

# Class 16

## Sound change and analogy

11/12/19

**Reading for this week: Campbell Ch. 4**

### 1 Analogy

- Thus far, we have focused on *regular sound change* — changes that result from the across-the-board application of new phonological rules.
  - But there is another kind of change that we frequently observe in language: “**analogy**”.
- (1) **Analogy:** “a process whereby one form of a language becomes more like another with which it is somehow associated” (?91).
- The term analogy encompasses a wide range of types of changes where related forms change to become more similar than they would otherwise be expected to be based on regular sound change.
  - A common type of analogy (sometimes called “syntagmatic analogy”) is when words that commonly appear together (e.g. in lists) end up becoming more similar:
- (2) a. *February* went from [fɛbɹuɛɪ] > [fɛbjuɛɪ] on the basis of  
 b. *January* [dʒænjuɛɪ]
- (3) a. Russian ‘nine’ *devjat’* < PIE \**n*... changed to *d* on the basis of  
 b. Russian ‘ten’ *desjat’* < PIE \**d*...
- (4) a. *female* [ˈfiːmeɪl] changed from earlier *femelle* [fɛˈmɛl] on the basis of  
 b. *male* [ˈmeɪl]
- These kinds of analogical changes tend to be sporadic and unpredictable (though they are more likely the more similar they are already).
- But “analogies” can be regular(-ish) too, if they have well-defined conditions and apply in (nearly) all contexts where these conditions are met.

### 2 Paradigmatic Leveling: Latin rhotacism

- We’ve seen several times now that Latin underwent a process of “rhotacism”:
- (5) Latin Rhotacism: /s/ → [r] / V\_V
- This led to **paradigms** (e.g. nouns inflected for different cases) with *alternations* like the following:
- (6) Rhotacism alternations in Classical Latin

	NOM.SG	GEN.SG	<i>gloss</i>
	...Vs#	...VrV...	
i.	flo:s	flo:ris	‘flower’
ii.	hono:s	hono:ris	‘honor’
iii.	kere:s	kereris	‘Ceres’ (a goddess)
iv.	genus	generis	‘race, family’

- From our internal reconstruction exercise, we saw that there is also a rule that shortens long vowels (in non-initial syllables) before a word-final sonorant:

$$(7) \quad V: \rightarrow V / \sigma\_R\#$$

- This resulted in alternating paradigms like:

(8) Vowel length alternations in Classical Latin

	NOM.SG	GEN.SG	<i>gloss</i>
	...VR#	...V:RV...	
i.	soror	soro:ris	'sister'
ii.	amor	amo:ris	'love'
iii.	kalkar	kalka:ris	'spur'

- Now, consider the change in the paradigm of the word meaning 'honor' between Old Latin and Classical Latin (both of these rules had already come into the language by the time of Old Latin):

(9) Paradigm of Latin 'honor'

Case	Old Latin	Classical Latin
NOM.SG	<b>hono:s</b>	<b>honor</b>
ACC.SG	hono:r-em	hono:r-em
GEN.SG	hono:r-is	hono:r-is
DAT.SG	hono:r-i:	hono:r-i:
ABL.SG	hono:r-e	hono:r-e
NOM.PL	hono:r-e:s	hono:r-e:s
ACC.PL	hono:r-e:s	hono:r-e:s
GEN.PL	hono:r-um	hono:r-um
DAT.PL	hono:r-ibus	hono:r-ibus
ABL.PL	hono:r-ibus	hono:r-ibus

★ How does the change in the NOMINATIVE SINGULAR change how the entire paradigm can be analyzed?

- In Old Latin, the presence of the [s] in the NOM.SG requires that /s/ be present in the UR.
    - All the [r]'s in the oblique cases have to be *derived* by the rhotacism rule.
      - Only the NOM.SG faithfully shows the underlying /s/.
  - In Classical Latin, the change to [r] in the NOM.SG forces a change to a UR with /r/.
    - But this allows all the [r]'s throughout the paradigm to come for free, i.e. be the faithful realization of the UR (/r/) without any synchronic rule application.
      - The vowel in NOM.SG now shortens by application of the shortening rule.
- ★ This is a case of **paradigm leveling**, where an allomorph from one cell of a paradigm is adopted into another cell where it did not originally belong.
- Leveling normally has the effect of reducing the complexity of the paradigm (in one way or another).
  - Here, it eliminates the complexity caused by a partial merger in the consonant system.
- *honor* is not an isolated case. This same paradigmatic leveling occurs in (almost) all equivalent cases where the rhotacism alternation originally took place:

## (10) Other rhotacism levelings in Latin (\*... means that it is a reconstructed form which is not attested in Old Latin)

	Old Latin	Classical Latin	<i>gloss</i>
i.	arbo:s	arbor	'tree'
ii.	hono:s	honor	'honesty'
iii.	odo:s	odor	'smell'
iv.	vapo:s	vapor	'vapor'
v.	colo:s	color	'color'
vi.	*augus	augur	'augur'
vii.	vo:mis	vo:mer	'ploughshare'
viii.	*pallo:s	pallor	'pallor'
ix.	*albo:s	albor	'whiteness'
x.	*vigo:s	vigor	'tree'
xi.	*rigo:s	rigor	'rigor'
xii.	*terro:s	terror	'terror'
xiii.	fulgus	fulgur	'lightening'

- The exceptions to this leveling are almost entirely *neuter nouns* that have a vowel alternation in addition to the rhotacism alternation:

(11) Classical Latin paradigms that didn't undergo leveling: *neuter nouns*

	NOM.SG	GEN.SG	<i>gloss</i>
i.	corpus	corporis	'body'
ii.	stercus	stercoris	'dung'
iii.	tempus	temporis	'time'
iv.	pecus	pecoris	'cattle'
v.	pectus	pectoris	'chest'
vi.	tergus	tergoris	'back'
vii.	nemus	nemoris	'woods'

- Presumably, these didn't get leveled because the change would have been too substantial (probably w.r.t. the vowels).
- Monosyllables also tended to resist leveling, but not universally:

(12) Classical Latin paradigms that didn't undergo leveling: *monosyllabic stems*

	NOM.SG	GEN.SG	<i>gloss</i>
i.	mo:s	mo:ris	'custom'
ii.	gli:s	gli:ris	'doormouse'
iii.	flo:s	flo:ris	'flower'
iv.	ro:s	ro:ris	'dew'
v.	mu:s	mu:ris	'mouse'
vi.	ma:s	ma:ris	'male'
cf.	lar	laris	'household deity'

⇒ **Take-away:** some types of analogy are very regular.