

Class 14

A little morphology, and internal reconstruction

11/5/19

Reading for this week: Campbell Ch. 8

1 Introduction

- The comparative method is the way to reconstruct earlier forms by using data from multiple related languages.
- We can also reconstruct earlier forms by using specific kinds of data from within a *single language*.
⇒ This is called **internal reconstruction**.
- It uses evidence of **alternations** between related words/morphemes, and seeks to find sound changes that can *undo* those alternations, allowing us to reconstruct a unitary original form.
 - Basically, this process is equivalent to synchronic phonological analysis.
 - The reconstructed form is basically equivalent to the underlying form in the synchronic analysis.

2 Morphemes and allomorphs

- We have seen extensively how we relate surface and underlying forms for *sounds*.
 - A phoneme (UR) maps to allophones (SR) by phonological rules.
- The same structural relationships can be applied to “**morphemes**”.
 - A *morpheme* is a linguistic unit that (arbitrarily) connects some particular meaning with some particular string of sounds.
 - ★ We won’t be concerned with the meaning side (for now...), only the sound side.
- Just like phonemes can have allophones, morphemes can have “**allomorphs**”.
 - An allomorph is a predictable variant of a morpheme, which alters the sounds associated with the meaning in some particular way.

(1) Allomorphs of the plural in English

<i>dogs</i> [dɔgz]	<i>cats</i> [kæts]	<i>buses</i> [bʌsɪz]
<i>flies</i> [flaɪz]	<i>tricks</i> [trɪks]	<i>bushes</i> [bʊʃɪz]
<i>hands</i> [hændz]	<i>laughs</i> [læfs]	<i>matches</i> [mætʃɪz]
<i>balls</i> [bɔlz]	<i>cups</i> [kʌps]	<i>judges</i> [dʒʌdʒɪz]

- (2)
- a. What are the different allomorphs of the plural in English?
 - b. What is the underlying representation of the plural in English?
 - c. What rules govern the distribution of plural allomorphs in English?

→ Typically, (regular) allomorphs are derived by the application of phonological rules applying to their segments.

↪ So, allomorphy usually reduces to allophony.

• But...

(3) a. *ox : oxen*
b. *child : children*

(4) a. *goose : geese*
b. *mice : mouse*

↪ Sometimes allomorphs are not transparently distinguished by phonological rules.

• Synchronically, we have to talk about these as instances of “**suppletion**”

→ Phonologically-unrelated allomorphs whose occurrence is conditioned by morphological category.

(5) a. *good : better : best*
b. *bad : worse : worst*
c. *go : went : gone*
d. *sing : sang : sung*

○ Often, these can be explained by earlier phonological processes that we just can't quite see the structure of anymore (*sing:sang:sung*).

○ But sometimes phonology clearly never had anything to do with it (*go:went*).

★ When we encounter regular allomorphy (like in (1)), or even sometimes with irregular phonological allomorphy (*sing:sang:sung*), we can use **internal reconstruction** to reconstruct the earlier situation.

3 Internal reconstruction

• Internal reconstruction is basically a diachronic version of synchronic analysis.

• The result of internal reconstruction is a “**pre-language**” and “**pre-forms**”.

○ These have a distinct theoretical status from *proto-languages* and *proto-forms*.

→ Pre-languages/pre-forms are much less secure entities, because it is more difficult to be certain that you have reconstructed past all the correct changes.

3.1 Procedure for internal reconstruction

(6) Procedure for Internal Reconstruction (Crowley & Bower 2010:131, Campbell 2013:226)

- a. Examine the data, consulting the glosses, and make a provisional division of the forms into morphemes.
- b. Find each morpheme that alternates, and locate all of its allomorphs (i.e., locate the morpheme alternants).
- c. Within each allomorph, locate the particular segment or segments that alternate.
- d. Considering the logical possibilities, reconstruct the earlier form so that **all the allomorphs of each morpheme can be derived from a unitary form of that morpheme** by way of general phonetic changes.
- e. Postulate the changes required to produce the alternation. These should be phonetically natural.

3.2 Some basic examples

• Here's a fairly simple example from Tojolabal (Mayan) (Campbell 2013:199)

(7) Tojolabal verbal forms

	1 SG.PRES		INFINITIVE
1.	h-man	'I buy'	man 'to buy'
2.	h-lap	'I dress'	lap 'to dress'
3.	h-k'an	'I want'	k'an 'to want'
4.	k-il	'I see'	il 'to see'
5.	k-uʔ	'I drink'	uʔ 'to drink'
6.	k-al	'I say'	al 'to say'

(8) Additional Tojolabal words:

- a. *haʔ* 'water'
- b. *hune* 'one'
- c. *hiʔ* 'unripe ear of maize'

★ *How should we reconstruct the Pre-Tojolabal 1SG.PRES prefix?*

- Another example comes from Nahuatl (Uto-Aztecan) (Campbell 2013:200; cf. Langacker 1972).

(9) Nahuatl possessors

- a. *ikfi* 'foot' *nokfi* 'my foot'
- b. *ihti* 'stomach' *nihti* 'my stomach'
- c. *ta* 'father' *nota* 'my father'

★ *How should we reconstruct the 1SG.POSS prefix and the three roots?*

4 Internal reconstruction of Latin

★ Use internal reconstruction to reconstruct original underlying representations for the all the morphemes and identify all the relevant sound changes.

○ Data from Odden (2005:210–211).

	Nominative	Genitive	Gloss		Nominative	Genitive	Gloss
1.	arks	arkis	‘fortress’	26.	no:men	no:minis	‘name’
2.	duks	dukis	‘leader’	27.	ka:rmen	ka:rminis	‘song’
3.	daps	dapis	‘feast’	28.	lu:men	lu:minis	‘light’
4.	re:ks	re:gis	‘king’	29.	wenter	wentris	‘belly’
5.	falanks	falangis	‘phalanx’	30.	pater	patris	‘father’
6.	filiks	filikis	‘fern’	31.	kada:wer	kada:weris	‘corpse’
7.	lapis	lapidis	‘stone’	32.	tu:ber	tu:beris	‘swelling’
8.	li:s	li:tis	‘strife’	33.	piper	piperis	‘pepper’
9.	fraws	frawdīs	‘deceit’	34.	karker	karkeris	‘prison’
10.	noks	noktis	‘night’	35.	as	as:is	‘whole’
11.	frons	frontis	‘brow’	36.	os	os:is	‘bone’
12.	frons	frondis	‘leaf’	37.	far	farris	‘spell’
13.	inku:s	inku:dis	‘anvil’	38.	mel	mel:is	‘honey’
14.	sors	sortis	‘lot’	39.	o:s	o:ris	‘mouth’
15.	fu:r	fu:ris	‘thief’	40.	flo:s	flo:ris	‘flower’
16.	murmur	murmuris	‘murmur’	41.	mu:s	mu:ris	‘house’
17.	augur	auguris	‘augur’	42.	kru:s	kru:ris	‘leg’
18.	arbor	arboris	‘tree’	43.	kinis	kineris	‘ash’
19.	pugil	pugilis	‘boxer’	44.	pulvis	pulveris	‘dust’
20.	sal	salis	‘salt’	45.	die:s	die:i:	‘day’
21.	adeps	adipis	‘fat’	46.	li:ber	li:beri:	‘free’
22.	apek	apicis	‘top’	47.	miser	miseri:	‘wretched’
23.	pri:nkeps	pri:nkipis	‘chief’	48.	ager	agri:	‘field’
24.	ekwes	ekwitis	‘horse’	49.	sinister	sinstri:	‘left’
25.	miles	militis	‘soldier’	50.	liber	libri:	‘book’

References

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