## Early sound changes of relevance to Modern English vowels.

1. In the prehistoric OE period, long vowels were shortened
a) before clusters of three consonants, and
b) before clusters of two consonants if at least two syllables followed in the word.

## Examples:

*sām- 'half' (cf. Old High German sāmi-) > sam- in samcwic 'half-alive', samboren 'untimely born', etc. [cf. ModE sandblind, reanalyzed by folk etymology]
bremblas 'brambles' < *brēmblas < *brēmlas, cf. sg. brēmel

gastlīcं ‘spiritual; spectral', cf. gāst 'spirit' [ModE ghastly, ghost]
bletsian 'to bless' < blootsian (attested in the late Mercian Rushworth Glosses) < *blœdsian (cf. derived noun bloedsung in the late Northumbrian Durham Ritual) < *blōdisōjan 'to sprinkle with (sacrificial) blood', cf. blōd 'blood'
Hlammaesse 'Lammas (August 1, the feast of St. Peter in Chains)' < Hlăfmcesse (also attested as a recompound) 'bread-mass' (so called because in England Lammas was also a harvest festival, and blessed loaves were distributed after mass)
Cristesmoesse 'Christmas', cf. Crīst 'Christ'
This was a "minor" OE phonological rule, affecting relatively few forms. It had already ceased to be fully automatic; for instance, the underlying form of the prefix 'half-' had been reinterpreted as /sam-/ (as we can see from the spelling: the form with a long vowel should have been "sōm-").
2. Possibly early in the10th century, and at any rate within the OE period, vowels were lengthened in the southern dialects
a) before a coronal sonorant which was immediately followed by a voiced coronal obstruent, and
b) before the clusters $m b, n g$ (which are also fully voiced and homorganic).

The rule probably failed to operate if a further consonant followed immediately, and perhaps if more than two syllables followed; i.e., change \#1 apparently acted as a phonological filter on the output of change \#2. It also
failed to operate in unstressed and weakly stressed syllables.
Thus the words that we spell (in conventionalized early WS orthography) as lamb, lang, land, findan, ald, wilde, eorl, beornan, eorðe became, by 1066, lāmb, lāng, lānd, fīndan, āld, wīlde, ēorl, bēornan, ēorðe respectively in the south. But the plural of $\dot{c} \bar{l} l d$ was $\dot{c} i l d r u$, and aldormann, englisc, hundred, etc. still had short vowels in the first syllable; so did under, scolde, etc.
3. Within the same time period the distinction between the fully unstressed vowels $a$ and $o / u$ was lost. A bit later, but certainly within the 11 th c ., the fully unstressed back vowel which was the product of that merger also merged with unstressed $e$. These changes are reflected in a massive confusion of inflectional endings in some late WS manuscripts.

Thus by about 1100 English had only one fully unstressed vowel, namely [ə], in posttonic open syllables.
4. In the 10 th or 11 th century the high front round vowels $y$ and $\bar{y}$ were unrounded to $i$ and $\bar{l}$ in Northumbrian and most of the Mercian area (though not in western Mercian); in WS and in the Severn valley the change did not occur. (In the southeast, including Kent, $y$ and $\bar{y}$ had already become $e$ and $\bar{e}$ a century earlier.) This change does not become clearly visible until after the conquest, when writing one's own local dialect becomes the norm. Thus (standardized) OE fyllan, hyll, synne, cyning, cyssan, pytt, fyrst, fyyr, bry$d, h \bar{y} d a n, m \bar{y} s$, etc. appear in northern and eastern Middle English as fillen, hill, sinne, king, kissen, pit, first, fir, brīd, hīden, miss, etc.; but in the south and southwest they are spelled vullen, hull, zunne, kung, kussen, put, vurst, vur, brud, huden, mus, etc., with the new French spelling " $u$ " for /ü/ and /ü:/ (while in the Kentish Ayenbite of Inwit we find, for example, zenne 'sin' and verst 'first').
[Note: probably $x$ and $\bar{e}$ were unrounded to $e$ and $\bar{e}$ in the northern dialects at the same time; in the southern dialects, and therefore in standardized OE, they had been unrounded at least a century earlier.]
5. In the 11th century the shortening rule (change \#1 above) apparently underwent a simplification of its triggering environment: instead of applying before clusters of three consonants, or two if at least two syllables followed, it now applied before
clusters of two consonants, or before a single consonant if at least two syllables followed ("trisyllabic shortening"). The consonant clusters that had triggered lengthening (change \#2 above) did not trigger this shortening rule; neither did /st/ (at least not consistently).
This sound change is the most important source of the long $\sim$ short alternation that appears in a large number of English inflectional and derivational sets of forms.
For instance, among class I weak verbs:

| Old English | Middle English (NE Midlands) |
| :--- | :--- |
| hȳdan, hȳdde | hīden, hidde |
| cēpan, cēpte | kēpen, kepte |
| fēdan, fēdde | fēden, fedde |
| mētan, mētte | mēten, mette |
| l̄̄̄dan, l̄̄dde | lē̃den, ladde (see below) |
| l̄̄fan, l̄̄fde | lęven, lavde (see below) |

In various derivational formations:
fïf(e), fifta fïve, fifte ('fifth')
wīs, wīsdōm wīs, wisdom
clǣne, clǣnsian clę̃ne, clansen (see below)
wrāp, wrēppu wrōth, wraththe ('wroth, wrath')
sūp, sūperne south (= sūth), sutherne
fūl, fȳlb foul (= fūl), filth
$\overline{\mathrm{u}}$, ȳtemest out (= ūt), utemest
In compounds:
hālig̀, hālig̈dæg g họli, halidei (see below)
frēond, frēondscipe frēnd, frendschip
gōs, gōshafoc gōs, goshauk
Of course the change also affected isolated words, e.g.:
āscian asken
Since the shortening of both $\bar{a}$ and $\overline{\mathcal{T}}$ gives $a$, it is clear that this change occurred before the rounding of $\bar{a}$ and before the merger of $c e$ with $a$. However, most of the synchronically derivable shortened forms were adjusted later in ME (cf. ModE led, left, cleanse, holiday); the original outcome is preserved only in relatively
isolated forms (ask, wrath) and forms with shifted meaning (e.g. the name Halliday). This rule continued to operate on forms that entered the language later (e.g. width, depth, divinity, legislate, bestial, chastity, ominous, profundity, etc.).
6. Except in the southeast, all the OE diphthongs were monophthongized as follows: $e a>e(>a$; see below $) \quad e o>[\ddot{0}]$, which $>e$ except in the south $\bar{e} a>\bar{e} \quad \bar{e} o>[\ddot{\mathrm{o}}:]$, which $>\bar{e}$ except in the south io $>i$; $\bar{\imath} o$ had already merged with $\bar{e} o$ except in the southeast $i e$ and $\bar{i} e$ had already merged with $y$ and $\bar{y}$, which developed as above Thus OE earm, wearm, wearb 'became', wearp 'threw', eart 'you are' appear in ME (NE Midlands) as arm, warm, warth, warp, art; OE drēam, bēan, hēap, grēat, dēad, dēap, ēare 'ear' appear in ME as dręm, bęn, hęp, gręt, dęed, dęth, ęre; OE heorte 'heart', heofon, steorfan 'die', feorr 'far', deorc 'dark', meodu 'mead' appear in (early) ME as herte, heven, sterven, ferre, derk, mede; OE trēo, dēor 'animal', dēop, bēof, cंēosan 'choose', frēond 'friend', bēon 'be' appear in ME as trē, dēr, dēp, thēf, chēsen, frēnd, bēn.

For io the most obvious example is OE siolfor, ME silver; see also below.
Because ie and $\bar{i} e$ occurred only in the WS dialect of OE, their reflexes are found only in southern (mostly southwestern) ME. For example: southwestern OE hīeran 'hear' > hȳran > ME huren (i.e., /hü:rən/) other OE hēran > ME hēren
and further:
southwestern OE ierre 'angry; anger' > yrre > ME urre (i.e., /ürro/) midland OE eorre $>\mathrm{ME}$ erre northern OE iorre $>$ ME irre
7. Around 1100 , after the above changes had occurred, $c e$ merged with $a$. A few examples are given above; more straightforward examples are extremely numerous, e.g.: OE bcer 'carried', smael, ceppel, bcet, wceter, bæec, bcep, cefter, heefde 'had', wces, hwcet, hrcefen 'raven' appear in (early) ME as bar, smal, appel, that, water, back, bath, after, havde, was, what, raven.

The merger of $e a$ with $c$, and then of $c e$ with $a$, eliminated a substantial complex of OE phonological rules.
8. In the 12 th century $\mathrm{OE} \bar{a}$ was rounded and raised to $\bar{Q}$ in the southern dialects; this change spread steadily northward, until by 1300 all the Midlands dialects (i.e., those north of the Thames and south of the Humber) likewise had $\bar{Q}$. Examples are very numerous; for instance, OE māra, sāriğ, hāl 'whole', hālig, hām, ān 'one', sāpe, bāt, $\bar{a} c$, rād, hlāf 'bread', $\bar{a} p, s n \bar{a} w$ appear in ME as $m \bar{o} r e, s \bar{\varphi} r i, h \bar{o} l$,
 $h \bar{a} n d, c \bar{a} l d$, etc. (see 2 above), was of course also affected, giving cōmb, lōng, $h \bar{Q} n d, c \bar{o} l d$, etc.
9. In OE postvocalic $\dot{g}$ and $w$ are best analyzed as consonants (because that is how they behave phonologically). In ME vowel $+/ j /$ and vowel $+/ w /$ sequences develop as units and so are best analyzed as complex nuclei ("diphthongs"). The details are not very important; what is important is that there were at first a large number of contrasting diphthongs, and that their variety was steadily reduced by merger. Examples: OE lig̀ep, wegं, dcėg, ryge 'rye', eowu, clawu appear in ME as līep, węi, dai, rīe, ęwe, clawe; OE Tīwesdag̀, twēgèn 'two', cā̀g, drỳg ge, flōwan, cnāwan, cnēow, fēawe are ME Tiwesdai, tweien, kęi, drīe, flowen, knowen, knew, feque.

Diphthongs which appear almost exclusively in French loanwords are qi (jqie, noise, etc.) and oi (joint, etc.); the only exception is boi, a word of unknown origin which appears also in the Frisian dialects. In many ME dialects French /ü/ and /ui/ were rendered by the diphthong $i u$ (mostly spelled $u$, e.g. in duke, June, etc.).
10. In the 13th century, short nonhigh vowels in the first (i.e., stressed) syllables of disyllabic words were lengthened when the syllable was open; the results were $\bar{e}, \bar{a}, \bar{Q}$. Since the rounding of OE $\bar{a}$ had already occurred, the newly lengthened o-vowel merged with it in $\bar{Q}$, but the newly lengthened a-vowel did not merge with anything. (The newly lengthened e-vowel merged with the reflex of OE $\overline{\mathscr{e}}$ in $\bar{e}$. .) Examples are very numerous; for instance, OE beran 'to carry', mete 'food', stelan 'to steal', specan, caru, talu 'account', macian, wadan, bapian, hopian, prote, nosu, boren are ME bęren, męte, stēlen, spęken, cāre, tāle, māken, wāden, bāthen, hōpen, thrōte, nōse, bōren.
11. Also in the 13th century, velar $g$ began to be dropped in postvocalic position; further
examples of diphthongs resulted. Thus OE nigon 'nine', stīgan 'to mount', wegan 'to weigh', ēage (Anglian $\overline{e g e}$ ) 'eye', flēogan 'to fly', sagu 'saw', $\bar{a} g e n$ '(one’s) own', boga 'bow', bōgas ‘boughs', fugol 'bird', būgan 'to bend' are ME nūen, stīen, węien, eie, fleien, sawe, qwen, bqwe, bowes, fūel, būen.
12. In the 14 th and 15 th centuries diphthongs also developed before the voiceless palatal and velar fricatives (which did not drop at the time). These diphthongs are still reflected in ModE spelling, e.g. weight, height, taught, brought, dough, bough; the differences in pronunciation between the vowels of these words demonstrate that the inventory of ME diphthongs was fairly large.

