Sound Change: Types and Motivations

- change occurs regularly and systematically
- change and development of single speech sounds
- more word order for all V, S, O changed to SVO, not only for some elements
- change occurs with all sounds

Causes of sound change:
- articulatory simplification
  - most sound changes have a physiological basis = “ease” of pronunciation
- consonant deletion:
  - clothes
    - kloʊdz → kloʊz
  - fifths
    - fifθs → fifs

Transmission of languages across generations introduces changes

Sound Change: Causes and sequential changes

Sequential changes: likely vs. unlikely sound changes

Most common sound change: assimilation
- increasing efficiency of articulation through simplification of articulatory movements

Partial assimilation vs. Total assimilation:
- involves place or manner of articulation, can result in total assimilation

Sound Change: Assimilation

Place assimilation:
- Early Latin: imposibilis → late Latin: imposibilis
  - alveolar nasal + bilabial stop → bilabial nasal + bilabial stop
  - Early OE: slavepte → later OE: slavepte
  - voiceless bilabial + voice alveolar → voiceless bilabial + voiceless alv.

Palatalization and affrication
- a non-palatal sound (dental, alveolar, velar…) becomes palatal
  - velar stops /k/,/g/ → /ʃ/, /ʒ/

Assimilation across a distance:
- umlaut, results in front rounded /y/ and /ø/
  - gos (goose), plural, gośi → gośi → geese

Sound Change: Dissimilation

Dissimilation: one segment is made less like another
- less frequent than assimilation

Latin arbor → Spanish arbol, different dissimilation

Epenthesis: insertion of a consonant or vowel in particular environment

Early OE aemitig → later OE aemtig

Sound Change: Directions

Fortition vs. lenition (Strengthening vs. weakening)
  - hierarchy of strength: voiced higher than voiceless
    - stops higher than continuants
    - fricatives higher than approximants
    - consonants higher than semi-vowels
    - orals higher than glottals
    - front/back vowels higher than central vowels

Lenition:
- a) glottalization, e.g. in dialects /k/ → /h/
  - b) rhotacism /s/, /z/ → rhotic between vowels

Root /wese/ later: lenition /s/ → /r/

Sound Change: Weakening and deletion

Gemination vs. degemination
- geminates weaken to non-geminates
- stops weaken to fricatives
- voiceless sounds to voiced sounds (voicing)

Ultimate weakening/extreme lenition: deletion
- subject to weakening: especially intervocalic environments

Latin mittere (to put)
- Old Spanish maduro

Old Spanish madure
- Modern Spanish maduro

Epenthesis: insertion of a consonant or vowel in particular environment

Early OE aemtig → later OE aemtig

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Vowel epenthesis often preserves phonotactics of respective language
cf. Spanish /sk/- avoidance
Sound Change: Apocope and syncope

Vowels in unstressed syllables: susceptible to weakening or deletion (especially in neighborhood of stressed syllables)

Vowel deletion: commonly preceded by vowel reduction to short central /ə/

Apocope: loss of word-final vowel _V → ∅

cf. cura → cure

OE ME ModernE

name /name/ /name /∅/

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Consonant deletion: common sound change /kn/ as in knight, knee, knot, knit → /k/ gets lost

Syncope: loss of word-internal vowel _CVC → _CC_

cf. interest → [intrest/], policeman → [pli:sm´n], histr:

OE ME ModernE

stanas /stones/ /stones/ /∅/

Cluster reduction and haplology

Cluster reduction: deletion of consonants from consonant clusters CC → C
government → [g.vwamnt]

Haplology: loss of a syllable when next to identical or similar syllable
→ difficult to pronounce similar/same syllables as in tongue twisters,

She sells sea shells by the sea shore

library → [lu:bri] instead of [lu:bxrri]

Anglaland → England [´ngland]

Phonetic vs. Phonological Sound Change

Early stages of sound change: create a new allophone of existing phonemes

Split: • all phonemes of the same phoneme contrast due to loss of environment result of a split cf. English η

1) η was an allophone of /n/ before a velar consonant
2) ME: loss of g in word-final position after nasal consonant n
3) this leaves η in final position, cf. sing

phonological sound change: when allophone is no longer predictable

Merger: • two or more phonemes collapse into a single one, reducing phoneme inventory of that language

cf. Cockney, instances of /l/ change to /f/, therefore the phonemes /l/ and /f/ have become one, /l/, as in /fln/,

Similarly, /l/ and /v/ have become /v/ as in /svlv/

Phonological Sound Change: Sound Shift

Shift: systematic modification of series of phonemes

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Phonological Sound Change: Great Vowel Shift

The Neogrammian model: 2 principles

Neogrammarians: Leipzig school, ca. 1876-90, considers language as an individual phenomenon with physical and psychological properties

Brugmann, Osthoff, Debrück, Verner, Behaghel ("Junggrammatiker")

Two fundamental principles governing language change over time:
1. sound change
2. analogy

Sound change: processes operating at phonological level

Analogy: at the syntactic and morphological level

presupposes independence phonological and morphological level have different regularities

a) direction would be same for all members of speech community
b) same phonetic environments would yield same results

Neogrammian belief: phonological level is morphosyntax-independent → sound change rules are inherently phonological
The Neogrammarian model: Analogy

**Analogy**: a powerful force in language change
speakers perceive partial similarity between 2 forms on basis of meaning
even when there is no similarity in their actual forms
speakers change shape of a word to make it more like another word
that is related in meaning
→ relationship in meaning: meaning A : meaning B
form A : form B
but: form-meaning relationship is arbitrary

*quattuor* (Latin: 4)
*quinque* (Latin: 5)
early Latin: *quetuor*
*pentque* → regular change: *pinque*
/sp/ → /kw/
but: other basis than meaning may be possible: based on form

**Motivations of Analogy**

**Popular etymology**: bases on guesses of people about history of a word
on basis of partial similarities
• French *crévisse* → borrowed as OE *creviss*, single morpheme
analogy with words with 2 morphemes
  → folk version: *crayfish*
• French *berfrei* (movable siege tower) → borrowed as OE *berfry* (defensive tower)
• OE *earwicga* pronunciation: *earwidge* 
  wigge: lost as an independent word, association with to wiggle
  → folk version: *earwig*

**Neogrammarian theory**: sound change and analogy are basic components of
language change
• difference: analogy is concerned with relationship between
phonological and grammatical structure
speakers perceive partial similarity between forms on basis of meaning

1) **analogue change** (realigns existing material via redistribution)
2) **analogue creation** (produces new forms by extending existing form-function relationships)