LNGT0101
Introduction to Linguistics

Lingu-ist-ic-s
[lĭŋ-gʷĭ-stɪks]

Lecture #22
Nov 24th, 2014

Announcements

- None for a change.

Language change

- An exercise on language change.

Summary of language change and transition to "reconstruction"

- To sum up, a language undergoes change in its lexicon as well as all components of grammar (phonology, morphology, and syntax).
- Over time, these changes might become considerable enough to the point where we become unable to tell if two historical varieties of the same language are actually related.
- Luckily, though, historical linguists developed ways to establish historical relations among languages. We discuss this today.

Historical linguistics

- The 19th century was the century for the study of historical (aka *diachronic*) linguistics.
- Herman Paul in 1891: "It has been objected that there is another view of language possible than the historical. I must contradict this."

Reconstruction and the comparative method

- Historical linguists, aka *comparativists*, were mainly concerned with "reconstructing" the properties of the parent language of a group of languages that are believed to be genetically related.
- **Reconstruction** was done by means of the **comparative method**, whereby earlier forms were determined via the comparison of later forms.
- The earlier forms are called **proto-forms**, and the earlier language is called a **proto-language**.

Cognates

- The forms compared were typically words that were believed to have developed from the same ancestral root. They are called *cognates*.
- Consider the following table of Germanic cognates:

Cognates

| English	Dutch	German	Danish	Swedish
man	man	Mann	mand	man
foot	voet	Fuß	fod	fot
bring	brengen	bringen	bringe	bringa

- Compare the Arabic "non-cognates":
    [radʒul] 'man'
    [qadam['foot'
    [juħdʕir] 'bring'

The discovery of Proto-Indo-European

- In 1786, Sir William Jones, a British judge and scholar working in India, noted that Sanskrit bore to Greek and Latin "a stronger affinity … than could possibly have been produced by accident," and he suggested that the three languages had "sprung from a common source".
- This common source is what came to be known later as "**Proto-Indo-European**" (PIE), the parent language of most of the languages spoken today in Europe, Persia, and northern India.
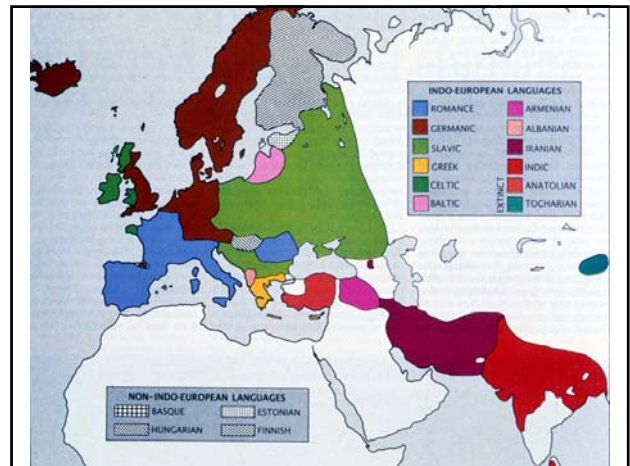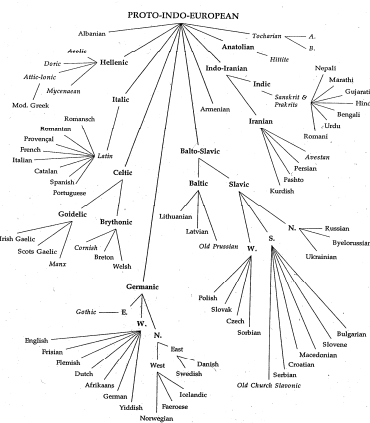
The discovery of Proto-Indo-European

- Thirty years after Sir William Jones' initial remark, a young Danish scholar, named Rasmus Rask, postulated general correspondences between the consonants of Germanic languages and those of Sanskrit, Greek, and Latin.
- He noted, for example, that where the ancient languages showed a [p] sound, the corresponding words in the Germanic languages showed an [f].
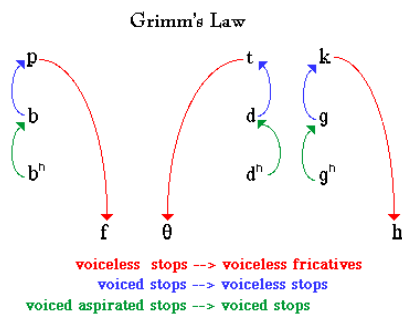
The discovery of Proto-Indo-European

Sanskrit	Latin	English
pitar-	**p**ater	**f**ather
pad-	**p**ed-	**f**oot
——	**p**iscis	**f**ish
pasu	**p**ecu	**f**ee

Grimm's Law

- In 1822, a German scholar, named Jakob Grimm, extended Rask's observations and provided a detailed exposition of the Germanic consonant shift that came to be known as *Grimm's Law*.
- The crucial observation was that where ancient languages showed a voiceless stop [p, t, k], Germanic languages like English and Gothic showed a corresponding fricative [f, θ, h]:

Grimm's Law

Grimm's Law

p → b → bʰ → f

t → d → dʰ → θ

k → g → gʰ → h

voiceless stops --> voiceless fricatives
voiced stops --> voiceless stops
voiced aspirated stops --> voiced stops

Grimm's Law

Sanskrit	Greek	Latin	Gothic	English
pad-	**p**od-	**p**ed-	**f**otus	**f**oot
trayas	**t**reis	**t**res	**th**reis	**th**ree
——	**k**ardia	**k**or	**h**airto	**h**eart

Grimm's Law (note * = proto)

PIE form	Sanskrit	Latin	English
*p	**p**itar-	**p**ater	**f**ather
*t	**t**rayas	**t**rés	**th**ree
*k	**ś**un	**c**anis	**h**ound
*b	No cognate	la**b**ium	li**p**
*d	**d**va	**d**uo	**t**wo
*g	a**j**ras	a**g**er	a**c**re
*bh	**bh**rātar-	**fr**āter	**b**rother
*dh	**dh**ā	**f**ē-ci	**d**o
*gh	va**h**-	ve**h**-ō	wa**g**on

English words not affected by Grimm's Law

- A puzzle: Some words in English were not affected by Grimm's Law:

Latin	English	
ped-	pedestrian	(no p → f)
tenuis	tenuos	(no t → θ)
canalis	canal	(no k → h)

- Why?

The second Germanic consonant shift

- A second consonant shift took place in some Germanic languages (e.g., Modern German), but not in others (e.g., Modern English):

Proto-sound	After vowels	Elsewhere
*p	f	pf
*t	s	ts
*k	x	k
*d	t	t

The second Germanic consonant shift

Modern English	Modern German
o**p**en	o**ff**en
path	**pf**ad
bi**t**e	bei**ss**en
to	**z**u (z = ts)
boo**k**	Bu**ch** (ch = x)
come	**k**ommen
ri**d**e	rei**t**en
door	**T**ür

So, how do we decide on the proto-form?

- Reconstruction of proto-forms makes use of two main strategies:
  a. **the phonetic plausibility strategy**
  b. **the majority rules strategy**

- When both strategies lead to a tie, the data may point to a more *logical* change than another.

The phonetic plausibility strategy

- The phonetic plausibility strategy requires that any sound changes posited to account for differences between proto-forms and later forms must be phonetically plausible.

Some phonetically plausible sound changes

- Voiceless consonants become voiced between vowels and before voiced consonants.
- Stops become fricatives, particularly between vowels.
- Consonants become palatalized before front vowels.
- Consonants become voiceless at the end of words.
- Oral vowels become nasalized before nasals.
- Fricatives become [h].
- [h] deletes between vowels.

The majority rules strategy

- The majority rules strategy stipulates that if no phonetically plausible change can account for the observed differences, then the sound found in the majority of cognates should be assumed to be the proto-sound.

Romance cognates

French	Italian	Spanish	Portuguese	
cher	caro	caro	caro	"dear"
champ	campo	campo	campo	"field"
chandelle	candela	candela	candeia	"candle"

- The regular sound correspondence for the initial sound is
  ʃ-k-k-k
- Two hypotheses: (a) k → ʃ, or (b) ʃ → k.
  By phonetic plausibility, (a) wins.
  By majority rules, also (a) wins.
- Then, we do the same for every other sound in the cognates.

Reconstructing Proto-Uto-Aztecan

38. Proto-Uto-Aztecan

	Shoshone	Ute	Northern Paiute	Gloss
a.	[tuhu]	[tuu]	[tuhu]	'black'
b.	[nika]	[nįka]	[nika]	'dance'
c.	[kasa]	[kąsi]	[kasa]	'feather'
d.	[tuku]	[tųku]	[tuku]	'flesh'
e.	[juhu]	[juu]	[juhu]	'grease'
f.	[pida]	[pida]	[pita]	'arm'
g.	[kadi]	[kadí]	[kati]	'sit'
h.	[kwasi]	[kwąsi]	[kwasi]	'tail'
i.	[kwida]	—	[kwita]	'excrement'

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[s] and [θ] and [j] and [ʎ] in two Spanish varieties

Dialect 1	Dialect 2	Gloss	Earlier Form (to be completed)
[kasa]	[kaθa]	hunt (noun)	*
[si]	[si]	yes	*
[gajo]	[gaʎo]	rooster	*
[dies]	[dieθ]	ten	*
[pojo]	[pojo]	kind of bench	*
[kaje]	[kaʎe]	street	*
[majo]	[majo]	May	*
[kasa]	[kasa]	house	*
[siŋko]	[θiŋko]	five	*
[dos]	[dos]	two	*
[pojo]	[poʎo]	chicken	*

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Next class agenda

- Pidgins and creoles. Follow the links on the online syllabus table for the readings.

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