

Week 4: The regularity of sound change

1. The arbitrariness of the linguistic sign: implications for (sound) change

- Saussure: there is no intrinsic relation between the pronunciation of a word (its *signifiant* dimension) and its meaning (its *signifié* dimension) → each aspect can change independently of the other
- There are exceptions to Saussure's generalisation — “iconicity”, e.g. onomatopoeic *cuckoo* [kʊ'ku:] — while sound change is generally regular (see futher §4, below) in such cases, sound change may be blocked (cf. ME *doun* [du:n] PDE *down* [daʊn])
- Sound change is due to the influence of other sounds, and is normally “phonetically natural [that is to say] easy to understand in terms of the structure and movement of the speech organs” (Trask 1996:52)

2. Phonetic vs. phonological change

- Phonetic change does not (necessarily) have an effect on the phonological system of a language: it is the change in the individual sounds, e.g. the respective distinctions between [t] vs. affricated [tʰ] as in *top* vs. *tea* or [l] vs. [ɫ] as in *light* vs. *tile* do not serve to create meaning differences. As such, it is not a phonological opposition, but merely an allophonic one (at least for now! Smith 1996: Ch.5 emphasises how allophonic variation may lead to changes in the system). Compare It. *tappa* /tappa/ ‘stage’ vs. *zappa* /tʰappa/ ‘hoe’ and Scots Gaelic *baile* ‘town’ (with light *l*) vs. *balla* ‘wall’ (with dark *l*)
- The process that led to the PDE situation with respect to the pronunciation of /t/ is an example of what Trask means by “syntagmatic change” (1996:52), as opposed to “paradigmatic change” (ibid.:76) — a change to the system of phonological oppositions — which is the subject of Ch. 4
- The traditional term “sound change” lacks precision, or is at least ambiguous, referring either to the actual articulatory noises, or to the units that create contrasts in the system

- A famous example of a phonetic change that did not have an impact on the system of phonological oppositions is the rise of French uvular /r/ at the court of Louis XIV in Versailles in the 17th C.
- Phonological change occurs when the phonetic changes alter the possibility for signalling contrasts in the language.
- Contrasts can be acquired, e.g.:
 1. OE /u/ vs. /y/ <pre-OE allophonic variation of /u/ between [u] (normal pronunciation) and [y] (before high front /i/ or /j/; “i-mutation”, “umlaut”, “fronting”), see e.g.:

pre-OE **trumian* > **trymian* ‘strengthen’
**trymian* > OE *trymman*

→ The phonological change was a fact once the conditioning environment (high front vowel) was lost (cf. OE *trymman*) → phonemicisation (Smith 1996:80ff)
- ...but also lost: PDE *whine*, *which*, *whet*, *wine*, *witch*, *wet* all have [w], where it formerly had voiceless [ɰ] in the first three (as is still the case in Scottish English)

3. Classification of phonetic changes

3.1 General types of processes

- ASSIMILATION vs. DISSIMILATION
 1. Assimilation: most common phonetic process, e.g. /k/ > [tʃ] /__V_{front} (see OE *boc* Sg – *bec* Pl, /k/ > [kʰ] /__V_{front} (see *cool* vs. *keel*), Lat. -kt-, -pt > It -tt- → *noctem* vs. *notte*, *factum* vs. *fatto*, *septem* vs. *sette* → usually happens because of adjacency
→ “anticipatory” (“regressive”) vs. “perserverative” (“progressive”); former most common; OE pl. *bec* exemplifies latter
→ can also be both at the same time: Scouse *matter* with [s] for /t/ (cf. *pitch* **pi[s]ch*, *date* **da[s]*)
NB Understanding the *mechanics* of sound change is not the same as explaining why a change catches on!

2. Dissimilation: less common, motivated by avoidance of the so-called tongue twister effect, e.g. En. *pilgrim* <Fr. *pélerin* <Lat. *peregrinus* → /t/ > /l/
 → usually happens when sounds are *not* immediately adjacent

- LENITION (“weakening”) vs. fortition (“strengthening”): affects only consonants
 Consonants vary from strong to weak, depending on the amount of articulatory effort involved in their production:

geminate > simplex
 stop > fricative > approximant
 stop > liquid
 oral stop > glottal stop
 non-nasal > nasal
 voiceless > voiced

Lenition happens especially intervocalically (assimilation!), see e.g. standard En. *bu[t]er* > Cockney *bu[ʔ]er* (“debuccalisation”). More complex ex.: Lat. *catena* ‘chain’ > Sp. *cadena* (lenition on two dimensions)
 Lenition can go all the way to zero (“loss”/“deletion”), e.g. Lat. *regale* ‘royal’ > Sp. *real*

FORTITION, e.g. Lat. *Iulius* > Sp. *Julio*
 much less common → less obviously motivated in terms of economy of effort

3.2 Phonetic feature based changes

e.g. FRONTING, LOWERING, RAISING, AFFRICATION, DENTALISATION, etc.

3.3 Whole segment processes

- DELETION (LOSS)
 APHAERESIS: word-initially, e.g. En. *knee*
 SYNCOPE: word-medially, e.g. En. *chocolate*, *temporary*, *colonel*, Lat. *paupere* > Sp. *pobre* ‘poor’
 APOCOPE: word-finally Fr. *lit*, colloq. Du. infinitive ending *-en*

- “insertion”
 - PROTHESIS: word-initially, normally only vowels, e.g. Lat. *scala* > Sp. *escala* ‘scale’, Sp. *esquí* ‘ski’
 - EPENTHESIS: word-medially also has narrow sense of inserting a vowel /C__C (aka “anaptyxis”/“svarabhakti”) e.g. eLat *poculum* > Classical Lat. *poculum* ‘goblet’, Du. *film* ([filəm]), Jap. *baakuree* <En. *Berkeley*); which may be opposed to “excrescence”, inserting consonant /C__C, e.g. OE *æmtig* > PDE *empty*, PDE *prince* [prints]
 - PAROGOGE: word-finally, not common but when it occurs usually consonants and normally /C__ (EXCRESCENCE), e.g. ME *amonges* > PDE *amongst*
- METATHESIS: changing the order of phonemes in a word, PDE *wasp* < *wæps* ([wops] still around as a regional variant), Du. (in some speakers) *psychiater* > [sp], Lat. *miraculu* > Sp. *milagro* (**miraglo*) ‘miracle’
- HAPLOLOGY: loss of one of two consecutive identical / similar syllables, cf. PDE *simply* not **simple-ly* (cf. ME *simpleliche*)

4. The regularity of sound change

- sound change due to interaction with other sounds → every time the appropriate context is met the sound change should occur — “Regularity Hypothesis” (associated with the late 19th C. German school of the *Junggrammatiker* ‘Neogrammarians’) → “sound change is blind and exceptionless”
- normally sound change is indeed regular, e.g. Lat. > Sp. degemination (*cuppa* > *copa*) affected all geminate consonants
- some exceptions recognised by the Neogrammarians, under the name of SPORADIC CHANGES; metathesis and haplology are typically sporadic
- the regularity hypothesis also restricted to a specific speech community at a specific time
- two possible approaches to remaining “exceptions”:
 - reformulate the change so as to capture the apparent exception
 - propose an additional change

5. Types of impact on the phonological system

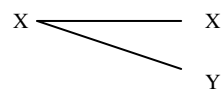
→ changes in the system of contrasts (new minimal pairs possible)

5.1 Two basic types of phonological change

5.1.1 Split

→ one phoneme splitting up into two distinct phonemes, thereby creating a new contrast in the system

1. PDE *kin* [k] vs. *chin* [tʃ]
i. OE *cīn* < pre-OE **kinn-* → palatalisation of [k] > [tʃ]
OE *cyn(n)* → no palatalisation before [y]
→ allophonic variation
ii. distinction [i] vs. [y] lost → contrast [k] vs. [tʃ] gets phonologised → /k/ and /tʃ/ now serve to oppose lexical items (phonemicisation has occurred)
2. German Umlaut
i. Sg. *gast* ‘guest’ Pl. *gastī*
ii. Sg. *gast* Pl. *gesti*
→ variation phonologises when *-i* gets lost
iii. Sg. *gast* Pl. *gest*

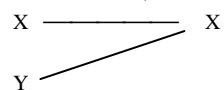


→ X, Y first in complementary distribution, come to be in phonological contrast

5.1.2 Merger

→ two phonemes collapsing into a single one, thereby destroying a particular phonological distinction

1. (Non-Sc.) Eng. *whine* vs. *wine*; *while* vs. *wile*, *whine* vs. *wine*, *which* vs. *witch*, etc. → formerly phonological contrast /w/ vs. /w/



2. Often a merger is the kind of change that destroys the context for allophonic variation and thus leads to a split, e.g. OE *cīn* and *cyn(n)* → /i/ and /y/ merged, leading to the phonologisation of /k/ and /tʃ/

NB A phonological change may also affect a sound *in certain contexts only*; in this case we call it a PARTIAL PHONOLOGICAL CHANGE.

5.2 Loss

The complete loss of a phoneme — the disappearance of a phonemic contrast from the system — is rare, but it does happen; normally there is only partial loss: a phoneme is lost in certain environments but remains in others.

5.2.1 Complete loss

Latin /h/ has disappeared across the board in Romance languages (though some of them retain it in their spelling, e.g. French, Spanish)

5.2.2 Partial loss

OE /k/ could occur in word-initial clusters followed by /n/, hence the spellings of words like *knee*, *knave*, *knight*, etc.; compare G. *Knie*, *Knabe*, *Knecht*, Du. *knie*, *knaap*, *knecht*

In terms of the basic classification into merger and split, loss can be thought of as MERGER WITH ZERO (cf. *hand* vs. *∅and*)

5.3 Phonological borrowing

One way a completely new segment may enter the system is as a result of borrowing, e.g. En. /ʒ/ (*bei[ʒ]e*, etc.) entered the language as a result of borrowing from French.

5.4 Phonotactic change

A change in the possible combinations of sounds, e.g. Lat. #/sC/ → It. #/sC/ but Sp. #/esC/ → It. *Spagna* vs. Sp. *España*, It. *scuola*, Sp. *escuela* ‘school’ → phonotactic rule that forbids sC/#_

Other phonotactic changes may subsequently occur, concealing the phonotactic rule from the eye:

Fr. *école* < OF *escole* < Lat. *schola* 'school'
ek esk sk

- i. e introduced to support sC cluster
- ii. s no longer allowed in this environment

(PDE *feast*, *fête* < Lat. *fešta* → borrowed from Fr. at different points in time!)

5.5 Chain shifts

- These happen when one change seems to knock into and bring about another. The most famous case is the Great Vowel Shift (GVS) in English:

[a:] > [ɛ:] (>[eɪ])	e.g. <i>fame</i>
[ɛ:] > [e:] (>[i:])	e.g. <i>meat</i>
[e:] > [i:]	e.g. <i>meet</i>
[i:] > [əi] (>[ai])	e.g. <i>ride</i>
[ɔ:] > [o:] (>[əʊ])	e.g. <i>boat</i>
[o:] > [u:]	e.g. <i>boot</i>
[u:] > [əʊ] (>[aʊ])	e.g. <i>house</i>

- Here one major problem is the question as to which direction the shift went in. Was it a “push chain” or a “drag chain”? The former seems less likely since it would mean that sounds could somehow recognise that they were being threatened. (This raises the problem of the teleology of sound change in particular, and language change in general.) Convincing examples of push chains are hard to find in general; by contrast, there are fairly clear cases of drag chains (e.g. the High German Consonant Shift, cf. e.g. Aitchison 1991:155f)
- There are numerous other problems associated with GVS, e.g. why it took place *when* it did, why in the North back vowels were much less affected than they were in the South (cf. e.g. Sc. [nu:] *now*, OE *nū*), whether the change had similar causes in English as a whole or whether different factors were at work in different areas, etc. Smith (1996:86ff) has some interesting, if rather speculative suggestions, many of them involving the sociohistorical linguistic notion of PRESTIGE → Week 5

References

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