Summary of Sound Changes up to c.1350 CE

1 Consonant Shifts

Grimm's Law / The First Germanic Consonant Shift

In the first millennium BCE, the following changes took place in Proto-Germanic in contrast with the other Indo-European languages:

- Aspirated voiced stops lost their aspiration: /b^h, d^h, g^h/ > /b, d, g/;
- Non-aspirated voiced stops lost their voicing: /b, d, g/ > /p, t, k/;
- Voiceless stops became fricatives: /p, t, k/ > /f, θ, x/.

Examples: Latin *piscis, edere, ager* $\hat{=}$ PDE *fish, eat, acre*.

The theory is far from accurate, as Verner's Law makes clear.

Verner's Law

A modification of Grimm's Law stating that voiceless consonants did **not** by default become fricatives but gained voicing; they did, however, become voiceless fricatives if immediately preceded by Indo-European word stress.

Examples: Lat.*pa'ter* $\hat{=}$ OE *fæder* but Lat.*'frater* $\hat{=}$ OE *brōþor*

High German Consonant Shift

A series of changes that took place in High German in contrast with the other Germanic languages between the fourth and ninth centuries CE. Most notably:

- voiceless stops following vowels > geminated fricatives: /p, t, k/ > /ff, ss, xx/
- voiceless stops initially, after /lmnr/, or when geminated > /pf, ts, kx/
- voiced stops sometimes lost their voicing: /b, d, g/ > /p, t, k/

Examples: PDE *ape, eat, make, pepper, two* $\hat{=}$ Germ.*Affe, essen, machen, Pfeffer, zwei*.

The different developments vary in robustness and regional spread.

2   Vowel Mutations

Front Mutation or *i/j*-Mutation

In the prehistoric or early stages of all Germanic languages except Gothic, back vowels were fronted and front vowels were raised if the following syllable contained an /i/ or /j/. The /i/ or /j/ was often lost at a later stage, so that one has to know the history of the word or word class to understand its form. This explains many of the "irregular" plurals in PDE, such as *mice*, *geese*, and *men*, as well as the vowel difference between German *fahre* and *fährt*, *stoße* and *stößt*.

/u/ > /y/: **mūsiz > *mȳsiz > mȳs* "mice"
/o/ > /e/: **fōtiz > *fētiz > fēt* "feet"
/a/ > /æ/: **brannjan > bærnan* "burn"
/a/ + nasal > /e/: **manniz > *menniz > menn* "men"
/æ/ > /e/: **læggjan > lecgan* "lay"
/e/ > /i/: **regnjan > rignan* "rain (verb)"; cf. *regn* (noun)

Breaking, Back Mutation, and Retraction

Breaking is whenever a monophthong (static vowel) develops into a diphthong (gliding vowel). If this happens under the influence of a back vowel in the following syllable, it is also an instance of **back mutation**; if it is caused by a following consonant or consonant cluster /l/ + cons., /r/ + cons., /x/ (often represented by <h>), or /w/, we simply refer to it as breaking. In Old English, the developments concerned are short /æ/ > /æa/ <ea>; short /e/ > /eo/; and short /i/ > /io/ (later likewise spelled <eo>).

In Anglian especially, the same conditions could lead to **retraction** instead, in which these same front vowels became /a, o, u/ rather than breaking.

Examples:

hefen > heofon "heaven" (breaking, back mutation)
ahta > eahta "eight" (breaking under the influence of /x/)
æll > all "all" (retraction under the influence of /lC/, here /ll/)

Various Middle English Vowel Developments

- /ɑ:/ > /ɔ:/ <o, oo>: *hām > hom(e), stān > ston(e)*
- /y/ > /i/: *cynn > kin; cyning > cining > king*
- /æ/, /ɑ/ > /a/ <a>: *fætt > fat*; *cat* /kɑt/ > /kat/
- /æa/ <ea> > /æ/: *bēam* /beam/ > *bem* /bæm/, *eahta* /eaxta/ > *eighte* /æxtə/
- /eo/ > /ø:/: /ˈheovon/ > /ˈhøvən/
- With all OE diphthongs gone, new diphthongs arise through breaking and vocalization

3   Changes in Vowel Length

Homorganic Lengthening

In late Old English, a sonorant (/l m n ŋ r/) followed by a stop produced in (almost) the same place came to cause lengthening of the preceding vowel, unless a third consonant followed.

Examples: *gold > gōld, word > wōrd, climban > clīmban, singan > sīngan, eorl > ēorl*

Shortening Before Consonant Clusters

In late Old English, this happened before clusters of three consonants only; in Middle English, it happened before two as well.

Examples: *gōdspell > godspell; cēpte > cepte*

Trisyllabic Shortening

In late Old English, the long first vowel in a trisyllabic word was shortened before clusters of two consonants; in Middle English, it happened before one as well. This explains PDE pairs of the type *impede/impediment; profane/profanity*.

Examples: *blētsian > bletsian; sūþerne > suþerne; dēorlingas > darlings*

Middle English Open Syllable Lengthening

In the thirteenth and fourteenth centuries, the long vowels in open syllables (i.e.syllables ending in a vowel) were lengthened.

Examples: *bacan > bākan > bake; takan > tāken > take; befer > bēver > beaver*