

Lecture 3: Properties of Sound Changes

1. Neo-grammarian hypothesis

- Phonological change is regular and operates without exception at a given time and in a given speech community.
- Grimm's Law revisited: Verner's Law

[b ^h]	Skt. <i>b^harāmi</i>	b	bear
[d ^h]	Skt. <i>dad^hāmi</i>	d	do
[g ^h]	PIE * <i>g^hans</i>	g	goose
[b]	?	p?	?
[d]	Lat. <i>decem</i>	t	ten
[g]	Lat. <i>genus</i>	k	kin
[p]	Lat. <i>pater</i>	f	father
[t]	Lat. <i>tres</i>	θ	three
[k]	Lat. <i>cornu</i>	h	horn

- *p, *t and *k > (PGmc) *f, *θ and *x (velar fricative).
- Some exceptions > *b, *d, *g
- e.g. PIE **ph₂tēr* > PGmc **faðēr* (instead of expected **faþēr*).
- cf **b^hreh₂tēr* 'brother' > **brōþēr* as expected
- The solution: PIE accent - Sanskrit *pitā* versus *bhrātā*
- Sound-change is regular, we just have to look for the rules

2. Some extensions to the Neogrammarian Hypothesis

2.1. Non-regular changes

- Dissimilation

Lat. *anima* > Span. *alma* ‘soul’

Lat. *arbor* > Span. *arbol* ‘tree’

- Metathesis

Lat. *parabola* > Span. *palabra* ‘word’

Lat. *periculum* > Span. *peligro* ‘danger’

OE *bridd* > ME *bird*

OE *frist* > ME *first*

OE *þridd* > ME *third*

[but cf Hom Gk. πόληος > Att. πόλεως]

2.2. Analogy

- Eg. Latin has a regular dissimilatory change

[k^uo] > [k^uu] > [ku]

Hence Old Lat. *quom* vs. class. *cum*, etc.

But then we should have *ecus*, *ecum*, *equi*, *equo* etc.

The *qu* is restored to the nom. and acc. sg. by analogy

- Sturtevant’s paradox: Sound change is regular but produces irregularity. Analogy is irregular, but produces regularity

2.3. Lexical diffusion – sound change in action

- Consider the pronunciation of these words:

room

roof

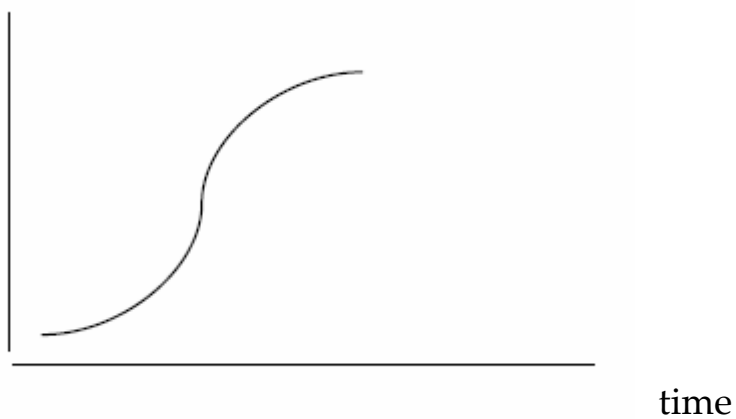
good

food

- Change takes place gradually
- Through lexicon and population
- Follows ‘s-curve’ pattern

no of words

affected



- But Neogrammarian Hypothesis only looking at change *post hoc*

3. Predictability

- Predictability of sound change is limited to direction
- Certain changes more likely than others
- e.g. [s] > [h] > [0]
- Greek ὑπερ vs Lat super
- Other direction implausible

4. Different types of sound change

- Conditioned: happen in specific environments
e.g. Verner's Law
Attic $\text{æ:} > \text{a:} / \{i, e, r\}__\text{ ; } \text{æ:} > \text{ɛ:} / (\text{elsewhere})__\text{$
- Unconditioned: no change to contrasts
e.g. Grimm's Law
- Split and merger
e.g. Latin rhotacism
 $[\text{s}] > [\text{z}] / __\text{V}__\text{$
flōs vs flōris
 $[\text{z}] > [\text{r}]$ (Split)
[r] already existed (Merger)
- [What about causa, cāsus? Two reasons:
 1. From -ss-, with degemination after a long V or diphthong
Hence earlier spellings caussa, cāssus cf Crāssus.
 2. Other examples are restored or preserved analogically: hence
positus for *poritus by analogy with situs.]

5. Historical order

- Sound changes can bleed other sound changes = remove phonemes from the sphere of operation of a subsequent change.

- Grassmann's Law (GL):

[+ASP.] > [-ASP.] / – (X) [+ASP.]

e.g. τίθημι from *θι-θημι

πέφευγα from *φε-φευγα

- GL is bled by a rule which deletes aspiration before an [s]:

[+STOP, +ASP.] > [-ASP.] / – s

*hεχ-σω > ἔξω

*hεχω > ἔχω

θρίξ vs τριχός

6. Assimilatory changes

- Adjacent segments become more similar
- Mechanically efficient
- e.g. ad-similare > assimilare;

[d] is [+DENTAL, +STOP], [s] is [+DENTAL, -STOP].

- Continuing process:

Lat. octo > It. otto 'eight'

Lat. septem > It. sette 'seven'

Lat. damnum > danno 'damage'

- Can be partial e.g. nasal assimilation in Greek:

[+NASAL] > [+NASAL, POSITION X] / __ [+STOP, POSITION X]

Hence inscriptional spellings

EM ΠΟΛΕΙ, ΕΓ ΚΥΚΛΟΙ, ΙΕΡΟΓ ΧΡΕΜΑΤΟΝ ΣΤΕΣΑΜ ΠΡΟΣΘΕ

- Need not be adjacent: vowel harmony

foot > feet

*fōt	*fōti	pre-OE
*fōt	*fōti	i-mutation
fot	fēt	OE
fu:t	fī:t	Great Vowel Shift
fut	fit	ME

cf. mouse > mice, goose > geese

- Palatalisation common change, C, [+FRONT] vowel
- Drags point of articulation of consonant further forward.
- Term used with three meanings: [k] > [c] or [k] > [kʲ] or any fronting
- Latin centum [kentu] > Fr. cent [s-], It. cento [tʃ]-, Sp. ciento [θ-]
- Also PIE *k^u > Gk. τ- (in most dialects) before a [+FRONT] vowel:

cf. Lat. *-que, quis* vs. Gk. τε, τίς.

7. Weakening (lenition) and loss

- Relaxation of articulatory effort: mechanically efficient
- Often includes voicing assimilation, or reduction of obstruction of airstream (fricativisation, flapping, rhotacism)

Example 1: Latin rhotacism

- *flōs, flōris*
- a-stem gen.pl. in -āsom > -āzom > -ārum.

Example 2: Greek [s]

- Between vowels weakened first to [h] then further to zero
- Hence -āsōm > -āhō > Attic -ōn, -ōν

Example 3: Latin word final [s] is lost after a short vowel

- Hence inscr. spellings:

Cornelio(s)

militare = militaris

- Common in Ennius
- Restored from end of C3 BC

Example 4: Latin simplification of clusters involving nasals and fricatives

- *consol* [kõnsol] > [kõ:sol] > [ko:sol], later [ko:sul]
- *ensor* [kěnsor] > [ke:sor] > [ke:sor]
- Hence inscr. spellings

cosol (whence standard abbrev. *cos.*)

cesor

cosentiont

- Cf. Lat. *mensis* > It. *mese*, Lat. *sponsa* > It. *sposa*.
- *n* spellings used historically, especially in official inscriptions.
- Leads to reintroduction of pronunciation of *n*
- But not uniformly reintroduced, leading to utter confusion:

Grammarians' Capers: '*omnia adverbia numeri sine n scribenda sunt, ut milies, centies, decies; quotiens, totiens per n scribenda sunt.*'

- Also hypercorrections eg. *thensaurus, occansio, Herculeus*.
- Lost nasal sometimes restored analogically
- Eg. in the perf. of *sumo*, *sum-s-i* [sumsi] > [sũ:si] > [sũsi]
- But *m* then restored by analogy with present, (with epenthetic *p*)

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