in the London area by the midland *-(e)n*).

Historically what counts is presence vs absence of plural marking, not the particular marker used. A series of eastern texts from the twelfth to the fifteenth century will indicate the direction of change. The figures below are based on samples from *Peterborough Chronicle* (1154), Chaucer’s *Treatise on the Astrolabe* (1381), *The Grocers’ Ordinances* (1418) and a selection of Caxton’s prologues (1470s). This sequence is of course a kind of proxy for a ‘real’ history: there is no claim implied that any earlier language is the ancestor of any later one, except in *type*.

(51)	<i>Plural marking on the verb</i>	
	% -en	% zero
	PC 1154	95 5
	Astrolabe 1381	84 16
	Grocers’ 1418	52 48
	Caxton Prol 1473	28 72

By the late fourteenth century, the London area had a stable and simplified conjugation:

(52)	<i>present</i>		<i>past weak</i>		<i>past strong</i>	
	sg	pl	sg	pl	sg	pl
1	-(e)	-e(n)	-(e)	-e(n)	-∅	-e(n)
2	-(e)st	-e(n)	-(e)st	-e(n)	-(est)	-e(n)
3	-(e)th	-e(n)	-(e)	-e(n)	-∅	-e(n)

Number marking continues to decrease, and is finally lost in the early sixteenth century, with one short-lived exception, a new plural in *-(e)s* (Section 2.7.7.4).

During the ME period the northern present third singular in *-(e)s* begins to move south, and shows an interesting sociolinguistic complexity. For fourteenth-century Londoners it can be a northern stereotype: Chaucer uses it for comic purposes in the Reeve's Tale, by having his northern clerks say *gaa-s* instead of *goo-th*, etc. (Northern vowels are also part of the stereotype.) But *-(e)s* was also available for neutral uses. In early works (*Book of the Duchess*, ?1370), Chaucer uses it to rhyme with noun plurals:

- (53) And I wol give him al that fall-*es*  
To a chambre, and al hys hall-*es* (275–6)

The overtaking of *-th* by *-s* belongs to a later period (Section 2.7.7.4); but it was beginning to spread in the fourteenth and fifteenth centuries as an option. Some writers use it freely, others hardly at all.

### 2.6.3.8 The verb 'to be'

For reasons of space I will treat only the most complex and frequent of the OE 'anomalous' verbs, 'to be'; for the others see *Cambridge History of the English Language*, volumes 1 and 2 (Hogg, 1992; Lass, 1992) or any standard history.

Recall the set of paradigms making up the OE verb 'to be' (21). The tiny ModE remnant shows that this structure was dismantled at some point; but dismantling anything so complex and disorderly, itself a contingent survival of old fragments, is not likely to be very orderly. And indeed the early stages show considerable redeployment and variation. Here for instance is what we find in the language of hand D in Trinity College 323 (a final <d> in his scribal dialect may represent either /t/ or /θ/):

- (54) infinitive: ben 9x, be 1x  
pres 2 sg: ard 1x, best 1x  
pres 3 sg: (h)is 59x, bed 1x  
pres 3 pl: arren 1x, ben 1x, senden (< sindon) 1x

Similar variation in both stem-choice and endings is shown in Digby 86:

- (55) pres 2 sg: art 35x, best 1x  
pres 3 sg: (h)is 197x, beþ 3x

The numbers indicate where the system is heading; but there is considerable flux well into the next century. By the late fourteenth century it had begun to stabilise in the SEML into a paradigm that was still variable but considerably less prodigal:

(56)

	PRESENT		PAST	
	<i>ind</i>	<i>subj</i>	<i>ind</i>	<i>subj</i>
1	am	be	was	be
2	art	be	were	be
3	is	be	was	be
pl	be(n)/are(n)	be(n)	were(n)	were(n)

Throughout ME the indicative *be*-plural is far commoner than *are*. It is not clear what controls the variation, but there seems a slight preference for *be* in subordinate and negative clauses. Except for plural *be* and second singular *art*, the paradigm by the fifteenth century is the modern one.

### 2.6.3.9 The infinitive and participles

The Germanic infinitive is historically a neuter deverbal noun; OE *-an*, ME *-en* reflect the reduction of an old chain of suffixes (the Germanic ancestor is *\*-an-a-m* < IE *\*-on-o-m*). Under the general regime of weakening unstressed syllables, especially when they carried little syntactic information, the infinitive suffix reduced and eventually vanished. The same texts as were used in (51) tell this story up to the late fifteenth century:

(57)

	Infinitive marking	
	% -en	% zero
PC 1154	100	0
Astrolabe 1381	44	56
Grocers' 1418	25	75
Caxton Prol 1473	2	98

Note that the loss of endings is morphologically conditioned; though the eventual result is similar, the figures and trajectory here are quite different from those for the phonologically identical verb plural *-en*.

In ModE the gerund (verbal noun) and present participle are identical: 'I like drink-*ing*' (gerund), 'I am drink-*ing*' (participle). In OE they were not: while *-ing* (~ *-ung*) was a common abstract noun suffix, the present participle ended in *-ende* < *\*-and-i*. It is not clear how the merger came about, but one element was the development of a new southern participle ending *-inde*, which spread into the midlands by the thirteenth century. One might say loosely that it is 'not very far' from *-inde* to *-inge*; whatever the motivation, the variation patterns in the earliest SWML texts show *-ing* encroaching on the range of the participle. Here is a sample from three scribal languages (two in one MS), showing one conservative and two variably innovative patterns:

- (58) Cotton Caligula A.ix, (Lazamon A), hand A: -inde 5x, -iende 1x  
 Cotton Otho C.XIII (Lazamon B): -ende 2x, -inde 2x, -ing(g)e 2x  
 Cotton Caligula A.ix, (Lazamon A), hand B: -ende 1x, -inde 1x, -inge 1x

There is still variation in the fourteenth century. The Chaucerian consensus has *-ing(e)*, while the contemporary Gower prefers *-ende*, except if a rhyme on *-ing(e)* is needed. Some more southerly varieties have exclusive *-inde*. The *-nd-* type disappears during the fifteenth century.

The past participle was originally a deverbal adjective, formed with one of the two IE suffix chains *\*o-to-/\*o-no-*. The former was generalised in Germanic to the weak verb, the latter to the strong. In ME the weak participle retained (as it still does) its final *-d* or *-t*; the strong participle was more variable, and over the period more and more variation appears, with *-en/-el-Ø* often appearing in the same text. The major transformations in the past participle (as in all parts of the strong verb) occurred in the sixteenth to eighteenth centuries.

## 2.7 Early Modern and Modern English, c.1450–1800

### 2.7.1 Introduction

The period from about 1550 allows a new kind of historiography, particularly in phonology. For the first time we have extensive native grammatical description, both phonetic and morphosyntactic, as well as sociolinguistic commentary. The phonetic description is controversial and often difficult; but the best of it is so good that we feel for the first time (I think without delusion) that we have a sense of what English might have sounded like. My exposition will be based mainly on a selection of these sources, though for morphology I will also use the standard range of textual materials.

### 2.7.2 Phonology: the Great Vowel Shift

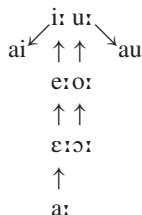
Here is what we get if we line up the late ME long monophthongs and their rather idealised late nineteenth-century standard reflexes:

- (59) i:—bite—ai  
 e:—meet—i:  
 ε:—meat—i:  
 a:—name—e:  
 u:—house—au  
 o:—food—u:  
 ɔ:—bone—o:

By the 1890s, some scholars had noted that this apparently random set of developments had a striking conceptual geometry. Each non-high long vowel raises, and the two high ones, which ‘have no place to raise to’, diphthongise. This can

be visually represented in the famous diagram that appears in virtually every textbook on the history of English:

(60) The Great Vowel Shift



This icon is traditionally called the Great Vowel Shift (GVS). For close to a century it has been pivotal to treatments of post-ME phonology. It also marks a separation of the trajectories of the long and short vowels. If the GVS affected only the long vowels, it is clear why the members of the alternations produced by the early ME quantitative changes (Section 2.5.2.1) have drifted so far apart phonetically (e.g. why we have /ki:p/ vs /kept/ rather than /ke:p/ vs /kept/, etc.). The apparently less systematic changes of the short vowels will be treated separately (Sections 2.7.4 and 2.7.4.3).

The GVS as presented here, and as typically described in histories of English, appears to be an *event*: a chain-like transformation of the whole long vowel system. But it is not an ‘event’ in the usual sense; it is a *result*. The changes are spread over more than two centuries, and there are at least two distinct subshifts. The first (fifteenth to sixteenth century, though with stirrings as early as the thirteenth) involves the high and high mid vowels; the second (late seventeenth century) the low mid and low vowels. (There is an enormous controversial literature on the GVS; I simply present my own position here, since I lack the space to detail even the outlines of a century of debate. For summaries see Stockwell & Minkova, 1988; Lass, 1988, 1997: ch. 1, 1999.)

But if the GVS is a kind of ‘musical chairs’ effort, with the vowels following each other around a notional ‘vowel space’, the collapse of ME /e:/ and /ɛ:/ in /i:/ breaks the pattern. Though to be fair, a tiny scatter of /ɛ:/ words stay at expected /e:/ or thereabouts in southern English (*break, yea, steak, great, drain*), and the merger is much weaker in many Irish dialects.

There is another difficulty, not so obvious at first: the standard diagram proposes a change /i:, u:/ > /ai, au/. Dialect-internal changes this large do not generally happen. In southern English however the modern values were not reached until the nineteenth century. To clarify, I first interpolate the situation in the mid-sixteenth century, as described by the English phonetician John Hart in *An Orthographie* (1569), perhaps the most important phonetic source for that period (see the next section):

(61)

	ME	1569	19th c.
bite	i:_____	ɛi_____	ai
meet	e:_____	i:_____	i:
meat	ɛ:_____	ɛ:_____	

name	a:_____	a:_____	e:
house	u:_____	ɔu_____	au
food	o:_____	u:_____	u:
bone	ɔ:_____	ɔ:_____	o:

Not only have *meat* and *meet* not merged; the lower mid vowels and /a:/ have not shifted at all. I now interpolate two further stages of development, exemplified by John Wallis' *Grammatica linguae Anglicanae* (1653) and Christopher Cooper's *The English Teacher* (1687):

(62)	ME	1569	1653	1687	19th c.
bite	i:_____	ɛi_____	əi_____	ʌi_____	ai: bite
meet	e:_____	i:_____	i:_____	i:_____	i: meet, meat
break, meat	ɛ:_____	ɛ:_____	e:_____	e:_____	
name	a:_____	a:_____	ɛ:_____	e:_____	e: name, break
house	u:_____	ɔu:_____	əu_____	ʌu_____	au: house
food	o:_____	u:_____	u:_____	u:_____	u: food
bone	ɔ:_____	ɔ:_____	o:_____	o:_____	o: bone

So 'the GVS' is really a diagrammatic summary of two temporally extended processes: early raising of the high mid vowels with diphthongisation of the high ones, and later raising of the low mid and low vowels. Then a second raising of ME /ɛ:/ leads to merger with /e:/, hence modern /i:/; but since this does not go to completion, it also leads to a split in ME /ɛ:/, which produces some merger with ME /a:/, and later with ME /ai/ (*day*).

This highlights an important conflict between the nature of history and the preferences of historians: *apparent historical patternedness and directionality are typically accidental*. They are results of the coming together over time of processes that have no particular 'conceptual' relation.

### 2.7.3 The mid-sixteenth-century state of play: John Hart's testimony

Until perhaps the end of the nineteenth century, and then only rather broadly, there is no agreed-on standard English phonology. Grammarians argue about what varieties of English should be taken as 'the best'; but the varieties on close examination are themselves corpora of variants, often – in the same geographical and social environments – quite different, even in matters as basic as what rhymes with what. In the following sections I will treat my authorities (the sixteenth- to nineteenth-century grammarians) more or less as I did the individual early ME scribal languages. Each is a personal sample of a possible type among a welter of variants; with hindsight we can see that some died out, others survived, and still others contain a mixture of doomed and successful features.

Let us take John Hart as our first witness:

## (63) John Hart's vowels (1569)

i: i	u u:
ε: ε	ɔ ɔ:
a: a	
εi ui ɔi iu eu au ou	

(64) *Keywords*

SHORT: /i/ *it, fill*; /ε/ *bed, breast*; /a/ *rat, bath, arm*; /u/ *full, love, southern*;  
/ɔ/ *god*

LONG: /i:/ *meet, be, week*; /ε:/ *lead, meat, leaf, day*; /u:/ *food, good, flood, wood*; /ɔ:/ *bone, nose, own, know, dough, daughter, grow, sought*; /a:/ *name*

DIPHTHONGS: /εi/ *bite, hide, child*; /ɔi/ *joy*; /ui/ *poison*; /au/ *law, all*; /εu/ *dew*; /iu/ *due, flute*; /εu/ *dew*; /ɔu/ *out, bound*

Note that there has as yet been no qualitative split between any of the long/short vowel pairs. (This is controversial: see Section 2.7.4.1.)

## (65) John Hart's consonants

Labial	Dental	Alveolar	Palatal	Velar	Glottal
p, b	t, d		tʃ, dʒ	k, g	h
f, v	θ, ð	s, z	ʃ		
m	n				
		l, r			
w			j		

(66) *Keywords* (relevant consonants in boldface)

STOPS: /p/ ***path***; /b/ ***bath***; /t/ ***tell***; /tʃ/ ***chin***; /dʒ/ ***edge, joy***; /k/ ***kin***; /g/ ***gold***

FRICATIVES: /f/ ***father***; /v/ ***virgin***; /θ/ ***thigh***; /ð/ ***thy***; /s/ ***sing***; /z/ ***zodiac***; /ʃ/ ***ship***; /h/ ***house, night***

NASALS: /m/ ***man***; /n/ ***nose***

LIQUIDS: /r/ ***rat, for*** 'for'; /l/ ***love, all***

SEMIVOWELS: /w/ ***water***; /j/ ***yoke***

I replace /x/ with /h/ to indicate that [x] does not appear in this dialect, and that there is now a distinctive glottal place of articulation, rather than a symmetrical fricative system with the velar slot filled. For Hart the postvocalic consonant in 'night' (which he writes <neiht>) is the same as the initial one in 'hand'.

## 2.7.4 English vowel phonology, c.1550–1800

### 2.7.4.1 ME /i/ (*bit*), /u/ (*put, cut*) and shortened /o:/ (*good, flood*)

In Section 2.7.3 I showed Hart's reflexes of ME /i, u/ as qualitatively identical to his long /i:, u:/. Hart says this explicitly: in his transcriptions he subpuncts the long member of each pair: 'when the vowell shall be longer *in the same sound* . . . I vse a pricke vnder ech' [my emphasis]. Since he makes no exception for short <i, u>, I assume that pairs like *did/teeth, book/do* had [i/i:], [u/u:], not as in ModE [ɪ/i:], [ʊ/u:]. This is not a widely held view; the

majority opinion is that Hart must have been ‘mised’ by his knowledge of Latin, where *i*, *ī* and *u*, *ū* were assumed to differ only in length, and projected this model onto the quite different English state of affairs. But Hart’s agenda was *phonetically* (distinctly not ‘phonemically’) based spelling reform, and he had a remarkably acute ear for quite non-Latinate distinctions. He even insisted on distinguishing [ð] and [θ], which no English spelling system has ever done, and reported aspiration in voiceless stops. In most particulars his ear was so good that I see no reason not to take him at his word. (For the controversy see Lass, 1989, vs Minkova & Stockwell, 1990, and Lass, 1999: 3.4.1.3.)

The native phonetic tradition bears this out. Virtually all sixteenth- and earlier seventeenth-century grammarians (as late as Wallis, 1653) give *beet/bit*, *pool/pull* as pure length pairs. Cooper (1687) is our first modern-looking witness: *win* has a short version of the *wean* vowel /e:/, and *pull* a short version of *hope* [o:]. While he does not describe centralisation, he makes it clear that these vowels are not high (as they are still often mistakenly described) but mid. I read the evidence as saying that lowering and centralisation do not date to Old or Middle English as the handbooks assume, but only to the seventeenth century.

Southern (types of) ModE dialects have one more short vowel than ME: both older /ʊ/ and new /ʌ/ are possible reflexes of ME /u/ (*put*: *cut*). This split first appears in the 1640s. Richard Hodges (*The English Primrose*, 1644) distinguishes the vowel in *wool*, *pull* from that in *son*, *us*, and takes the first as the short version of the vowel in *pool*. Hodges does not describe the new *son* vowel, but Wallis does, if unclearly; he calls it ‘*u* obscurum’, and it appears to be mid and centralised, and perhaps weakly rounded – but in any case distinct from the *pool* and *pull* vowels. Three decades on, Cooper’s vowel is opener and unrounded. It is customary to represent the higher values like Wallis’ as [ə], and the lower ones like Cooper’s as [ʌ]; but neither of these symbols is really precise. The first good description of this vowel comes in the late eighteenth century, in Abraham Tucker’s *Vocal Sound* (1773). Tucker describes a ‘straitning made at the throat by drawing back the root of the tongue’; he also notes that if you ‘slide your finger under your chin’ while making this vowel, ‘you will feel the finger pushed downwards, the gullet seeming to swell, occasioned by the tongue crowding in upon it’. This vowel is the same as his ‘schwa’: it occurs in both syllables of *London*, *covered*. The description matches the /ʌ/ and certain unstressed vowels of a rather conservative kind of current RP.

ME /u/ intersects the story of ME /o:/. The latter was subject to shortening at least twice during the eModE period: early shortenings merge with the lowered split of ME /u/ and have /ʌ/ (*blood*, *glove*); late ones merge with unlowered ME /u/ and have /ʊ/ (*foot*, *book*).

#### 2.7.4.2 /a/ > [æ] (*cat*)

If we discount later influences of the southern standards, [æ] for ME /a/ occurs ‘natively’ only south of a line from north Norfolk to Staffordshire, and is commoner in the east than the west. The midlands, the north, Scotland and

Wales have nothing higher than [a] except as importations. All the extraterritorial Englishes except some Irish varieties have [æ] or something higher. So [æ] is a southern development, with secondary spread due to London prestige.

Raised /a/ is sporadically noted in the early seventeenth century, but does not become the norm until mid-century. For Wallis ME /a/ is a ‘palatal’ vowel; the middle of the tongue is raised so that speakers ‘compress the air in the palate’ (‘aerem in Palato comprimant’). For Hart nearly a century earlier this vowel is made ‘with wyde opening the mouth, as when a man yauneth’.

Wallis has the same quality long for ME /a:/ (*bate, pale*); so the two original low vowels are still qualitatively matched, but raised. Thirty years later Cooper calls this vowel ‘a lingual’; it is ‘formed by the middle of the Tongue a little rais’d to the hollow of the Palate’, and is distinct from ‘e lingual’ (= ME /a:/ in *tale*), which has the tongue ‘more rais’d’. The two are different heights, and short *e* lingual is the value of ME /e/, i.e. [ɛ]. Wallis and Cooper then are describing something between [ɛ] and [a], and we can date the stabilisation of this [æ] to about the 1650s.

### 2.7.4.3 /ɔ/ > /ɒ/ (*pot*)

By the mid-seventeenth century ME /o/ had lowered to [ɒ]. It is Wallis’ lowest ‘guttural’ (= back) vowel. For Cooper it ‘hath the most open and full sound of all’. Lowering began no later than the 1650s, and was established by the end of the century.

In the conservative (or radical) version I advocate, the story of the short vowels from 1400–1690 is:

(67)	HIGH	i u	i u	i u	
	HIGH-MID	e o			ɪ ʊ
	LOW-MID		ɛ ɔ	ɛ	ɛ ʌ
	LOW	a	a	æ ɒ	æ ɒ
		1400	1550	1650	1690

### 2.7.4.4 Monophthongisation and merger: *daze, days, seas; no, know*

I choose different keywords here as a mnemonic for a complex group of changes. The precursors of the modern standards are heterogeneous and variable. The ModE reflexes of the ME lower long vowels and /ai, ɔu/ show an apparently simple pattern, involving partial or complete merger:

(68)		ME	ModE
	<i>seas</i>	ɛ:	i:
	<i>days</i>	ai	eɪ
	<i>daze</i>	a:	eɪ
	<i>know</i>	ɔu	əʊ
	<i>no</i>	ɔ:	əʊ

During the sixteenth and seventeenth centuries, however, at least three different and not always regular patterns coexisted in the southern proto-standard (not infrequently in the same speaker). Hart generally has /ɛ:/ for ME /ai, ɛ:/, /ɔ:/ for

ME /ɔ:/ and /ɔu/ ~ /ɔ:/ for ME /ɔu/. He also has two ‘advanced’ ME /ɛ:/ items, *read* and *leave* with /i:/, presupposing earlier raising to /ɛ:/ (see below). The younger Alexander Gil (b. 1564) criticises both monophthongisations half a century later (*Logonomia Anglica*, 1619), which suggests that Hart was exceedingly ‘modern’ for his time (or, in Gil’s interpretation, following the wrong models).

Until at least the 1620s, and in some cases up to the end of the century, the patterns available for these categories were:

- (69) Type 1 (Hart): {*daze* /a:/} vs {*days, seas* /ɛ:/}  
 Type 2 (‘general’ London): {*daze, days* /ɛ:/} vs {*seas* /ɛ:/ ~ /i:/}  
 Type 3 (‘standard’ London): {*daze* /a:/} vs {*days* /ai/} vs {*seas* /ɛ:/}
- (70) Type 1 {Hart – advanced}: {*no, know* /ɔ:/}  
 Type 2 (Gil – conservative): {*no* /ɔ:/} vs {*know* /ɔu/}

The partially merged (69, type 2) and the merged (70, type 2) have survived; the others have been deselected (see Lass, 1999: 3.4.2.1 for details).

### 2.7.4.5 The long mid vowels and /a:/: the *meet/meat* merger

By the last quarter of the seventeenth century the pictorial GVS (60) is complete except for minor details. ME /ɛ:, ɔ:/ have raised to /e:, o:/, and ME /a:/ has raised to /ɛ:/ and then to /e:/ by the 1680s. There is still extensive variability and no ‘codification’, but the collection of languages does show an overall shape. Here is a tabular summary of the main developments of the long nuclei to c.1650:

(71)		ME	1550	1650
	bite	i:	ɛi	əi/ai
	meet	e:	i:	i:
	meat	ɛ:	ɛ:	e:
	mate	a:	a:	a:/ɛ:
	day	ai	ai/ɛ:	e:
	out	u:	ɔu	əu/au
	boot	o:	u:	u:
	law	au	au	ɔ:
	know	ɔu	ɔu/ɔ:	o:
	no	ɔ:	ɔ:	o:

(It looks as if the vowels of *out* and *know* had merged in the sixteenth century; they did not, but it is unclear what the distinction was. Hart seems to suggest that the first element of the *know* diphthong was longer. At any rate the two categories do not fall together anywhere, and the first element of *out* unrounds quite early.)

ME /ɛ:/ (*meat*) and /e:/ (*meet*) have now merged in /i:/. This began around the 1650s, and took another century to complete. For some the merger is already an option in the sixteenth century (as in two words in Hart). In the 1590s Shakespeare (*Com. Err.* II.i.20–1) rhymes *these/seas* (ME /ɛ:, ɛ:/) almost certainly on /i:/; but nearly two decades later (*Henry VIII* III. i. 9–10) he can still rhyme *play/sea* (ME /ai, ɛ:/), most likely on /ɛ:/ or /e:/. A whole speech community and its history can coexist in one speaker.

In the late 1680s Cooper has mostly /e:/ for ME /ɛ:/, keeping *meat* separate from *meet*. But a decade later the anonymous *Writing Scholar's Companion* (1695) reports complete merger in /i:/. In the early eighteenth century Pope has both old-style unmerged rhymes on /e:/ (*weak/take, obey/tea*), and merged new-style ones on /i:/ (*see/flea, ease/these*). This continued till about the 1760s.

#### 2.7.4.6 ME /iu, ɛu/: the *due/dew* merger and some later developments

By late ME there were two front diphthongs in /-u/: /iu/ (*spew, due*) and /ɛu/ (*dew, beauty*: the first of each pair is native, the second French). Hart writes <bliu> 'blue' and <deu> 'dew', and the distinction is still visible a century later (Hodges, 1644). Wallis is the first source to show large-scale merger in /iu/, and it is apparently complete thirty years on (Cooper). Shortly afterwards, the [i] in many varieties is desyllabified to [j], and the [u] lengthens: [dɛu] > [diu] > [dju:].

In effect this introduces a new onset type, /Cj-/. Since the eighteenth century what we can call *j*-dropping has been common where the preceding consonant is /r, l, s/; except in some East Anglian dialects it remains after labials and velars (*music, cute*). Dropping begins in /rj-/ (*rue, true*), and is still variable until the 1780s. Deletion after /l-/ also begins during the eighteenth century, especially in clusters: *blue, glue*, etc. lose /j/ quite early. Loss also begins after /s/ (*sue*), though less commonly. After /t, d, n/ it is uniformly stigmatised: for Walker (1791) *noo, doo* for *new, due* are 'corrupt' Londonisms. This deletion has never caught on in the British standards, though it is now an American stereotype (inaccurate: many eastern and southern US dialects still distinguish *do* and *dew*).

#### 2.7.4.7 ME /oi, ui/ and /i:/: the *loin/line* instability

The diphthongs /oi/ (*joy, choice*) and /ui/ (*join, poison*), though usually spelled alike in ME, were nevertheless kept apart – if not always according to etymology – until well into the eighteenth century. Hart regularly writes <oi> for /oi/ and <ui> for /ui/, and has an occasional third value written <uei> = [wɛi] in a few words like the Dutch loan *buoy*. Hodges (1644) still retains two sets: one apparently has [ɔi] and the other [wɛi] (*boy, choice, joy* vs *boil, coin, point*). Wallis has [ɔi] in *boys, noise, toys*, and – probably – [əi] in *boil, oil, toil*; but he notes that the latter set can also have [ɔi]. And [əi] is Wallis' usual reflex for ME /i:/, so there is a partial merger which we can exemplify by *loin* and *line*.

Most of Cooper's <oi> words of whatever source have [ɔi] (thus merging with ME /i:/:), except for a specified list, including *oil* and *boil*, which have [ɔi]. Yet later in his book he lists *bile/boil, I'le/isle/oil* as homophones in [ɔi]. This is not a 'contradiction', but a typical state for a variable: when Cooper was writing the homophone list one might say that the merger 'happened to surface', and just *was* the state of his language – for the moment. There is no puzzling 'reversal of merger'. The merged and unmerged states coexist in the same speaker: he toggles between two languages.

The unstable partial merger persists until the late eighteenth century. Mather Flint (*Prononciation de la langue angloise*, 1740) has [ɒɪ] in *boy*, *destroy*, *oil* but [aɪ] in *joint*, *point*, *voice* (= *vice*) – and both in *employ*. Forty years later Robert Nares (*Elements of orthoepy*, 1784) gives [ɒɪ] in *boil*, *join*, *poison*. By the end of the century the merger was in retreat, if still acceptable; by the next century spellings like *bile*, *jine* were provincial stereotypes, and the standard dialects had restored [ɒɪ].

#### 2.7.4.8 Lengthening I: new /æ:/ (*far*, *path*, *plant*), /ɔ:/ (*horn*, *off*)

The long nuclei at c.1650 were:

(72)	i: meet	u: food	iu due, dew
	e: meat	o: bone	au out, ai bite
	ɛ: name, day	ɔ: bought, oi boy	

The modern southern standards are poorer by one contrast: *meat*, etc. have merged with *meet* or *mate*. They are also richer by at least five others: long monophthongs /ɑ:/ (*far*, *pass*), /ɛ:/ (*hurt*, *heard*) and centring diphthongs /ɪə/ (*fear*), /eə/ (*fair*), /ʊə/ (*poor*). The last four derive mainly from changes before /r/ and loss of /r/ (Section 2.7.4.9); /ɑ:/, while partly of this origin, has important additional sources.

ModE /ɑ:/ mostly continues lengthened and quality-shifted seventeenth-century /æ/; lowering to [ɑ:] took place during the eighteenth century, and retraction during the later nineteenth. Lengthening occurred before /r/ (*far*), voiceless fricatives except /s/ (*chaff*, *path*, *grass*) and irregularly before /ns, nt/ (*dance*, *plant*). Other minor sources include sporadic lengthenings, as in *father*, *rather*, and certain doublets of ME /au/ forms (*half*, *palm*). This lengthening is not normally treated unitarily in the handbooks; in 1990 I christened it ‘Lengthening I’ to give it an identity and distinguish it from the later lengthening of /æ/ before voiced stops and nasals (*bag*, *hand*), which is obviously ‘Lengthening II’ (see Section 2.8.2.2). This produces yet another ME /a/ reflex, [æ:].

Lengthening I first produces a new [æ:], later [ɑ:]. It also affects ME /o/ in the same environments (before /r/ in *horn*, before voiceless fricatives in *off*, *cloth*, *loss*); these, however, merge with ME /au/ (*all*, *law*) in /ɔ:/. Nowadays, lengthened ME /o/ before voiceless fricatives has largely ceded to /ɔ/, though some conservative varieties still have /ɔ:/. Both long and short versions of *off*, *cloth*, etc. have coexisted since the late seventeenth century; the ‘restoration of /ɔ/’ is not a reversed merger, but a prestige-shift in a set of coexisting variants, as with *meet/meat*, *line/loin* (Section 2.8.2.1).

The first good witness is Cooper (1687), who has:

(73)	ME /a/	ME /o/
	[æ] path, pass, bar, car	[ɔ] loss, off
	[æ:] passed, cast, gasp, barge, dart	[ɔ:] lost, frost, horn

Lengthening at this stage is favoured by a following cluster; there is no quality-shift. By the 1740s there is some lowering of lengthened /æ/, notably before /r/.

Flint (1740) has [æ] in *chaff*, [æ:] ~ [a:] in *bath*, *castle*, *half*, and [a:] only in *art*, *dart*, *part*.

It is hard to find two eighteenth-century sources unanimous about which words have the new vowel. By the 1780s its distribution for one type of speaker (but see below) is very close to modern, though there are still some lexical differences. Nares (1784) has ‘open A’ [a:] in *after*, *ask*, *ass* (now short), and *plant*, *advance*, *calm*, *palm* (on the last group see below). Data on ME /o/ is sparser: he has ‘broad A’ [ɔ:] in *off*, *cross*, *cloth*, as opposed to ‘short o’ [ɒ] in *moss*, *dross*.

But Nares’ rather modern-looking pattern is only one of many. There is a curious see-saw development: from about 1680–1780 the lengthened vowels expand; at 1780–90 a reaction sets in. John Walker (*A Critical Pronouncing Dictionary*, 1791), perhaps the most influential of the late eighteenth-century normative lexicographers, has [a:] always before /r/ in monosyllables (*car*), and <l> + labial (*balm*, *calf*). It was, he says, formerly commoner in *dance*, *glass*, etc., but is receding. To pronounce the <a> in *after*, *plant* ‘as long as in *half*, *calf*, &c. borders on vulgarity’.

This likely reflects a more extreme quality-shift in London and neighbouring provincial vernaculars – especially before /r/. In reaction, anything but [æ] (or perhaps [æ:]) was non-standard or ‘vulgar’. But the more general lengthening persisted, and was finally adopted.

Lengthened ME /o/ was also stigmatised; Walker says that just as it ‘would be gross to a degree’ to have the same vowel in *castle* as in *palm*, so ‘it would be equally exceptionable’ to pronounce *moss*, *frost* as if they were spelled *mawse*, *frawst*. A century earlier Cooper had simply noted a fact about vowel length; a half century on Flint noted a fact about length and quality; now the neutral fact has developed a social value. Presumably the change became salient enough to attract evaluation only in the later eighteenth century, when the lowering was identified by at least some writers with more advanced (hence ‘vulgar’) dialects.

#### 2.7.4.9 Vowels before liquids: /r, l/ and the nurse merger

Since OE times syllable-final /l/ has usually been dark (roughly [u]-coloured). This vowel-colouring could be extracted to the left, diphthongising preceding vowels, particularly [a, o]. By late ME most if not all dialects would have had [auʔ] for *all* and [jɔuʔk] for *yolk*. These fall together with existing [au, ɔu] (*law*, *know*), and end up with sixteenth-century [au, ɔu], and by later changes [ɔ:, o:] (so ModE *all/law* and *yolk/know*).

The story of /r/ involves both vowel insertion and quality changes. Some fifteenth-century spellings like *hyar*, *hyer* ‘here’, *desyar* ‘desire’ suggest [ə] insertion before /r/. This is still variably spelled: *flower*, *briar*, but *flour*, *fire*. Hart has <-er> in *fire*, *dear*, *here*, and Cooper’s homophone lists include *hire* = *higher*. Nares in 1784 remarks that *hour*, *power* are ‘discretionally disyllabic’.

Vowels before /r/ deserve a monograph; its effects are complex and unpredictable. Beginning in the thirteenth century we find sporadic lowering of /e/ > /a/, which gains momentum in the sixteenth. Queen Elizabeth I writes *clark*, *hart*,

*starre* (all with ME /e/); this change also yields doublets like the American vs British pronunciations of *clerk* (and of course the name *Clark*). Lowered variants, first with [æ], then with [æ: > a:], are stable in Germanic words like *heart*, *dark*, but in others (e.g. *mercy*, *heard*, *verdict*) persist only until about 1800, when they become, as deselected variants so often do, vulgar or rural stereotypes.

The developments of both the short and long vowels before /r/ (whether later lost or not) are complex; here I will treat only one development, because of its major effect on most later vowel systems. This is now usually called the *nurse* merger (after Wells, 1982); it can best be illustrated by lining up the reflexes of ME /VrC/ sequences in three increasingly innovative dialect types:

(74)		<i>ME</i>	<i>Scots</i>	<i>Eastern US</i>	<i>London</i>
	bird	irC	ɪrC	ə(:)rC	ɜ:C
	earth	erC	ɛrC	ə(:)rC	ɜ:C
	word	urC	ʌrC	ə(:)rC	ɜ:C

During the late seventeenth to eighteenth centuries, ME /ir, ur/ merge in /ur/, and are then joined by /er/. Cooper has /er/ intact, but remarks that many words with the sound *ur* are written *ir*: *bird*, *virgin* have the same vowel as *scourge*, *adjourn*. By the end of the eighteenth century we find either etymologically inconsistent splits or total merger: Thomas Sheridan (*A General Dictionary of the English Language*, 1780) has [ɛ] in *birth*, *chirp* and [ʌ] in *fir*, *fur*. Nares (1784) is the first writer showing the change complete: ‘*vergin*, *virgin*, and *vurgin* would be pronounced alike’.

By about 1800 the collapse is complete in England, usually to a vowel of the same quality as that of *bud*. Most writers do not mention lengthening, but it must have occurred before deletion of /r/, or *bird* and *bud* would be homophones. This new vowel, call it [ʌ:], gradually moves away from *bud*, and raises and often rounds.

## 2.7.5 English consonant phonology, c.1550–1800

### 2.7.5.1 Loss of postvocalic /r/

All English dialects have /r/, but not with the same distribution. *Rhotic* dialects allow it in all syllable positions, e.g. *red*, *very*, *star(t)*. *Non-rhotic* dialects have /r/ only before vowels, i.e. in the first two but not the last. But a word-final /r/ may ‘surface’ if the following word begins with a vowel: /fɔ:/ *far*, /ɔ:f/ *off*, but /fɔ:r ɔ:f/ *far off* (‘linking *r*’). In some varieties, etymologically or orthographically unwarranted /r/ may also appear as a hiatus-breaker after mid and low vowels, e.g. in *law and order* /lɔ:r ænd ɔ:də/ (‘intrusive *r*’).

Scotland, Ireland, SW England, a portion of west Lancashire, and most of the US and Canada are rhotic; the rest of England, parts of the US eastern seaboard and Gulf coast, South Africa, Australia and most of New Zealand are non-rhotic. So loss of /r/ is relatively late and geographically restricted. It is also gradual and complex.

This is in fact the second episode of /r/-loss. The first is sporadic, without lengthening, and starts around 1300. Typical relics are *ass* ‘arse’ (US, SW England) < OE *ears*, *bass* (fish) < OE *bærs*. These scattered survivors represent something once more widespread, as attested by occasional spellings from the fifteenth to eighteenth centuries, like *cadenall* ‘cardinal’, *passons* ‘persons’, *hash* ‘harsh’. From the late seventeenth century there are inverse spellings suggesting loss in unstressed syllables: e.g. *operer* ‘opera’, *Bavarior* ‘Bavaria’ (for citations see Lass, 1999).

Though there is evidence for /r/-loss from the fourteenth century on, it is not common enough for phoneticians to notice it for another three centuries or so. In the seventeenth century /r/ was intact in all positions, though for some speakers it had apparently begun to weaken after vowels. John Wallis in the 1650s describes what appears to be a retroflex trill in all positions; three decades later Cooper shows no change.

But there was a concurrent line of development, apparent a decade before Wallis: Ben Jonson in his *English Grammar* of 1640 remarks that /r/ ‘is sounded firme in the beginning of the words, and more liquid in the middle, and ends’. Presumably the ‘firme’ realisation is a trill; the other is probably an approximant or weak tap.

Half a century later, some speakers show a change: Mather Flint in 1740 observes that preconsonantal /r/ in some words is weakened, almost mute (‘fort adouci, presque muet’). But, like his Lengthening I (see above), this is lexically restricted. Three decades later, Abraham Tucker (1773) tells us that /r/ is lost in *partial*, *servant*, *word* and ‘wherever retained . . . you scarce hear a single reverberation of the tongue’. It is now apparently further weakened, but still only lost in some words.

And another two decades on, now 150 years after Jonson and a bit over a century after Cooper, John Walker (1791) says that ‘the *r* in *lard*, *bard* . . . is pronounced so much in the throat as to be little more than the middle or Italian *a*, lengthened into *baa*, *baad* . . .’. But he also claims that ‘this letter is never silent’. This is suggestive; you do not have to say that something never happens unless it commonly does. And sure enough, Walker then adds (disapprovingly) that in London postvocalic /r/ ‘is sometimes entirely sunk’. We can now finally talk seriously about /r/-loss: it is salient enough to attract a social valuation.

The virtual end of the story comes in the later nineteenth century. A. J. Ellis (b. 1814), arguably the greatest nineteenth-century English phonetician besides Sweet, notes (*Early English Pronunciation* pt IV, 1874) that in general postvocalic /r/ is not pronounced, but after non-low vowels is realised as [ə]. There is, however, ‘a liberty, *seldom* [my emphasis] exercised unless a vowel follows to add the trilled (r)’. That is, postvocalic /r/ still exists, but is rare; and linking /r/ is (as now) a ‘liberty’, not an obligatory sandhi rule. So about two centuries after Cooper, and nearly two and a half after Jonson, there are still traces of postvocalic /r/, both in its original form and as some kind of weak vowel, though the received standard could be said to be (mostly) non-rhotic.

### 2.7.5.2 Palatals and palatalisation

The only Germanic palatal was \*j; Old English added [tʃ, dʒ] < \*k before front vowels (*cinn* ‘chin’ < \*kinni), \*g before \*j (*mycg* ‘midge’ < \*mugg-ja), and [ʃ] < \*sk (*fisc* ‘fish’ < \*fisk). The incidence of /tʃ, dʒ/ increased during ME through French borrowings; some of these had initial /dʒ/, so its distribution became parallel to that of the others (e.g. *chase*, *joy*). During the early Modern English period there was a second palatalisation, of dentals rather than velars, which also produced a new fricative /ʒ/, completing the modern inventory.

Dental palatalisation first manifests in the fifteenth century, but is established only in the seventeenth. The results are new [ʃ, tʃ, dʒ] < [s, t, d] in weak syllables before [i, j] (*cautious*, *Christian*, *soldier*); some [ʃ] also come from initial /sj-/ (*sure*, *sugar*); and – variably as still in ModE – [tʃ, dʒ] < initial [tj, dj] (*tune*, *due*). In the seventeenth century palatalisation of [zj] produces [ʒ] (*vision*).

The first indications of [sj] > [ʃ] are fifteenth-century spellings like *sesschy-ons*, *oblygashons*. The sixteenth century still shows variation: Hart writes <-si-> for *-tion*, *-sion*, while Mulcaster (1582) has <-sh->. By the mid-seventeenth century, the change is nearly complete: Hodges has [ʃ] in *-(a)tion*, *-cian* and most *-sion* words (but see below). For many speakers, palatalisation of /t, d/ lags behind that of /s, z/: Hodges has [tj] in *Christian* and [dj] in *fraudulent* (as some still do).

Hodges is the first writer to describe [ʒ], which he calls ‘zhee’; it occurs (as is still the case) largely in *-si-* derivatives of Latin stems in *-d*. Thus *-sion* has [ʒ] in *circumcision* (L *circumcid-io-*); cf. [ʃ] where the Latin stem is in *-s* (*passion* < L *pass-io-*).

There is still hesitation in the 1780s; Nares notes [dʒ] in *grandeur*, *soldier*, but is uncertain if ‘it is a pronunciation of which we ought to approve’. But he accepts [tʃ] in *bestial*, *celestial* and, unlike any ModE variety, also in *courtier*, *frontier*. He also gives [ʃ] in *nauseate*, *Persian*, *issue*, and [ʒ] not only in expected *evasion*, *azure*, but also in *roseate*. Modern varieties would generally have slightly different patterns: the unpalatalised form is commoner in *nauseate*, *roseate*, *issue* (at least in Britain) and *azure*. As usual, both conservative and innovating lineages leave traces in the final disposition of a lexical class.

### 2.7.5.3 The story of /x/

As we have seen (Section 2.6.2.2) there are at least two ME treatments of old /-VxC/ rhymes. The commonest is retention of /x/ as [x] after back vowels (*bought*) and [ç] after front (*night*). Another option is loss, probably with compensatory lengthening. Retained [x] (but not [ç]) can become [f] (*dwarf*, *laugh*). It is likely that [h] existed as a weakened variant of /-x/ in ME too, but our first hard evidence is Hart’s 1569 description of the medial consonant in *night* as <h>, which ‘hath no sound but as you wold blowe to warme your handes’. Nonetheless the younger Alexander Gil (1619) is more archaic: he uses different symbols for initial and postvocalic historical /x/, <h> vs <h̄>. Spenser already shows complete loss in the 1590s (he rhymes *night* and *knight*, both with historical /-xt/ with

*quite*, *spite*, which have French /i:t/ – though he or his typesetters unsurprisingly spell them *quight*, *spight*). Postvocalic /x/ that has not become [f] is gone by the 1660s, and the only relic is initial [h-].

As we saw in Section 2.6.2.2, ‘dropping aitches’ was already established in OE and ME; it continued to be so until the later seventeenth century, and did not become a salient social variable until the mid-eighteenth century. Before that, the situation in all varieties, including the London standard, seems to have been what we find now in most non-Scots mainland vernaculars: initial [h-] is at least relatively less common than zero. But by the 1790s both omission of orthographic <h> and hypercorrect insertion were becoming stigmatised in London, and [h-] was eventually restored, one of the most successful efforts known of institutionalised spelling-pronunciation.

### 2.7.6 Stress

Throughout the early Modern English period, both the Germanic and Romance stress patterns expand, in different ways for different speakers. Both GSR and RSR are now more ‘general models’ than ‘rules’; the formal constraints loosen while variability increases. From the sixteenth century Romance vocabulary is increasingly treated as if it were Germanic, but with a simplification: the prefix/root distinction is often not observed, and words can be initial-stressed, whether or not they contain prefixes at the left or environments at the right that would fit the Romance pattern. Below are some examples, covering a period of over a century. Note that some of these have survived as the usual forms, others have not: in accentuation more than anywhere else one gets the impression of a large-scale lottery.

- (75) Peter Levins, *Manipulus vocabulorum* (1570): délectable, éxcusable, súggestion, dístribute  
 Christopher Cooper, *The English Teacher* (1687): ácademy, áccessory, ánniversary, nécessary  
 John Kirkby, *A New English Grammar* (1746): áceptable, áccessory, córruptible  
 Robert Nares, *Elements of Orthoepy* (1784): phlégmatic, tráverse, víbrate, ábsolute, ággrandize

On the other hand, many heavy finals which are now not stressed tended to attract stress in a ‘hyper-Romance’ pattern:

- (76) Levins (1570): parént, precépt, expért, manifést, stubbórne  
 Cooper (1687): colléague, advertíse, complaisánce  
 Nares (1784): alcóve, bombást, expért, pretéxt, salíne, recogníse

Beginning in the sixteenth century, parts of the Romance lexicon become increasingly sensitive to morphology, and a new sub-pattern develops: nouns tend to attract initial stress, and their cognate verbs final stress, producing the appearance of Germanic/Romance pairs with the same root: *óbject/objéct*, *súbject/subjéct*,

etc. Such forms are attested throughout the period, and the pattern remains stable but marginal. The ‘problem’ of how to stress polysyllables has not been solved, and there is no likelihood that it will be. English still, as in ME times, has two competing stress systems.

## 2.7.7 English morphology, c.1550–1800

### 2.7.7.1 Nouns and adjectives

The sweeping restructuring that characterised Middle English was largely complete by the end of the sixteenth century. What remains to be told, except for two major developments in the pronoun and verb systems, seems rather a set of minor tweakings.

By late Middle English the noun (except for genitive) was no longer case marked, and the former plethora of declensions had mostly been levelled under the *a*-stem pattern (*-s* in plural and genitive). The basic paradigm was, as now:

(77)		<i>sg</i>	<i>pl</i>
	‘common’ case	-∅	-(e)s
	genitive	-(e)s	-(e)s

Differences from the modern picture appear to be mainly in distributional frequency. There were more weak *-n* plurals: original *n*-stems like *eyen* remain through the sixteenth century. Some zero or *s*-plural nouns develop *n*-forms: *housen*, *shoon*, *horsen*. But except for the ‘poetical’ *kine* these are marginal by the mid-seventeenth century. Zero plurals were also commoner: the old ones like *deer*, *sheep* remain, and there are a few new ones like *fish* (OE *fisc-as*).

The adjective had become indeclinable by the sixteenth century, though we still find occasional attributive plurals, like Queen Elizabeth’s *clirrist-z days* ‘clearest-pl days’. The main change was regularisation of comparison. In OE and ME for the most part regular adjectival comparison was by suffix: the type *green/greener/greenest* belongs to Proto-Germanic. In later ME a periphrastic comparison began to appear, using *more* and *most* + adj.

ModE usually apportions suffixal and periphrastic comparison according to the length of the adjective: monosyllabic bases take *-er/-est*. Suffixed participles, however, even if monosyllabic, must take periphrasis: *more loved*, *\*loved-er*. Disyllables prefer periphrasis, but can often be suffixed: *hairy/hairier* ~ *more hairy*; though some derivational markers require periphrasis (*\*green-isher*, *\*grievous-er*). Trisyllabic and longer adjectives do not suffix: hence the comic effect of Alice’s ‘curiouser and curiouser’.

But usage was nowhere near this regular until the eighteenth century. Both textual evidence and grammarians’ comments up to then show periphrasis and suffixation as simple alternatives: in the Epistle to his *Orthographie* (1569) Hart writes *easilier*, *more brief* beside *more substantiallye*, *greater*, and this variation persists until the end of the seventeenth century without comment. By the first decade of the eighteenth century the modern restrictions are already emerging,

and there is a detailed discussion of what is or is not allowed in the grammar prefacing Dr Johnson's *Dictionary* (1755). But even then usage is not fixed: Johnson notes that 'all adjectives may be compared by *more* and *most*, even if they have comparatives and superlatives regularly formed [i.e. by suffix]'. But suffixation is 'commonly' used for monosyllables, whereas polysyllables 'are seldom compared otherwise than by *more* and *most*'.

### 2.7.7.2 The personal pronouns

After ME two major changes affected the pronoun system. One was simple: *it* developed a new genitive, *its*. The other was lengthy, complicated and still not fully understood – the singular *thou/thy/thee* paradigm was lost and *you* took on nominative and oblique functions for both numbers, while the old genitive plural *your* came to serve as both singular and plural.

The OE genitive of *hit* 'it', like that of *hē*, was *his*. The new *its* appears to be based on a grammatical analogy: *its* = *it* + (gen) -s. If -s is simply the non-feminine genitive ending, this is a natural interpretation. The new form was manufactured out of old materials in a conceptually elementary way. *Its* first appears in the later sixteenth century; the earliest examples given by the *OED* are from the translator and lexicographer John Florio, e.g. 'for *its* owne sake' (1598). We take first written attestations as *de facto* birthdays, even though of course a form like this (as opposed to a learned or technical term) must have existed in speech for some time before first being written. *Its* is not mentioned by grammarians until the 1630s, and until well into the seventeenth century seems to have been thought unsuitable for high style. The conservative Authorised Version of the Bible (1611) has only *his*, but Wallis gives only *its* in 1653.

Indo-European languages typically have a number opposition throughout the pronoun system. If English had developed as expected, it should have a second-person singular paradigm \**thou/thine/thee*, matching *you/your/you*, parallel to the other two persons. But ModE is asymmetrical: while first and third persons retain number, second person has only one set of forms for singular/plural. This is odd in two ways: lack of number in only one person, and the fact that the surviving form even in the nominative is an old oblique (*you* < OE dat/acc pl *ēow*).

The beginnings of this appear by the late thirteenth century. Here are two early examples (Cambridge Corpus Christi College 444, Genesis and Exodus: Norfolk, MS early fourteenth century; this scribe consistently spells initial /j/ as <g> in the OE style):

- (78) Quo seide ðe dat *gu* were naked  
 'who told *thee* that *you* were naked'
- Til *gu* bea-s eft in-to erðe cumen  
 'till *you* be-pres.2.sg again into earth come'

(Note the singular concord in the second example; instances of this occur throughout the sixteenth century.) Singular use of the second-person plural is probably

derived from French courtly practice (based on Latin conventions). That accounts for plural in singular address, but not for non-nominative in subject function: we would expect *ye* < OE nom pl *gē*.

During ME *you* begins to generalise as the ‘unmarked’ pronoun of address for both numbers in upper-class and courtly registers. At the same time *thou* (apparently normal lower-class usage) begins to develop special senses like intimacy (if used reciprocally) or contempt (if non-reciprocally). By Chaucer’s time *you* was well on the way to becoming neutral, and *thou* ‘marked’.

By the middle of the fifteenth century there was an explicit association of *thou* with intimacy and ‘equality’. This passage from Bokenham’s *Life of St Elizabeth* is worth quoting in full (emphasis mine):

- (79)           And so wele she groundyd was in loulynesse [= humility]  
                   That she nolde suffryn in no maner wyse  
                   Hyr maydyns hyr clepen lady nere maystresse  
                   Nere, whan she cam, ageyn hyr for to ryse,  
                   As among jentelys yt ys te guise,  
                   *Nere in þe plurere nounbyr speken hyr to,*  
                   *But oonly in þe synggulere, she hem dede devyse,*  
                   *As soveryns to subjectys be won to do.*

This neatly encapsulates the status function of *thou*: reciprocal use implies social equality, and non-reciprocal use (‘as soveryns to subjectys’) implies asymmetry of power. English at first appears to be on the way to developing an ‘intimate’ vs ‘polite’ system like that of German or French (*du/Sie, tu/vous*), where pronouns of address encode complex and stable rules for indicating status, power and solidarity. But what actually evolved was loose, unstable and pragmatically more subtle. The originally upper-class reciprocal *you* became the universal default, and *thou* was reserved for two special functions: marking (permanent or temporary) asymmetrical relationships, and as a general indicator of heightened emotional tone (positive or negative), intimacy, etc. But its use was also variably influenced by register, personal relationships, topic and other factors unconnected with status or power.

By the end of the seventeenth century, the grammarians reserve *thou* for special ‘affective’ uses: Cooper in his *Grammatica linguae Anglicanae* (1685) says it is used in ordinary speech only ‘*emphaticè, fastidiosè, vel blandè*’. But there is another important and interesting dimension, related but distinct, which emerges from a study of one type of text where personal interaction (and hence address) is patent: private letters, particularly to intimates like children or spouses.

Most pre-seventeenth-century correspondence is rather formal; but starting in the 1620s we get increasing numbers of intimate and personal letters preserved, which suggest how complex the second-person pronoun system becomes in its late stages. At first the usage may appear paradoxical: consider for instance this letter from Thomas Knyvett to his wife in 1620:

- (80) Sweet Harte I have sent by this bearer fourteen woodcockes and a brace of feasons . . . If *you* will, *you* may send them to my Lady Knyvett [his mother] . . . I came home on Friday nighte betimes sumwhat wery, but am very wel and doe hope to se *the* this weeke . . . so my deerest affection to *thyselve*; I . . . rest, *Thy* deerest Loving Husband Thomas Knyvett

While *thou* is the pronoun of normal address, there is a shift to *you* when the addressee's mother-in-law is mentioned. This might look like a joke, but there is a serious and interesting point involved. Here is a similar case, Henry Oxinden to his wife, at about the same time (1622):

- (81) I did write to *thee* by the Friday post . . . My mind is with *thee* howsoever I am forced to be absent from *Thee*. I see *thy* care and vigilance and thank *Thee* . . . I have spoken with Sir Tho: Peyton twice and find him in such passions as I have no manner of hopes of his assistance; he doth me twice as much hurt as good; some bodie hath incensed Him very much against me, *you* may guesse who hath done it, the partie being not far from *you*. Wherby *you* may the lesse wonder of the Indifferent Ladie's not giveing *you* a better answer . . . I am at more expence than *you* can imagine . . . I read *thy* letters over and over, for in them I see *thee* as well as I can . . . In extreme hast I rest *Thine* inexpressibly . . .

At this point the *thou/you* contrast has, for many speakers, become a deictic one: *you* is distal (distant from the speaker), *thou* proximal (speaker-oriented or speaker/addressee-dyad oriented). *Thou* is used when the topic is within the 'charmed circle' of a relationship, and restricted to an immediate, factual present. *You* is triggered (for regular *thou* users) by mention *inter alia* of mothers-in-law (archetypal 'outsiders'), strangers, business matters, social superiors, and unreal conditions (verbs of guessing, imagining, conjecture). But by the end of the seventeenth century non-users appear to outnumber users, and by the eighteenth *thou* is not an option in ordinary speech, though it remains in special registers like poetry and prayer.

### 2.7.7.3 Pruning luxuriance: 'anomalous verbs'

By late ME, the maximal strong verb paradigm had three grades (past plural had been lost). There are four main evolutionary options then for any verb (aside from the option of becoming weak):

- (82) Pattern 1: Historically expected vowel-grades: *sing/sang/have sung*  
 Pattern 2: Historical past pl or pp grade generalised to both past and pp:  
*sing/sung/have sung*  
 Pattern 3: Historical past sg grade generalised to past and pp:  
*sing/sang/have sang*  
 Pattern 4 ('crossover'): historical past vowel in pp and vice versa:  
*sing/sung/have sang*

All are well attested in the sixteenth to eighteenth centuries, though not uniformly for any individual verb or verb class in any given speaker's language; all except

pattern 4 survive for at least some verbs in the modern standards (pattern 4 is especially common in some vernaculars of seventeenth- to eighteenth-century origin, e.g. in the southern US).

One of the signatures of a standard language is supposed to be ‘codification’: development of an ‘authorised’ or ‘received’ form with minimal variation. But if this occurs it often does so only quite late (see further Section 5.2.6). The concept of a standard was commonplace in English from the sixteenth century; but the pruning away of variation and establishment of norms did not begin in earnest until the middle of the eighteenth. This is particularly clear in the development of the strong verb (and grammarians’ commentary, which from this period on is as much part of the story as the forms themselves). I will tell the story through the testimony of five seventeenth- to eighteenth-century grammarians who produced extensive lists of verb forms. For the purposes of a morphological history, these are roughly equivalent to the form inventories of individual manuscripts I used as evidence for the discussion of early Middle English variation and change. (The discussion in this section is based largely on Lass, 1994.)

(i) John Wallis (*Grammatica linguae Anglicanae*, 1653) devotes a chapter to ‘anomalous’ verbs – those that do not take the dental suffix (strong verbs and a few others). He notes first that the participial *-en* marker is variable: *written*, *bitten*, *chidden*, *broken* and *writ*, *bit*, *chid*, *broke* appear more or less at random (‘promiscue efferentur’); he gives no status labels.

Wallis reports immense variability, and not only in the past participle. In a section on ‘special anomalies’, he discusses nasal stems like *win*, *spin*, *drink* (OE class III), and others like *come*, *stick*, *run*. He notes that *u* appears in the past as well as past participle: *spun*, *drunk*, etc. (pattern 2). But many verbs also have pasts in *a*: *wan*, *began*, *sang*, *drank*. Some have *-en* in the past participle (*drunken*, *bounden*), and most have a weak or ‘regular’ form (‘forma analogia’) as well: *spinned*, *swimmed*. So a verb like *swim* could have the paradigms *swim/swam/swum*, *swim/swum/swum*, *swim/swimmed/swimmed* (or presumably any combination).

Another group has the old past vowel for both past and past participle: *take*, *drive*, *get* have past/participial *took*, *drove*, *got* (pattern 3). These may also retain the old participial vowel, with or without *-en*: *taken*, *driven*, etc. Other verbs also have *a* or *o* in the past: *bore/bare*, *spoke/spake*, *got/gat*.

(ii) Christopher Cooper, *Grammatica linguae Anglicanae* (1685). Wallis does not name the variety he is describing; Cooper defines his subject as the language one speaks if educated in the south, where the purest and most correct usage is the norm (‘purissima & emendata loquendi consuetudo norma est’). Unlike Wallis he has a codifying agenda; without written rules rather than mere oral learning the language will quickly change and disappear (‘fluctuare et citò evanescere certum est’). But despite his occasional normative posturing, he does not appear to suppress the variability in his data.

Cooper’s description is rather more elaborate than Wallis’, but we will be concerned with only a few classes. One is verbs that belong to his ‘first conjugation’,

and typically have pasts in *-ed*. But a special subset also have widely used alternative forms: there are two types of these, one historically weak but ‘irregular’ (*beseech-ed/besought*, *teach-ed/taught*, *catch’t/caught*), the other strong verbs, mainly from OE class III. Here we find not only strong variants, but typically more than one, as in Wallis. So *shine-’d/shon*, *sting-ed/stung/stang*. He appears to consider these verbs ‘basically’ weak, but with one or more strong variants; he prefers the *u*-pasts (a preference Wallis did not express), but notes the existence of *a* in *span*, *shrank* and some others, which he thinks are better avoided.

Cooper’s first conjugation is not only preferentially weak, but also lacks participial *-en*; his second conjugation, even more a mixed bag than the first, may or may not have *-en*, and at least one member also has a weak variant. Among the paradigms he gives are these (in this discussion he notes only the past participle, but the past can be deduced from a past participle either by dropping the suffix or just taking it as it is):

(83)	<i>present</i>	<i>pp</i>
	bid	bid-den/bade
	bind	bound-en
	chide	chid-en/chode
	rise	ris-en/rose
	speak	spok-en/spake
	strive	striv-en/strove/strave

A final group has neither *-en* endings nor weak forms, though some have only one past, others two: *fling/flung*, *find/found*; but *swim/swum* ~ *swam*.

(iii) John Kirkby, *A New English Grammar* (1746). Sixty years on, the picture does not appear very different. Kirkby gives paradigms for a number of strong verbs, without comment on preference. These verbs are simply ‘out of the common order’ (i.e. not weak). Here are some of Kirkby’s paradigms:

(84)		<i>past</i>	<i>pp</i>
	bear	bore/bare	bore/born
	drive	drove/drave	drove/driven
	shrink	shrun/shrank/shrunk	shrun/shrunk
	sing	sung/sang	sung
	write	wrote/writ	wrote/writ/written

So far it looks as if just about nothing has happened during the century since Wallis. But as usual history is not straightforward. Three decades before Kirkby we see a dawning dislike of formal luxuriance; the attempt to ‘ascertain’ and ‘fix’ the language had already begun in the reign of Queen Anne. I turn now to perhaps the earliest detailed attempt at ideological standardisation in a grammar of English.

(iv) James Greenwood, *An Essay Towards a Practical English Grammar* (1711). Greenwood’s verb paradigms are much sparer than those of Wallis, Cooper or Kirkby. While he does list alternant past and past participle for some verbs, he almost always describes one of the (usually only two) forms as ‘not proper or usual’. Greenwood’s listings are interesting; most of the forms he dislikes are in

fact the historically expected ones. Like many grammarians before the late eighteenth century, he tends to prefer old past plural or participial vowels for pasts. Here the dispreferred forms are marked with a following asterisk:

(85)	<i>past</i>	<i>pp</i>
bear	bore, bare*	born
break	broke, breake*	broken
drink	drunk, drank*	drunk
sing	sung, sang*	sung
win	won, wan*	won
write	writ, wrote	written

A serious problem for the historian of this period now emerges: how do we distinguish reporting of usage from the filtering of data through preference? The answer is that we can, but only with difficulty; there are cues in the writer's attitudes. The more normative he appears to be, the more likely the amount of variation actually present in the community is being underreported. On the other hand, given the richness of Kirkby's data and the poverty of Greenwood's three decades earlier, it is equally likely that we are dealing with quite different languages. But we see in Greenwood's attitudes (if not unequivocally in his forms) the beginning of what was later to become a programme of active purging of variation, which through the schools and other pressures apparently did act to reduce the available pool of forms.

(v) Robert Lowth, *A Short Introduction to English Grammar* (1762). Lowth discusses a great variety of 'irregular' verbs in some detail. For most he allows only one past and/or participial form; for others he gives a pair. Text-internal evidence suggests that he lists alternatives in order of preference; in (86) I separate these forms by commas:

(86)	<i>past</i>	<i>pp</i>
bear	bare, bore	born
break	brake, broke	broken
sing	sang, sung	sung
win	won	won
write	wrote	written

Lowth has more or less the modern paradigms. But his desire to normalise and prune and reorganise according to 'analogy' loses to usage in a few cases: each verb (almost) has its own history. And not all these histories are complete (or likely to be completed); at least two of the class III verbs (*sink*, *shrink*) still have both *a*- and *u*-pasts (though only *u*-participles). The picture is rather like that for stress alternants (e.g. *cóntroversy* vs *contróversy*): there is a relic core of variability at the heart of the most 'codified' varieties.

#### 2.7.7.4 Northern visitors: the -s ending in the third singular and plural

Aside from the reorganisation of 'anomalous' and strong verbs, the last major development in the verb system is the replacement of the old present third

singular *-th* ending by *-s*. The post-fifteenth-century evolution is built on two basic paradigm types:

(87)	<i>EML type</i>	<i>Southern type</i>
	1 -Ø	-Ø
	2 -st	-st
	3 -th/-s	-th
	pl -s/-n/-Ø	-th/-Ø

The third singular *-s* is originally northern (see Sections 2.6.3.7 and 5.3.3). By the fifteenth century, according to the *Linguistic Atlas of Late Mediaeval English (LALME)* (dot map 645), *-s* endings occur thickly in the north as expected, are common in Lincolnshire and north Norfolk, and occur in a few WML clusters as far south as Worcestershire and Gloucestershire (indeed the LAEME corpus shows a scatter in the SWML as early as the thirteenth century). The basic drift over time seems to be north to south, with *-s* entering London and later diffusing outward.

The modern results suggest a simple story: second-person singular keeps its original *-st* where it remains, the old third-person singular *-th* 'is replaced by' *-s*, and plural marking vanishes. We have already seen that things do not happen this way except by hindsight. The shift took a long time to complete, and (see below) it is not clear after a certain point that a *-th* form in a text actually means what it says. The story of the plural is also rather complex. (For quantitative and other details see Nevalainen & Raumolin-Brunberg, 2000.)

I begin with the singular. There is a gradual increase in *-s* in the fifteenth century, and an apparent explosion in the sixteenth to seventeenth centuries. By about 1600 *-s* is the norm in ordinary discourse. In Shakespeare, *-s* occurs mainly in verse, for metrical purposes, as in:

(88) With her that *hateth* [ʃx] thee and *hates* [ʃ] vs all (2 *Henry VI* II.iv.52)

*Doth*, *hath* are exceptions, and persist with *-th* long after other verbs uniformly have *-s*.

But a given language may show considerable variation, even without metrical constraint. Here is a not atypical example, from Queen Elizabeth's translation of Boethius:

(89) He that seek-*ith* riches by shunning penury, nothing car-*ith* for powre, he chos-*ith* rather to be meane & base, and withdrawe-*s* him from many naturall delytes . . . But that waye, he ha-*th* not ynogh, who leue-*s* to haue, & greue-*s* in woe, whom neerenes ouerthrowe-*s* & obscurenes hyde-*s*. He that only desyre-*s* to be able, he throe-*s* away riches, despis-*ith* pleasures, nought esteem-*s* honour nor glory that powre want-*ith*.

A sample of 200 present-tense third-person singular verb forms from this text gives the following picture (percentages rounded up: Lass, 1999: 3.8.4.2):

(90)	ALL VERBS		HAVE		DO		OTHERS	
	<i>-th</i>	<i>-s</i>	<i>-th</i>	<i>-s</i>	<i>-th</i>	<i>-s</i>	<i>-th</i>	<i>-s</i>
N	66	144	10	1	16	0	55	118
%	32	69	91	9	100	0	32	68

As expected, lexical identity is one of the controllers of the diffusion of change (and frequency may be involved as well): *do* and *have* behave differently from the rest. A similar distribution persists into the next century: Donne's sermon preached at Lincoln's Inn in 1618 *overall* has 89 per cent *-s* vs 11 per cent *-th*, but 100 per cent *-th* for *have* and 78 per cent *-th* for *do*.

These figures are what we would expect in a change of this kind; but there may be a kind of temporal skewing. It seems most likely that the distribution of spellings reflects an older situation, as it so often does. There is an important passage in Richard Hodges' *Special Help to Orthography* (1643) that deserves quoting in full, along with an extract from his homophone lists:

- (91) (a) . . . wee use to write thus, *leadeth* it, *maketh* it . . . &c Yet in our ordinary speech . . . we say *leads* it, *makes* it . . . Therefore, whensoever *eth*, cometh in the end of any word, wee may pronounce it sometimes as *s* and sometimes like *z*, as in . . . *bolteth* it and *boldeth* it, which are commonly pronoun'ct, as if they were written thus, *bolts* it, *bolds* it . . .
- (b) cox, coks, cocketh; clause, claweth, claws; courses, courseth, corpses; fleas, fleaeth, flayeth; Mr *Knox*, he knocketh, many knocks; reasons, reasoneth, raisins

(The homophone list illustrates some other properties of seventeenth-century pronunciation as well, e.g. incomplete *meet/meat* merger.)

By around 1500 plural marking is lost in the past, but still occurs in the present. Given the inputs in (87), the options were zero vs suffix, and among the suffixes a 'choice' of *-th*, *-n* or *-s*. Southern *-th* is attested sporadically into the eighteenth century; the midland *-n* becomes a poetical archaism after 1550, and probably does not reflect a genuine feature of the spoken language.

The *-s* plural marker, like the singular, is originally northern, but is relatively short-lived in the south. It first appears in the north midlands in the fourteenth century (McIntosh, 1983), and moves considerably further south in the fifteenth (*LALME*, dot maps 652–3). It is quite common in the London region by the sixteenth century, but disappears during the seventeenth. This *-s* is not usually a generalised present plural marker: it is largely constrained by the 'Northern present tense rule' (NPTR: see Schendl, 2000). In its later form (still current in Scotland and northern England) it is:

- (92) *ending*                      *condition*  
 -Ø                                if subject is a personal pronoun immediately to the left  
    of the verb: e.g. 'they *eat*'  
 -s                                elsewhere: e.g. 'the men *eat-s*', 'they *eat* and *drink-s*'

The NPTR was never fully generalised in the southern standards, but it was extremely common for a while, and quite characteristic, if in a slightly looser form, in the language of Queen Elizabeth, Beaumont & Fletcher and Shakespeare, to name three well-known users (examples from Schendl):

- (93) *Queen Elizabeth*: for wicked men *giue-s* this good turn to dignitie, that they  
*spot* them with their own infection  
*Beaumont & Fletcher*: Poets, when they *rage*, *Turn-s* gods to men  
*Shakespeare*: The people *knowe-s* it, And *have* now receiv'd his accusations

## 2.8 Plus ça change . . . The persistence of disorder

### 2.8.1 Preliminary note

As we approach the present our ability to construct good narrative history declines. There are two reasons for this. First, it happens contingently that very little of large-scale structural import seems to be going on in the areas this chapter is concerned with. Second, and equally important, we have too much data, too wide a spread of well-attested and well-studied varieties, to make the kind of generalisations that were fairly simple, if a bit dodgy, for Old and Middle English.

It only becomes apparent after a long engagement with the history of the language that the quality and quantity of our data-base shifts massively over time. And the less we know, the clearer the picture.

### 2.8.2 Progress, regress, stasis and undecidability

#### 2.8.2.1 The evolution of Lengthening I

Lengthening of ME /a, o/ in *pass*, *off*, etc. (Section 2.7.4.8) was first noted in the 1680s simply as a fact about southern English; for nearly a century it was apparently just that. But by the 1790s it was subject to prescriptive judgement – i.e. it had become a sociolinguistic variable. Both this normativism and the phonological and lexical variation that prompted it persist into the next century and well beyond.

The first good nineteenth-century discussion is by A. J. Ellis (1874: 1148). He cites among other sources a dictionary of the 1840s, which gives prescriptions for ME /a/ exactly like Walker's: [a:] only before <r, rC, lC>: *bar*, *calm*, *half*, but [æ] in the other Lengthening I environments, e.g. before voiceless fricatives and some nasal clusters (*chaff*, *pass*, *dance*). Ellis' own pronunciation (he was born in 1814) however seems much more modern, as does that of many other 'educated speakers'. The norm appears to be [a:] in all Lengthening I words; but there are variants, including unlengthened [æ], even before /r/, and sometimes lengthened but unshifted [æ:].

Avoidance of lengthened and lowered [æ] is tied up with the earlier lengthening and quality-shift before /r/; Ellis remarks that some speakers (especially

female) avoid [a:] through ‘fear . . . that if they said (aask), (laaf), they would be accused of the vulgarity of inserting an *r*’ (in the nineteenth century phonetic transcriptions were customarily put in round brackets; doubling indicates length). But in summary (or acknowledgement of the mess), Ellis says:

the words vary so much from mouth to mouth that *any* pronunciation would do; and short (a) would probably hit a mean to which no one would object. In a performance of *King John*, I heard Mrs Charles Kean speak of ‘(kææf) skin’, with great emphasis, and Mr Alfred Wigan immediately repeated it as ‘(kaaf) skin’, with equal distinctness.

He also gives anecdotal but interesting observations of individual speakers, whose social position indicates the sort of accents one might expect them to have: an Oxbridge professor has [a:] in *class*, [æ:] ~ [a:] in *classes*, and [æ] ~ [a:] in *dance*; an army officer has [æ] ~ [a:] in *staff*, and the whole range [æ] ~ [a] ~ [a:] in *class*.

Ellis says explicitly that he is attempting to describe a ‘received’ standard; but he does not have a ‘reducing’ agenda; he finds his received variety so variable that only a ‘generic’ pronunciation can be specified. There is so much variation that we have to be ‘content with a rather indefinite degree of approximation’. He sees, unlike many grammarians before, contemporary with and after him, no principled conflict between variability and ‘standardness’. This stance makes him a particularly valuable witness: he is under no pressure to under-report variation.

Ellis has little to say about lengthened ME /o/; most forms that ‘ought’ to have it do, and it is not as variable as ME /a/. But at roughly the same time, Henry Sweet (1877) has a short vowel in *cloth*, *cross*, *soft*, though it may lengthen before *th*, *s*, *f* to the vowel of *broad*, *more*: a perfect illustration of Ellis’ general point. He also allows for shortening in *glass*, *aunt*. Thus for Sweet’s corner of RP-shire, lengthening of /o/ already appears somewhat recessive, though no social judgements attach to the two values.

It is only as we approach the 1930s that something like the modern picture appears: Ida Ward (1929) describes more or less the current pattern of ME /a/ reflexes, but lengthened ME /o/ (except before historical /r/) shows a more complex picture. In *cross*, *off*, *soft*, a short vowel ‘probably . . . is used by the majority’, though ‘many educated speakers’ have a long vowel. She thinks that the long vowel ‘is dying out gradually’; ‘educated speakers who use [ɔ:] at the present day are mainly middle-aged, or conservative’. She also observes an element of lexical specificity associated with sociolinguistic judgements: *moss*, *boss*, *scoff* rarely have a long vowel, and in *toff* it is ‘considered Cockney’. Some speakers, she notes, have a long vowel in *cross* but a short one in *toss*. The two lengthenings have clearly parted company by the 1920s, with the short variants of ME /o/ largely re-generalized from some other lineage; the long ones remain in older speakers and as lexical fossils.

At the present time, the southern standard situation is more or less as follows. Both ME /a/ and /o/ are uniformly long before historical /r/. For ME /a/ length

and quality shift is the norm, but there is still an undiffused remnant: fluctuation between [æ] and [ɑ:] in *chaff*, *Basque*, *masque* (but not *mask!*), *plastic*, *Glasgow*, *transport* and some others. As for ME /o/, Wells (1982) notes that as of 1980, lengthened pre-fricative ME /o/ is ‘a laughable archaism of “affected” or aristocratic’ speech. In England in general (but not in South Africa, for instance), [ɒ] has become the norm.

This is really a very complicated and unsatisfactory history if one wants clear and unidirectional narrative (though by now I hope the reader has given up). The lengthening and quality shift of ME /a/ spreads and recedes and then spreads again; lengthening of ME /o/ spreads and recedes, and shows no signs of spreading again. What starts out as a unitary process eventually splits into two independent lineages, with one eventually ‘received’ and the other stigmatised to the point of disappearance.

### 2.8.2.2 Lengthening II

Superficially, the change I call Lengthening II can be stated this way: /æ/ > [æ:] before voiced stops, voiced fricatives and nasals except [ŋ]. This is a somewhat enigmatic change; we do not know when or where it began. The first mentions (as a marginal phenomenon in RP) come from around World War I (see MacMahon, 1998), but it must be much older than that, given its geographical distribution and cross-varietal idiosyncrasies. Lengthening II occurs in the speech of any living English speaker born and brought up south of the Wash, and in Australasian, South African and east coast varieties of American English; that is, it is a southern process. There is a ‘core’ change, a canonical pattern which all speakers appear to show:

(94)

æ	cap	cat	back	batch			hang		
æ:	cab	cad	bag	badge	jazz	salve		ham	man

But what surrounds this core is distinctly odd. The more detailed picture is not what ‘structuralist’ views of change and systems would lead us to expect; but it is characteristic of what close study of variation in actual texts tends to show. It sums up the spirit of this chapter to finish it with a change whose origins are obscure, and whose status is undecidable. Is it in progress? Has it partially diffused and then aborted? Is it even just one change? The apparent chaos of some aspects of early Middle and early Modern English is not restricted to ‘then’: we still have it now, in our ‘codified’ standards, and it ought to be central to the way we do history.

The lack of mention even in the writings of phoneticians as good as Ellis and Sweet makes one wonder if the change really manifested even in the nineteenth century; I would normally take the view that if Ellis and Sweet do not mention something, it was not there. But not only is this change found in all southern British

regional and extraterritorial dialects (which ought to suggest a *pre*-nineteenth-century origin); nearly the same lexical and grammatical irregularities – all of them failures of lengthening where it would be expected – occur in dialects of widely differing regional provenance. In some the exceptions are marginal; in others they are extensive enough to generate a new contrast. The internal shapes of and differences among systems showing Lengthening II provide an object lesson in the complexities of linguistic innovation, and the correlation I have been stressing between diversity in time and space. Here are some selected examples from three speakers: modern RP (b. 1950s), New York City standard (b. 1930s) and Cape Town standard (b. 1970s). In this display expected long [æ:] are unmarked, and unexpected short [æ] ('failures' of lengthening) have a following\*:

(95)		RP	NYC	CT
	can (aux)	æ:	æ*	æ*
	can (N)	æ:	æ:	æ:
	cannon	æ*	æ*	æ*
	has	æ:	æ*	æ*
	had	æ:	æ*	æ*
	Hadley	æ*	æ*	æ*
	ham	æ:	æ:	æ*
	hammy	æ*	æ:	æ*
	Samuel	æ*	æ:	æ*
	Pamela	æ*	æ*	æ*
	rabbit	æ*	æ*	æ*
	haggard	æ*	æ*	æ*
	cadge	æ*	æ*	æ*
	badger	æ*	æ*	æ*

The first thing to note is that the RP distribution is rather different from the other two: while New York and Cape Town have categorical failure of lengthening in auxiliary or potentially auxiliary verbs (*can*, *have*), RP treats them like (nearly) any other lexical items. The syllable rhyme in *can*, whatever its part of speech, is what triggers the change. In this sense RP is simpler than the two others. This lack of grammatical conditioning also suggests that the change is older there: it is typical for sound changes to be morphosyntactically and lexically conditioned in their early stages, and to generalise later.

We can also observe an unsurprising but not fully realised further conditioning: the likelihood of lengthening failing increases with syllable number (short vowels in *Pamela*, *rabbit*). This appears to reflect a well-known general English 'preference' for isochrony at word level: there seems to be a kind of 'ideal' length for a word, so that the more syllables there are the shorter each is likely to be. But this is only a tendency: lengthening fails in monosyllables as well, both across all varieties (*cadge*) and only in certain ones (*ham*).

This is just a single example of the kind of living historicity that characterises human languages, whether 'standardised' or not. Languages – regardless

of the ideologies that surround them – are spoken in real time by real humans, and the closer we get to the level of utterance, the more multistrandedness and stratigraphic complexity we find. The fact that only certain aspects of a language will be in flux at a certain time is what makes description possible; the certainty that at least some will be is what makes history possible. The confluence of the two is what makes the task of linguistic historiography both fascinating and eternally frustrating and productive of unease. And this is the way any intellectually respectable undertaking ought to be.