

## Introduction to Language

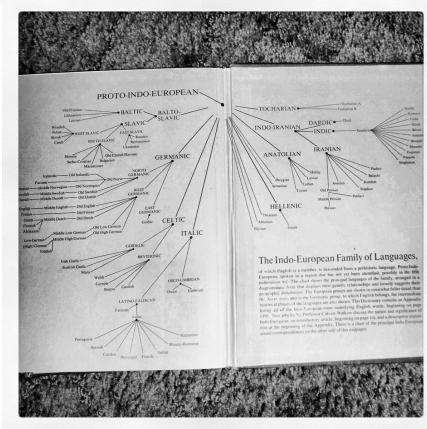
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Lecture 8: Nov. 5 2013

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1. Exam: Monday, December 16, 7 to 9pm (check exam schedule for location)
  2. My plan for next three classes:
    - Sociolinguistics and Canadian English (Nov. 19). (Your draft is also due!)
    - More sociolinguistics, the languages of Canada, language death and revitalization (Nov. 26).
    - Language and the Internet and Review (Dec. 3). (Your final paper is due!)



# Historical Linguistics

## Historical Linguistics

- ▶ The study of **language change** and the **relatedness** of languages
  - ▶ “Linguistic archeologists”
    - Make discoveries not just about language but also human history.

1. How do languages change and diversify over time?
  2. How are languages “genetically” related?

# Historical Linguistics

Historical Linguistics      History of English      Language Families      Reconstruction

History of English

Language Families

Reconstruction

## Some facts:

- ▶ All languages are in a **constant state of flux**.
    - We don't speak the same way our parents do and our parents don't speak the same way as our grandparents, even if we all speak the same language.
  - ▶ Some languages are similar to each other.
    - Keep the **language/dialect** distinction in mind!

# History of English

(or lots of invasions and Shakespeare)

## Origins of English

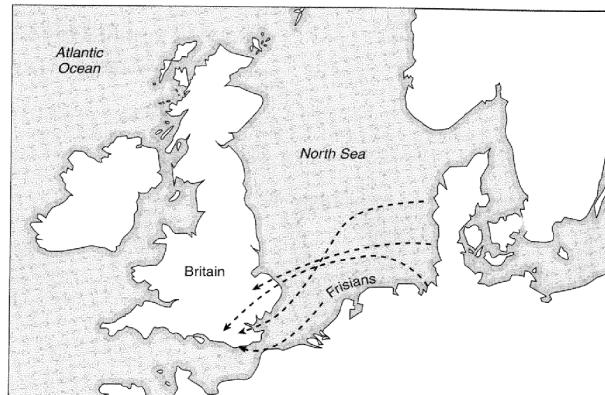
- Shortly after the Romans left England, the country was invaded by four West Germanic Tribes (c. 449CE):
  - Angles
  - Saxons
  - Jutes
  - Frisians
- Most of the Celtic-speaking inhabitants of England (Britons) relocated to Wales.



Legendary leaders of the Germanic invaders: Hengist and Horsa

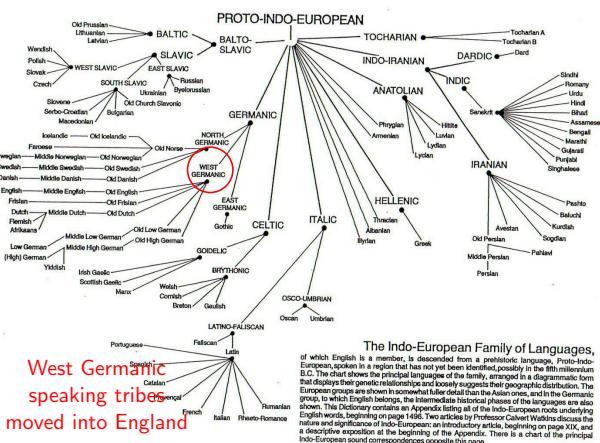
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## Origins of English

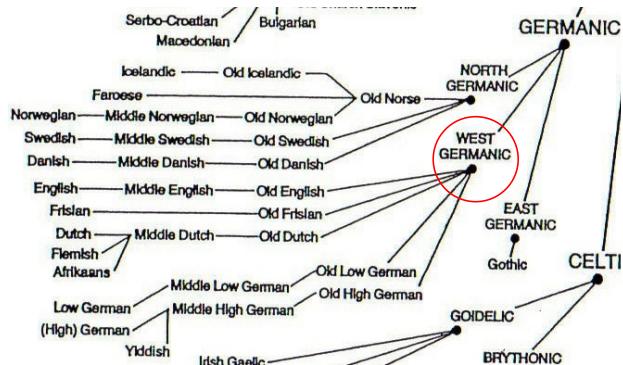


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## Transplantation of West Germanic Dialects to England



## Transplantation of West Germanic Dialects to England



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## Origins of English

This invasion marks the beginning of the **Old English** period.

- From 449 onward, the language of these tribes is separate from the Germanic languages spoken on mainland Europe.
- Also referred to as **Anglo-Saxon**.

The invading tribes formed seven kingdoms in England.

- Northumbria, Mercia, East Anglia (Angles)
- Essex, Sussex, Wessex (Saxons)
- Kent (Jutes)



Formed the Old English Dialects.

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## More Invasions

In the 9th century, Danes and Vikings invaded and settled in Northern and Eastern England.

### Danelaw

The invaders spoke **Old Norse**.

- Germanic parent language of Icelandic, Norwegian, Danish, Swedish, and Faroese.
- Many **Norse words were borrowed into English** at this time.

- egg, kid, get, give, skill, skin, sky, they, them, their etc.

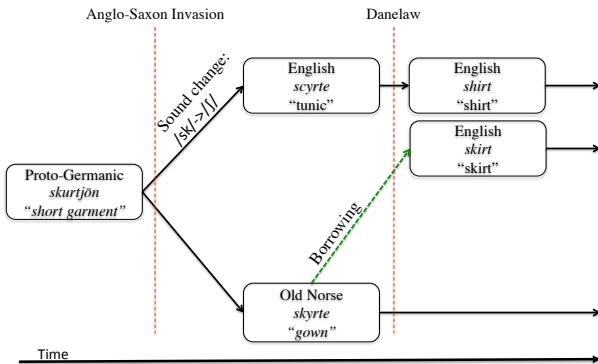


Some doublets in English:

- shirt~skirt
- shy~scare

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## Norse Doublets In English



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## Influence of Latin on Old English

Old English borrowed extensively from Latin.

- Many borrowings into the (proto-English) West Germanic dialects prior to the Anglo-Saxon invasion.
  - wine from Latin *vinum*
- Under the influence of the Catholic Church, many more words were borrowed.
  - England was Christianized throughout the 7th century.

English has continuously borrowed words from Latin.

- Today, more than 25% of English vocabulary is from Latin.
- Most of the borrowings happened during the Old English period.

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## Old English: Bēowulf

- (1) a. **Hwæt! We Gardena in geardagum**  
What! We of Spear-Danes in yore-days
- b. **beodcyninga, brym gefrunon**  
of people-kings glory heard of
- c. **hu ða æpelingas ellen fremedon!**  
how those princes valour performed.
- d. **Oft Scyld Scefing sceapena þreatum,**  
Oft Scyld Scefind of enemies from crowds
- e. **monegum mægpum, meodosetla ofteah,**  
from many tribes, mead-seats took away,
- f. **egsode earlas syððan ærest wearð**  
frightened warriors after first he was
- g. **feasceaft funden; he þas frofre gebad...**  
destitute found; he of that comfort awaited,

Lo, we have heard of the glory of the tribal kings of the Spear-Danes in olden days, how those princes did valourous deeds! Oft Scyld Scefing took away mead-benches from throngs of enemies, from many tribes, frightened warriors, after he was first found helpless—he awaited and found comfort for that.

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## Old English Grammar

Old English has a number of grammatical distinctions and structures that have since been lost in English:

- Case distinctions and grammatical gender.
- Distinct 2nd person singular and plural pronouns.
- Singular, Plural, and Dual Pronouns.
- Strong/weak verb paradigms.
- Variable word order.

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## Old English Grammar

### Grammatical Case

"A morphological category that encodes information about an element's grammatical role (subject, direct object etc.). The contrast between *he* and *him*" (O'Grady and Archibald 2012:508)

- Latin, German, Icelandic, Basque, Korean, Finnish etc.

Nouns also had **grammatical gender**, like French, Spanish, Icelandic, German.

	Masculine		Neuter		Feminine	
	Sg.	Pl.	Sg.	Pl.	Sg.	Pl.
Nominative	stān	stānas	scip	scipu	sorg	sorga
Accusative	stān	stānas	scip	scipu	sorg	sorga
Dative	stāne	stānum	scipe	scipum	sorge	sorgum
Genitive	stānes	stāna	scipes	scipa	sorge	sorga

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## Old English Grammar

### Pronoun System

	Singular			Dual			Plural			
	1st	2nd	3rd M.	3rd N.	3rd F.	1st	2nd	1st	2nd	3rd
Nom.	ic	þū	hē	hēo	hit	wit	git	wē	gē	hīe
Acc.	mē	pē	hine	hie	hit	unc	inc	ūs	ēow	hīe
Dat.	mē	pē	him	hiere	him	unc	inc	ūs	ēow	him
Gen.	min	pīn	his	hiere	his	uncer	incer	ūre	ēower	hiera

Many of these pronouns survived into Modern or Early Modern English

- þū → thou
- þē → thee
- pīn → thine/thy
- gē → ye
- ēow → you
- ēower → your

### Other changes:

- Lost the **dual** pronouns
- 3rd pl. pronouns replaced with Old Norse variants
  - þau, þeira, þeim
- Eventually 2nd sg. pronouns replaced with 2nd pl. pronouns

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## Old English Grammar

### Weak/Strong Verbs

There were two types of verbs: **weak** and **strong**

- Weak verbs used suffixes (like *-ed*) to mark these distinctions
- Strong verbs used a process of vowel change called **ablaut** to indicate past tense and past participle forms.
  - Vestiges of this system remain in Modern English irregular verbs.

Ablaut					
Present	sing	[i]	drive	[a]	
Past	sang	[æ]	drove	[o]	
Participle	sung	[ʌ]	driven	[ɪ]	

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## Middle English (More Invading)

### The Norman Conquest of England

In 1066 the **Normans** (Norsemen who had earlier settled in Northern France in 911) invaded and conquered England.

- Normans adopted French, brought it with them.
- Norman French becomes the language of the upper class and the language of government, law, and literature.
- English remained the language "of the people".



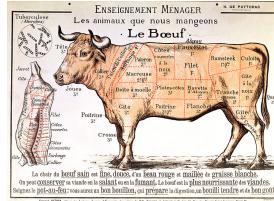
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## Middle English Borrowings

Native English words continued to be used for farm animals (by the English speaking farmers), yet the name for the meat of those animals was borrowed from French:

Farm	Food	French
cow	vs.	beef
pig	vs.	pork
sheep	vs.	mutton
fowl	vs.	poultry



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## Old English Grammar

### Variable Word Order

Old English has much more free word order than Modern English because **case** indicated subject, object etc.

- Sē man slōh þone kyning. SVO
- þone kyning slōh sē man. OVS
- Sē man þone kyning slōh. SOV
- þone kyning sē man slōh. OSV
- Slōh sē man þone kyning. VSO
- Slōh þone kyning sē man. VOS

All are equally grammatical ways of saying "That man killed this king"

## Middle English Borrowings

During this period, English **borrowed** many words from French.

- Mostly related to **government and law**:
  - accuse, acquit, administer, advocate, attorney, bail, baron, constable, convict, council, court, crown, duke, estate, evidence, fine, govern, heir, jury, liberty, madam, manor, major, noble, oppress, parliament, peasant, plea, pledge, prison, reign, royal, sentence, subject, tax...
- Some more general usage:
  - bacon, blue, dinner, music, sugar, beef, brown, cream herb, mustard, pork, supper, biscuit, button, lamp, salad, chair, dance, paper...

## Decline of French Influence

After the conquest of Normandy by the French in 1204, there was a rising sense of English nationalism in the Middle English period.

- The influence and prestige of Norman French greatly subsides thereafter.
- Throughout the Middle Ages and into the Renaissance, still a lot of borrowings from **Latin** (the language of learned Europe).

### Other changes...

- Loss of inflectional endings for case, number and gender.
  - Case becomes restricted to pronouns (like Mod. English)
  - English shifts away from **grammatical gender** to a system of **natural gender**.
- Loss of case inflection led to fixed SVO **word order**.
- Increase in modal verbs.

## Middle English: The Canterbury Tales

The Millere that fordrunken was al pale,  
So that unnethe upon his hors he sat,  
He noldes avalen neithir hood ne hat,  
Ne abyde no man for his curteisie,  
But in Pilates voye he gan to crie,  
And swoore, "By armes and by blood and bones,  
I kan a noble take for the nones,  
With which I wol now quite the Knyghtes tale."  
Oure Hooste saugh that he was dronke of ale,  
And seyd, "Abyd, Robyn, my leeve brother,

The miller, who totally drunk was all pale,  
So that with difficulty upon his horse he sat,  
He would take off neither hood or hat,  
Nor wait for any man out of courtesy,  
But in Pilate's voice began to cry,  
And swore, "By arms and by blood and bones,  
I know a noble take for the occasion,  
With which I will replay good knight's take."  
Our host saw, that he was drunk from ale,  
And said to him: "Wait, Robin, my dear

brother,

Some bettre man shal telle us first another:  
Abyd, and lat us werken thriftily."

"By Goddes soule," quod he, "that wol nat I;  
For I wol speke, or elles go my wey."  
Oure Hoost answeerde, "Tel on, a devel wey!  
Thou art a fool, thy wit is overcome!  
Now herkneheth," quod the Miller, "alle and some,  
But first I make a protestacion  
That I am drone, I know it by my soun.  
therfore, if that I mysspeke or seye,  
Wyte it the ale of Southwerk I you preye.

"By God's soul," said he, "that will not I!"  
For I will speak, or else go my way."

Oure host answered: "Tell on, what the devil  
You are a fool, your wit is overcome."  
"Now listen," said the miller, "one and all!"

But first I make a protestation  
that I am drunk, I know it by my sound.  
Therefore, if I speak or talk amiss,  
Blame it on ale of Southwark, I beseech you.

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## Early Modern English

The start of the **Early Modern English** period is marked by William Caxton's introduction of the printing press to England in 1476 and the English Renaissance.

- Led to an increase in literacy.
- Led to a standardization of English (based on London dialect), complete with dictionaries and prescriptive writing manuals.



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## Early Modern English Borrowings

- A lot of technical terminology was borrowed from Greek and Latin during this period.
- Italian words from art, music, architecture and poetry were borrowed into English.
  - Art: *fresco, miniature, profile, relief*
  - Architecture: *rotunda, stucco*
  - Music: *oratorio, trill*
  - Poetry: *sonnet, stanza*
- Vocabulary explosion from many languages:
  - German, Celtic, Russian, Norwegian, Dutch, Ojibwe, Cree, Turkish, Arabic, Hindi, Igbo, Cantonese

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## Early Modern English Borrowings

Proto-Indo-European

\*kaput-

English  
heafod  
head

h

Latin  
caput-

English  
cap/captain

k

Old French  
chief

English  
chief  
Mod. French  
chef  
English  
chef

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## Early Modern English Grammar

- Auxiliary "do" appeared:
  - I doubt it not → I do not doubt it.
- Plural -s suffix replaced most other plural forms, with a few exceptions.
  - -en: *ox/oxen, child/children, brother/brethren*
  - vowel change: *mouse/mice, foot/feet*
- 3rd person singular agreement ending changes from -eth to -s.
  - cometh and goeth → comes and goes
- Word final schwas dropped.
  - Left English orthography with a lot of silent "e"s (e.g. *some, give*).
- Start of *r*-dropping in some dialects.

### Fun fact:

Shakespearean actors would not have dropped their *rs* yet... a later development.

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## Early Modern English: The Great Vowel Shift

A major development in the phonology of Early Modern English was a systematic vowel shift that affected **the long vowels**.

Old and Middle English had a phonemic length contrast in vowels.

	Short		Long			
	Front	Back	Front	Back		
High	i	y	u	i:	y:	u:
Mid	e	(ø)	o	e:	(ø:)	o:
Low	æ	a		æ:	a:	

One of the major reasons the English writing system is so wild.

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## Early Modern English: The Great Vowel Shift

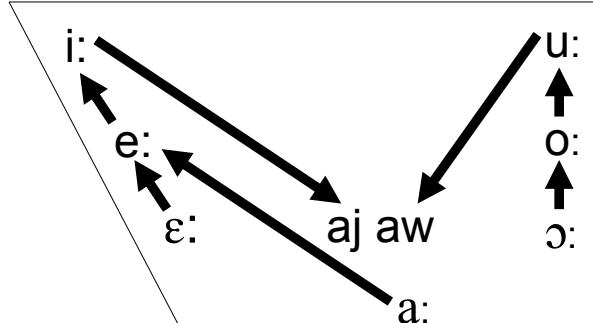
Among the long vowels, the following changes occurred.

[i:] → [a:]	/tajd/ tide
[u:] → [aw]	/lawd/ loud
[e:] → [i:]	/gis/ geese
[o:] → [u:]	/gus/ goose
[ɛ:] → [e:]	/brek/ break
[ɔ:] → [o:]	/brok/ broke
[a:] → [æ:] → [ɛ:] → [e:]	/nem/ name

The two high vowels become diphthongs while the other vowels are pulled higher to fill the space left by the high vowels.

► A chain shift.

## Early Modern English: The Great Vowel Shift



## Early Modern English: Henry IV Part 1

Poins: Come you reason Jack, your reason.

Falstaff: What, upon compulsion? No: were I at the Strappado, or all the Racks in the World, I would not tell you on compulsion. Give you a reason on compulsion? If Reasons were as plentie as Blackberries, I would give no man a Reason upon compulsion, I.

Note the pun: *reason* was homophonous with *raison* before the GVS.

David and Ben Crystal on OP

## Overview of the History of English

1. 449–1066: Old English
  - 449 Angles, Saxons, Jutes invade England
  - 878 Danes and Vikings invade north and east
2. 1066–1476: Middle English
  - 1066: Normans conquer England
  - 1204: Decline of French influence
3. 1476–1800: Early Modern English
  - 1476: Introduction of printing press.
4. 1800–: Modern English

## Language Families

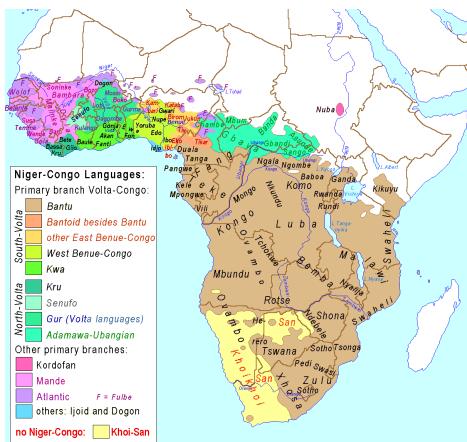
## Relatedness of Languages

*The Sanskrit language, whatever be its antiquity, is of a wonderful structure more perfect than the Greek, more copious than the Latin, and more exquisitely refined than either, yet bearing to both of them a stronger affinity, both in the roots of verbs and in the forms of grammar, than could possibly have been produced by accident; so strong indeed, that no philologer could examine them all three, without believing them to have sprung from some common source, which, perhaps, no longer exists; there is a similar reason, though not quite so forcible, for supposing that both the Gothic and the Celtic, though blended with a very different idiom, had the same origin with the Sanskrit, and the old Persian might be added to the same family.*

*Sir William Jones, 1786*



## Other Language Families: Niger-Congo



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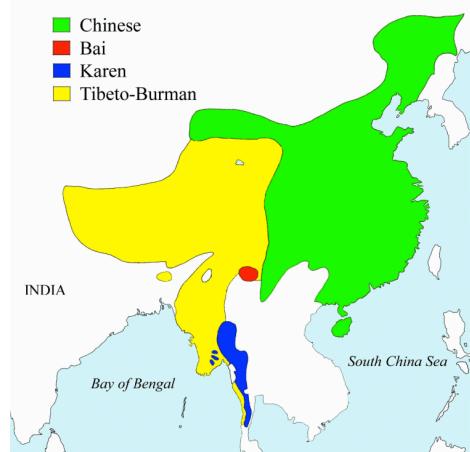
## Other Language Families: Austronesian



Credit: Encyclopædia Britannica, Inc.

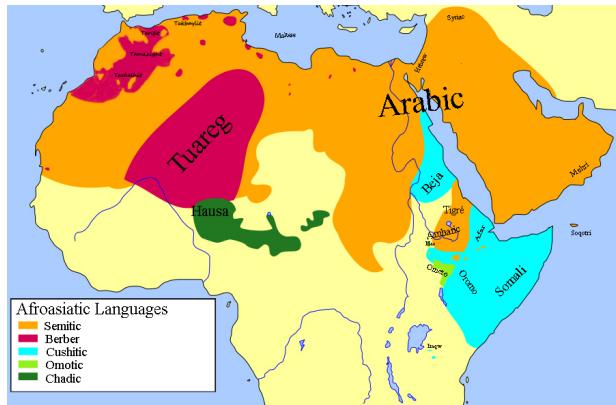
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## Other Language Families: Sino-Tibetan



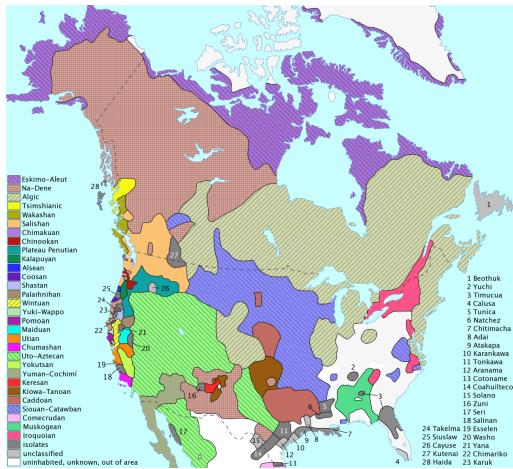
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## Other Language Families: Afro-Asiatic



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## Language Families of North America



## Other Language Families

### Other Families

- Trans-New-Guinea
- Dravidian
- Pama-Nyungan
- Turkic
- Mongolic
- Japonic
- Caucasian
- Khoi
- Tai-Kadai
- Uralic
- ...

### Language Isolates

- **Basque** (the last of the pre-Indo-European languages?)
- Korean
- Haida
- Ainu

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## Relatedness and Unrelatedness

There are other reasons languages can have similar features.

- Universal tendencies.
  - e.g., all languages have syllables, certain word orders are rare.
- Diffusion/Sprachbunds.
  - Languages constantly borrow from other languages, even unrelated languages (**diffusion** of features).
  - Unrelated languages that are in close proximity often share features.
- **Sprachbunds** (Ger. *language leagues*) are groups of unrelated languages that share many features:
  - e.g., three language families of the Pacific Northwest share: *ejjectives, location/shape affixes, verb initial word order*.
- Accident.
  - Bantu and Algonquian have causative morphemes but couldn't possibly be related.
  - English *mama*, Hebrew *ima*, Ma'darian *mā*

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## Reconstructing earlier languages

## Reconstruction

### How do we know languages are related?

- Examine **cognates**.
  - Establish sound correspondences.
- Look for other correspondences:
  - Similar syntactic structures.
  - Similar morphology.

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## Reconstructing earlier languages

### Finding cognates...

- We already saw some cognates in Indo-European.
- Which words should we compare?
  - Some words are more **stable** (less likely to be replaced through borrowing/innovation).
  - kinship terms
    - *mother, father, sister, aunt*
  - pronouns
    - *I, you, he, she, they*
  - numerals, body parts, animals, agriculture, natural features, mental/bodily functions, verbs of construction and motion...
- **Swadesh List:** 200 generally stable meanings, used for consistent comparison across languages.

## Reconstructing earlier languages

### Establishing sound correspondences

If we compare a set of cognates from two languages and we see that one sound appears in one language exactly where a different sound appears in another language, we call this a **sound correspondence**.

### Māori and Hawai'i'an

	t/k	Correspondence	r/l	Correspondence	Both
	'sea'	'one'	'five'	'enter'	'three'
Māori	tai	tahi	rima	uru	toru
Hawai'i'an	kai	kahi	lima	ulu	kolu

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## Reconstructing earlier languages

### An Indo-European Sound Correspondence

PIE	Sanskrit	Latin	English
*p	p pitar-	p pater	f father
	p pad-	p pedis	f foot
-		p piscis	f fish
	p pašu	p pecu	f fee

This correspondence is not by chance! (See Grimm's Law below)

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## Reconstructing earlier languages

Putting it all together. How do we reconstruct an ancestral language?

- Majority rules: assume that the more frequent forms/sounds in the daughter languages were the form in the proto-language.

French	Italian	Spanish	Portuguese	Proto-Romance	English
ſer	karo	karo	karo	*karo	dear
ſamp	kampo	kampo	kampo	*campo	field

The correspondence set:

ſ - k - k - k  
ɛ - a - a - a

Proto-Romance:

\*k  
\*a

Repeat this for every consonant and vowel in the languages...

e.g., m - m - m - m = \*m

majority rules

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## Reconstructing earlier languages

Putting it all together. How do we reconstruct an ancestral language?

- Phonological naturalness: some changes are more common cross-linguistically.

### Natural Changes

- Assimilation
- Frication
- Affrication
- Intervocalic voicing
- Deletion (esp. finally)
- Degemination (tt→t)
- Debuccalization (C→h)

### Less Frequent Changes

- Dissimilation
- Stopping
- Deaffrication
- Devoicing
- Consonant epenthesis
- gemination
- deglossalization (h→C)

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## Reconstructing earlier languages

Very Important!!: Phonological naturalness can outweigh majority rules.

- Certain phonological changes are more likely

Lang A	Lang B	Lang C	Lang D	Proto-Lang
hono	hono	fono	vono	*fono
hari	hari	fari	veli	*fari
rahima	rahima	rafima	levima	*rafima
hor	hor	for	vol	*for

The correspondence set:

h - h - f - v

Proto-Lang:

\*h, \*f, or \*v?

Majority rules would suggest \*h but \*h→f and \*h→v is historically and phonologically unusual.

- \*f can explain all the data with one change per language
  - \*f→h (debuccalization), \*f→v (voicing)

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## Reconstructing earlier languages

Spanish	Sardinian	Romanian	Proto-Romance	English
[ilo]	[filu]	[fir]	*filu	'thread'
[viða]	[bita]	[vita]	*bita	'life'
[vino]	[binu]	[vin]	*binu	'wine'
[riva]	[riba]	[ripa]	*ripa	'bank'
[rio]	[riu]	[riu]	*riu	'river'
[riso]	[rizu]	[ris]	*risu	laugh'
[muða]	[muta]	[muta]	*muta	'change'

### Spanish

- \*f→∅
- \*b→v
- \*t→ð
- \*p→v
- \*u→o

### Sardinian

- \*p→b
- \*s→z

### Romanian

- \*l→r
- \*u→∅
- \*b→v

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## Reconstructing Proto-Indo-European

Which languages do you think are related?

Look for similarities in the numbers one through five.

A	B	C	D	E	F
en	jedyn	i	ekas	ichi	exad
twene	dwjaj	liang	dwaū	ni	ſnajim
θria	tri	san	trajas	san	ſlofa
fiuwar	ſtyri	ſſsu	cçatvāras	ji	arba?a
fif	pjec	wu	pañcāra	go	xamiſa

G	H	I	J	K	L
mot	yn	hana	jaw	uno	wan
hai	duos	dul	daw	dos	tu
ba	trais	set	dre	tres	θui
bon	kwatter	net	tsaloor	kwatro	foi
nam	ſintʃ	daseot	pindze	sikjo	fajv

A and L have commonalities: [t] where other IE languages have [d], [θ] where others have [t], and [f] where others have [v].

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## Grimm's Law: A sound change from PIE to Germanic

Jacob Grimm (of the Brother's Grimm) discovered a major, systematic, **regular** sound change that happened between PIE and Germanic.

- Regular sound changes effect every word with the affected phoneme in it.

PIE	Germanic	Change
p, t, k	→ f, θ, h	vls. stops → vls. fricatives
b, d, g	→ p, t, k	vcd. stops → vls. stops
bh, dh, gh	→ b, d, g	vcd. asp. stops → vcd. stops

## Grimm's Law: A sound change from PIE to Germanic

	Indic		European		Germanic	
	Sanskrit	Greek	Latin	Gothic	English	
p>f	pad-	pod-	ped-	fōtus	foot	
t>θ	tri	tría	trēs-	θrija	three	
k>x/h	—	kúon	canis	hunds	hound	
b>p	—	—	lūbricus	sliupan	slip	
d>t	pad-	pod-	ped-	fōtus	foot	
g>k	dgánás	géños	genus	kun-i	kin	
bh>b	bhar-	phér-	fer-	baír-an	bear	
dh>d	vidhávā	ē-wíthewos	vidua	widuwo	widow	
gh>g	hams-á-	khēn	(h)āns-er	Gans	goose	

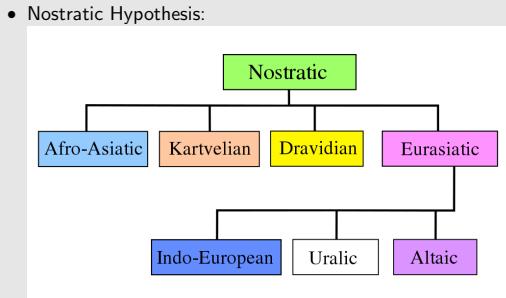
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## How far back can we go?

Not that far!

- Some historical linguists have attempted to trace connections between language families:



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## How far back can we go?

It's surely possible that some broad language families are connected to each other but...

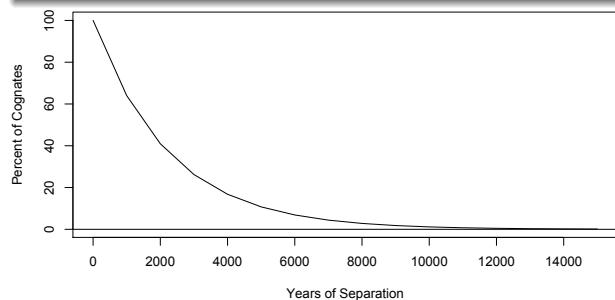
1. The rate of linguistic change is great enough that after a few thousand years of separation, two genetically related languages may show only the faintest traces of common origin.
2. Thus, the reconstruction method can only be used to trace common ancestry at most a few thousand years in the past.
3. Written records extend our perspective but the oldest written records are only 5000 years old and for only a few languages do we have texts that go back 2000 years.
4. Thus, even with written records, the best we can do is trace genetic relationships 6000-8000 years into the past but in most cases no more than 3000 or 4000 years.

## How far back can we go?

Some linguists have devised a formula to estimate how long ago two languages separated given the percent of shared vocabulary between the two:

- Lee's Equation:

$$t = \frac{\log c}{2 \log r}$$



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## For Next Tuesday...

1. Relax on your Fall Break.
2. Read Chapters 10 and 9.
3. Hand In the Draft of your paper (Guidelines to be posted ASAP).