

**Lgcs 101: Historical Linguistics.** Lecture Notes. Tues 1 Nov 2011.

**1. Internal reconstruction.** It is possible to reconstruct earlier stages of a language using data from the language alone. General procedure:

1. Note a pattern in the language.
2. Note that some forms are exceptions to the pattern. Often these exceptions manifest as **alternations**.
3. Hypothesize that the exceptional forms originally conformed to the pattern.
4. Posit an ancestral stage of the language with no exceptional forms.
5. Identify the changes that led to the introduction of exceptional cases.

**Example 1:** Latin (Note that  $c = [k]$ ,  $x = [ks]$ .) Data from Trask/Miller 2007.

(1) Pattern

	<b>1.sg.pres</b>	<b>Infinitive</b>	<b>1.sg.perf</b>	<b>Supine</b>	
	repo	repere	repsi	reptum	'creep'
	carpo	carpere	carpsi	carptum	'pluck'
	dico	dicere	dixi	dictum	'say'
	duco	ducere	duxī	ductum	'lead'

(2) Exceptions (here, alternations)

	nubo	nubere	nupsi	nuptum	'marry'
	scribo	scribere	scripsi	scriptum	'write'
	sugo	sugere	suxi	suctum	'suck'
	figo	figere	fixi	fictum	'fix'

(3)

	flecto	flectere	flexi	flectum	'bend'
	necto	nectere	nexi	nectum	'bind'

(4)

	divido	dividere	divisi	divisum	'divide'
	explodo	explodere	explosi	explosum	'explode'

(5)

	gero	gerere	gessi	gestum	'carry'
	uro	urere	ussi	ustum	'burn'

Cf. *ursus* 'bear', *fortis* 'strong'.

**Example 2:** Voicing alternations in Russian

<u>Nominative Singular</u>	<u>Genitive Singular</u>	<u>Gloss</u>
vagon	vagona	'wagon'
večer	večera	'evening'
muž	muža	'husband'
karandaš	karandaša	'pencil'
glas	glaza	'eye'
golos	golosa	'voice'
ras	raza	'time'
les	lesa	'forest'
porok	poroga	'threshold'
porok	poroka	'vice'
vrak	vraga	'enemy'
urok	uroka	'lesson'
tvet	t'veta	'color'
prut	pruda	'pond'
soldat	soldata	'soldier'
zavot	zavoda	'factory'
xlep	xleba	'bread'
grip	griba	'mushroom'
trup	trupa	'corpse'

**Example 3:** Past participles in English

Regular verbs form the past participle using *-ed*, e.g., *love/loved*, *paint/painted*. Some irregulars use *-en*, e.g., *write/written*, *take/taken*. Some verbs have only adjectival forms with *-en*:

- (6) He has shaved. He is clean-shaven.  
The lead has melted. This is molten lead.  
I have mowed the lawn. A mown-lawn.

*Shaven*, *molten*, *mown* can be taken as the original forms of the participles.

## 2. Limitations

- (a) Internal reconstruction can never recover unconditioned changes.

E.g., PIE *\*e,\*o,\*a* merged to Sanskrit *a*. It's impossible to reconstruct these vowels internally.

- (b) Internal reconstruction can be difficult or impossible if the conditioning environments for the alternations are lost.

E.g., *mouse/mice* and *goose/geese*; here we have alternations, but the original conditioning environment is lost.

## 3. Practice with IR

For each of the following sets of data, use the method of internal reconstruction to:

- Reconstruct the root morphemes.
- Reconstruct the suffix morphemes.
- State any sound changes that have occurred, including any crucial orderings.

(7) Paamese (Austronesian, Vanuatu)

N	'this' N	'only the' N	
aim	aimok	aimos	'house'
ahat	ahatuk	ahatus	'stone'
ahin	ahinek	ahines	'woman'
'sea'	atas	ataşik	ataşis
'spear'	metas	metasok	metasos
'banana'	ahis	ahisik	ahisis
'rifle'	ahis	ahisuk	ahisus

(8) Bislama (English-based Creole, Vanuatu)

root	transitive	
rit	ritim	'read'
bon	bonem	'burn'
smok	smokem	'smoke'
skras	skrasem	'scratch'
slak	slakem	'loosen'
stil	stilim	'steal'
rus	rusum	'barbeque'
tajt	tajtem	'tighten'
bojl	bojlem	'boil'
drawn	drawnem	'sink/push underwater'
melek	melekem	'milk'
level	levelem	'level'

(9) Ancient Greek

<u>Nom sg</u>	<u>Gen sg</u>	<u>Dat sg</u>	<u>Dat pl</u>	<u>Gloss</u>
hals	halos	hali	halsi	'salt'
oys	oyos	oyi	oysi	'sheep'
sus	suos	sui	susi	'sow'
klo:ps	klo:pos	klo:pi	klo:psi	'thief'
p <sup>h</sup> le:ps	p <sup>h</sup> le:bos	p <sup>h</sup> le:bi	p <sup>h</sup> le:psi	'vein'
kate:lipš	kate:lip <sup>h</sup> os	kate:lip <sup>h</sup> i	kate:lipš	'upper story'
p <sup>h</sup> ulaks	p <sup>h</sup> ulakos	p <sup>h</sup> ulaki	p <sup>h</sup> ulaksi	'guard'
ayks	aygos	aygi	ayksi	'goat'
salpiŋks	salpiŋgos	salpiŋgi	salpiŋksi	'trumpet'
onuks	onuk <sup>h</sup> os	onuk <sup>h</sup> i	onuksi	'nail'
t <sup>h</sup> e:s	t <sup>h</sup> e:tos	t <sup>h</sup> e:ti	t <sup>h</sup> e:si	'serf'
k <sup>h</sup> aris	k <sup>h</sup> aritos	k <sup>h</sup> ariti	k <sup>h</sup> arisi	'grace'
elpis	elpidos	elpidi	elpisi	'hope'
korus	korut <sup>h</sup> os	korut <sup>h</sup> i	korusi	'helmet'
ri:s	ri:nos	ri:ni	ri:si	'nose'
delp <sup>h</sup> i:s	delp <sup>h</sup> i:nos	delp <sup>h</sup> i:ni	delp <sup>h</sup> i:si	'porpoise'

## (10) Nahuatl (Uto-Aztecan, Mexico)

tepos-tli	'axe'	ikʃi-tl	'foot'
no-tepos	'my axe'	no-kʃi	'my foot'
tepos-tla:n	'place of axes'	ikni-tl	'fellow'
kak-tli	'shoe'	no-kni	'my fellow'
no-kak	'my shoe'	isti-tl	'fingernail'
teʃ-tli	'flour'	no-sti	'my fingernail'
no-teʃ	'my flour'	ihti-tl	'stomach'
mis-tli	'cougar'	n-ihti	'my stomach'
mis-tla:n	'place of cougars'	i:ʃte-tl	'eye'
kal-li	'house'	n-i:ʃe	'my eye'
no-kal	'my house'	ihwi-tl	'feather'
tla:l-li	'land'	n-ihwi	'my feather'
no-tla:l	'my land'	itsk <sup>w</sup> in-tli	'little dog'
tʃi:mal-li	'tortilla griddle'	n-itsk <sup>w</sup> in	'my little dog'
no-tʃi:mal	'my tortilla griddle'	itʃka-tl	'cotton'
tʃi:mal-la:n	'place of tortilla griddles'	no-tʃka	'my cotton'
mi:l-li	'cornfield'	okitʃ-tli	'male, man'
no-mi:l	'my cornfield'	n-okitʃ	'my husband'
mi:l-la:n	'place of cornfields'	kafi-tl	'bowl'
a:ma-tl	'paper, fig tree'	no-kaf	'my bowl'
n-a:ma	'my paper, fig tree'	k <sup>w</sup> awi-tl	'tree, wood'
a:ma-tla:n	'place of paper, fig trees'	no-k <sup>w</sup> aw	'my tree, wood'
e-tl	'bean'	ma:yi-tl	'hand'
n-e	'my bean'	no-ma:y	'my hand'
e-tla:n	'place of beans'	ʃa:mi-tl	'brick'
siwa:-tl	'woman'	no-ʃan	'my brick'
no-siwa:	'my wife'	pa:mi-tl	'flag'
siwa:-tla:n	'place of women'	no-pa:n	'my flag'
ol-li	'rubber'	ko:mi-tl	'jug'
n-ol	'my rubber'	no-ko:n	'my jug'
ol-la:n	'place of rubber'		

## (11) Tibetan numerals

dzu	'10'				
dzig	'1'	dzugdzig	'11'		
ʃi	'4'	dzubʃi	'14'	ʃibdzu	'40'
gu	'9'	dzurgu	'19'	gubdzu	'90'
ŋa	'5'	dzuŋa	'15'	ŋabdzu	'50'

**Assignment 7:** Due next Tuesday, Nov. 8<sup>th</sup>.

**Part 1. Comparative reconstruction**

Central Papuan. Answer (i)-(vi).

**Part 2. Internal Reconstruction**

**Karok** is spoken in Northwestern California. (i) Reconstruct the original form of each root and prefix, (ii) state what changes have taken place, including any crucial orderings, and (iii) provide derivations for the three forms of ‘steal’, ‘pick up’, and ‘jump’ (Odden 2005)

<u>Imperative</u>	<u>1 sg.</u>	<u>3 sg.</u>	<u>gloss</u>
pasip	nipasip	?upasip	‘shoot’
si:tva	ni?itva	?usi:tva	‘steal’
kifnuk	nikifnuk	?ukifnuk	‘stoop’
suprih	ni?uprih	?usuprih	‘measure’
?ifik	ni?ifik	?u?ifik	‘pick up’
?aktuv	ni?aktuv	?u?aktuv	‘pluck at’
?axyar	nixyar	?uxyar	‘fill’
?i?kak	ni?kak	?uskak	‘jump’
?ik?jah	nik?jah	?uksah	‘laugh’
?i?riv	ni?riv	?usriv	‘shoot at a target’
?uksup	niksup	?uksup	‘point’