LNGT0101
Introduction to Linguistics

Lecture #22
Nov 30th, 2011

Announcements

- I put "Do you Speak American?" back on reserve for this class, just in case anyone wants to watch it.

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A pronunciation puzzle

please-pleasant
serene-serenity
sane-sanity
crime-criminal

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A pronunciation puzzle

- The alternation is the result of the GVS taking place after the ***Early Middle English Vowel Shortening*** rule affected the second word in each pair.
- When the GVS occurred, it affected only the first word of each pair since it was the one that had the long vowel by then.

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Spread of change through the language

- A linguistic change may manifest itself at first in a few words, and then gradually spreads through the vocabulary of the language. We call this ***lexical diffusion***.

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Lexical Diffusion

- A good example of lexical diffusion from English has to do with an ongoing change in the stress pattern of words such as *convert*, which can be either a noun or a verb.
- Originally, the stress fell on the second syllable of such words, regardless of their lexical category.
- In the second half of the 16th century, three words, *rebel*, *outlaw*, and *record*, came to be pronounced with the stress on the first syllable when used as nouns. And this stress shift has been "diffusing" ever since.

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Diffusion of stress shift in English

(graph from O'Grady et al 2001)

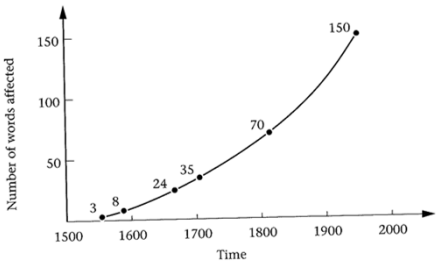

Figure 7.11 Diffusion of stress shift in English

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Non-gradual Diffusion: Cuban Spanish

- But not all phonological changes involve gradual diffusion. Some changes affect all instances of the sounds involved rather immediately.
- For example, the weakening in Cuban Spanish of [s] to [h] in syllable final-position applies to all instances where [s] occurs in that position:

Spanish Spanish	Cuban Spanish	
[filismente]	[filihmente]	"happily"
[estilo]	[ehtilo]	"type"

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Spread of change through the population

- For a particular instance of language change to take place, the innovation must be accepted by the speech community.
- So, even though children acquiring English produce *goed*, the form was never accepted.
- Similarly, *throve* is not accepted as the past tense form of *thrive* (cf. drive-drove).

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Spread of change through the population

- Social pressures often play an important role in the spread of a particular innovation.
- For example, when a change takes place in the speech of a high prestige group, it may gradually start spreading to other groups, and ultimately to the whole linguistic community.

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Spread of change through the population

- The loss of postvocalic [r] along the east coast of the US is a famous example.
- Pronunciations such as [fa:] for [fa:r] originated in parts of England in the 17th and 18th centuries.
- It spread along the east coast of the US by the children of the New England gentry who brought these pronunciations back with them from British schools, as well as the newly arrived immigrants who enjoyed high social status as colonial administrators and church officials.
- As a result, the innovation was widely imitated and spread along much of the east coast and the south.

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Spread of change through the population

- But social pressures also limited the spread of that innovation.
- In Pennsylvania and other Midland states the most prestigious group of settles were Quakers from northern England, an area that retained postvocalic [r].
- Similarly, in Canada, the influence of Scottish and Irish settlers, whose dialect retained the [r], limited the spread of the innovation to those areas there were in contact with New England, e.g., Nova Scotia and New Brunswick.
- Interestingly, now it's looking like "r-less" pronunciations have become stigmatized and we see an opposite trend for [r] restoration.

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Why do languages change?

- Technology.
- Borrowing.
- Language contact.
- Social pressure.
- Ease of articulation.
- Naturalness.
- Analogy.
- Extravaganza.

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But some changes are harder to explain than others

- Why would a language change its basic word order, the way it forms questions, the way it forms negation, verb placement, subject placement, its case and agreement system, its morphological typology, etc.?

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But some changes are harder to explain than others

- The "why" question is obviously hard, and 19th century historical linguists felt sometimes the pressure to provide an answer, but only in ways that we cannot accept today.

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Warning: This is *not* an explanation!

- So, Grimm explained the law of consonant shifts as

  "connected with the German's mighty progress and struggle for freedom … the invincible German race was becoming ever more vividly aware of the unstoppability of its advance into all parts of Europe … How could such a forceful mobilization of the race have failed to stir up its language at the same time, jolting it out of its traditional rut and exalting it? Does there not lie a certain courage and pride in the strengthening of voiced stop into voiceless stop and voiceless stop into fricative?"

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What's an alternative?

- Adults change the PLD by introducing innovations, say for 'extravaganza' reasons.
- Children get exposed to the innovations if they occur at a certain percentage (called "the threshold").
- What should the children conclude from an 'ambiguous' input?

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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 (morphology, syntax, phonology, and semantics).
- 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 next.

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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."

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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***.

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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:

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Cognates

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

- Compare Turkish "non-cognates":
  adam (man), *ajak* (foot), and *getir* (bring)

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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.

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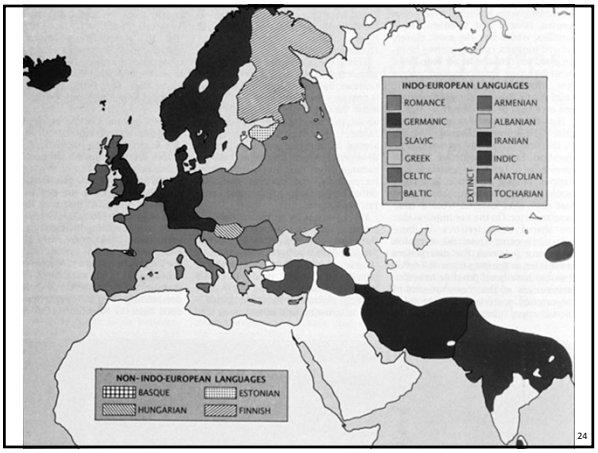

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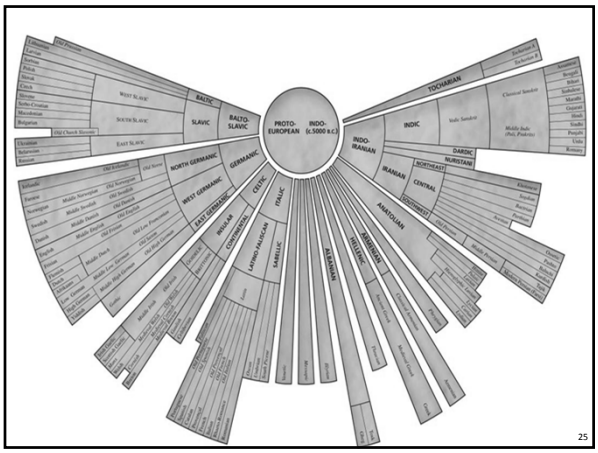


The discovery of Proto-Indo-European

- Thirty years later, a young Danish scholar, named Rasmus Rask, postulated general correspondences between the consonants of Germanic languages and those of Sanskrit, Greek, and Latin, noting for example that where the ancient languages showed a [p] sound, the corresponding words in the Germanic languages showed an [f].

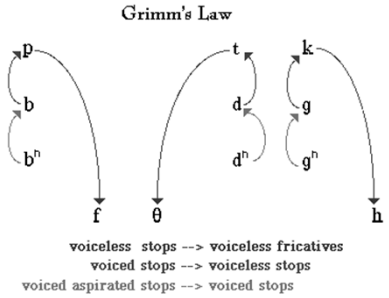
The discovery of Proto-Indo-European

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

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-	**f**rāter	**b**rother
*dh	**dh**ā	**f**ē-ci	**d**o
*gh	va**h**-	ve**h**-ō	wa**g**on

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English words not affected by Grimm's Law

- Notice that 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)

- Any ideas why?

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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

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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

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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.

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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.

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Some phonetically plausible sound changes

- Voiceless sounds 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.

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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.

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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.

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Maori	Hawaiian	Samoan	Fijian	Gloss	Proto-Polynesian (to be completed)
pou	pou	pou	bou	post	*
tapu	kapu	tapu	tabu	forbidden	*
taŋi	kani	taŋi	taŋi	cry	*
takere	kaʔele	taʔele	takele	keel	*
hono	hono	fono	vono	stay, sit	*
marama	malama	malama	malama	light, moon	*
kaho	ʔaho	ʔaso	kaso	thatch	*

a. Find the correspondence sets. (*Hint*: There are fourteen. For example: o-o-o-o, p-p-p-b.)
b. For each correspondence set, reconstruct a protosound. Mention any sound changes that you observe. For example:
   o-o-o-o *o
   p-p-p-b *p p → b in Fijian.
c. Complete the table by filling in the reconstructed words in Proto-Polynesian.

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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	*

a. Find the correspondence sets—there are fourteen of them, for example p-p.
b. Reconstruct each of the fourteen protosounds, for example *p.
c. What, if any, are the sound changes that took place in the two dialects?
   Dialect 1:
   Dialect 2:
d. Complete the table by filling in the reconstructed earlier form.

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Next class agenda

- Pidgins and Creoles: Follow the links on the syllabus table online for the reading materials. Also, Crystal's Encyclopedia has been on reserve.
- Hopefully, a brief discussion of language endangerment.

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