

LING001

Introduction to Linguistics

Lecture 20

Historical

04/15/2020

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A few things coming

- Exam 3 grading
- This week's practice problems
- This week's solutions
- This week's study guide
- Exam 2 return

Help!

- Fill out [this form](#) if you are anxiously awaiting the return of Exam 2.
- Every night, I'll work my way down the list returning a few each night. If you've already emailed about the exam, you are automatically at the top of the list.

Misconceptions about language change

- Language change is often viewed as decay
 - “Ugh, it is my pet peeve when people use that word wrong!”
 - “We have to restore the purity of the English grammar!”
 - “Kids these days don’t speak proper English anymore!”
- This is a form of cultural pessimism
 - “Everything was better in the old days”
 - Things used to be pure, now they are corrupted”
- None of these claims are scientifically sound

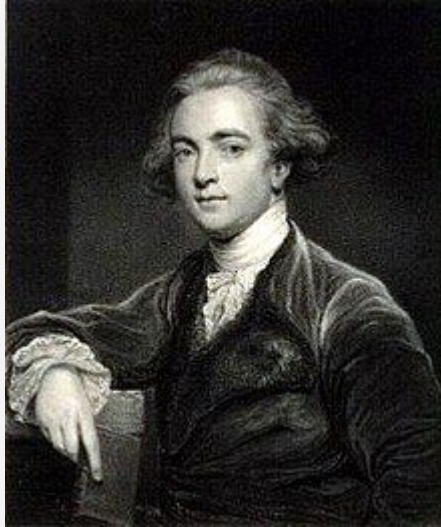
Why do languages change?

- Language learning
 - Children must construct their language based on the input received
→ imperfect process
 - Human biases come into play
- Language use
 - Languages are used to communicate and to express identity
 - Both processes can cause change
 - Communication also leads to the spread of innovations
- Language contact - via migration, conquest, trade
 - Adults learn new language as an L2
 - Children may be fully bilingual
 - Borrowing of words (especially), but also sounds, and even syntactic constructions

How do languages change?

- Language changes takes place on all levels:
 - **Phonology - sound change**
 - Morphology - changes in affixation
 - Syntax - changes in word order
 - Semantics - changes in word meanings

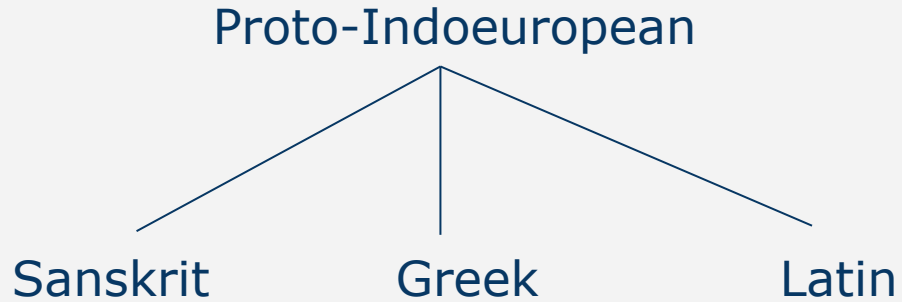
William James



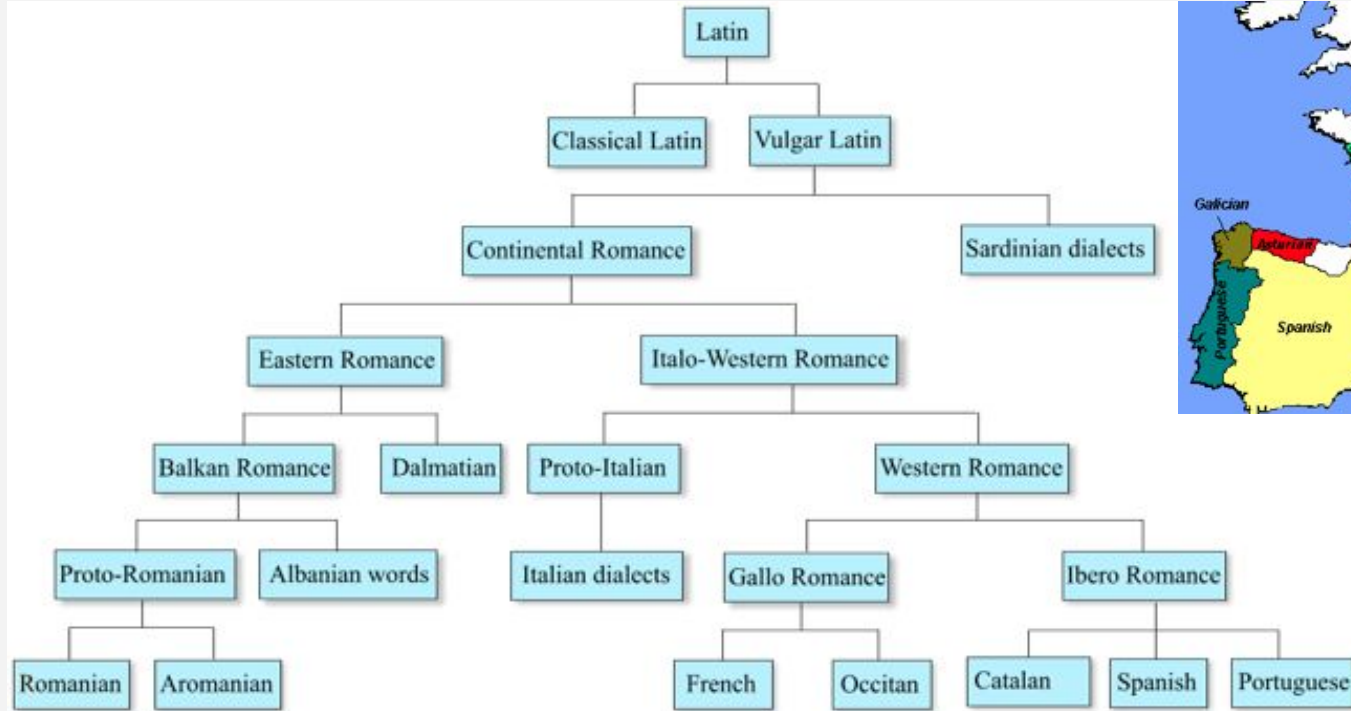
The Sanscrit language, whatever be its antiquity, is of a wonderful structure; more perfect than the Greek, more copious than the Latin, and more exquisitely refined than either, yet bearing to both of them a stronger affinity, both in the roots of verbs and the forms of grammar, than could possibly 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;"

Languages are related

Family tree model



Example: Romance Family



How do we know languages are related?

- In the case of Romance languages, **the history is well known to us**
- **Similarities** are obvious in many places (e.g. numerals)

French	Italian	Portuguese	Spanish	Catalan	Romanian
un	un	um	uno	un	unu
deux	due	dois	dos	dos	doi
trois	tre	três	tres	tres	trei
quatre	quattro	quatro	cuatro	quatre	patru
cinq	cinque	cinco	cinco	cinc	cinci
six	sei	seis	seis	sis	șase
sept	sette	sete	siete	set	șapte
huit	otto	oito	ocho	vuit	opt
neuf	nove	nove	nueve	nou	nouă
dix	dieci	dez	diez	deu	zece

Inferring Family Relations

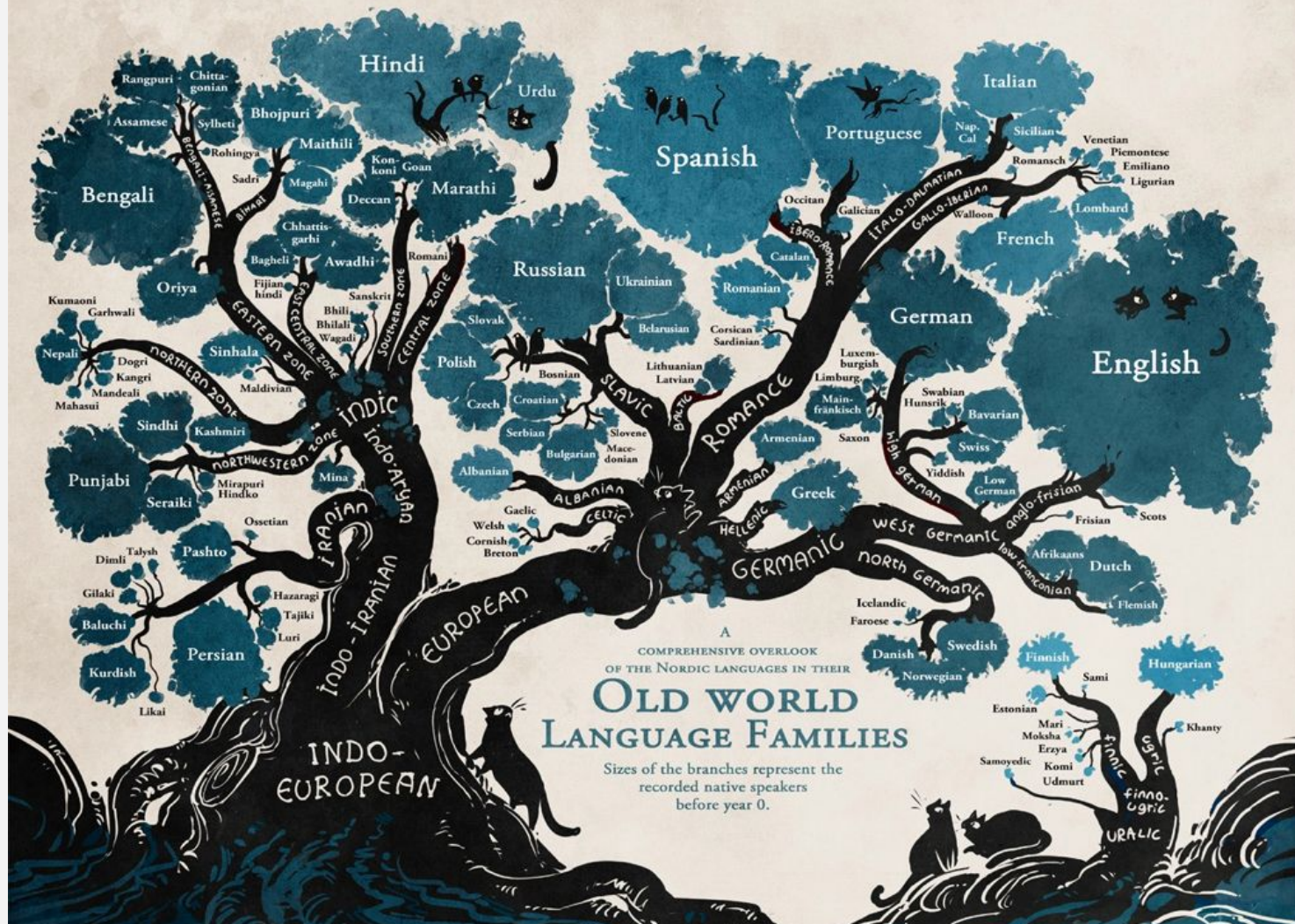
- What about languages with poor historical records? We need a more general approach
- **The comparative method**
 - Look for words with similar sounds and meanings across many languages to determine relationships
 - But be careful to avoid coincidental resemblance: find many examples and look for **systematic correspondences** only
 - And be careful to avoid borrowed words: stick to basic vocabulary like numbers, kinship, animals, body parts, etc.

Indo-European Number Words

- Many striking similarities across relatively distant languages

	Welsh	Greek	Latin	Portuguese	German	Russian	Persian	Lithuanian
1	un	hen	unus	um	eins	odin	yak	vienas
2	dau	duo	duo	dois	zwei	dva	do	du
3	tri	treis	tres	três	drei	tri	se	trys
4	pedwar	tettares	quattuor	quatro	vier	chetyre	cahar	keturi
5	pump	pente	quinque	cinco	fünf	pyat	panj	penkti
6	chwech	hex	sex	seis	sechs	shesht	shesh	sesi
7	saith	hepta	septem	sete	sieben	sem	haft	septyni
8	wyth	okto	octo	oito	acht	vosem	hasht	astuoni
9	naw	ennea	novem	nove	neun	devyat	noh	devyni
10	deg	deka	decem	dez	zehn	desyat	dah	desimt
100	cant	hekaton	centum	cem	hundert	sto	sad	simtas

Source: Mallory, J.P., "In Search of the Indo-Europeans: Language, Archaeology and Myth," Thames and Hudson, London: 1989



Basis of Language Classification

- How do we know **which similarities** to count toward family relations?
- Must reconstruction relies on the observation that **sound change is overwhelming regular**: any sound change is likely to affect all the words that contain that sound
- Note the emphasis on **phonology**
 - Syntactic similarities are much less reliable for identifying relatedness (far fewer degrees of freedom, so coincidence more likely)

The comparative method

- Step a, compile cognates
- Step b, determine sound correspondences
- Step c, reconstruct a sound for each position
- Step d, check for regularity

Step a, compile cognates

- **Cognate** another word that descends from the same source; very similar in form and (usually) identical or very similar in meaning

Samoan

[taʔele]

Māori

[takere]

Fijian

[takele]

Hawaiian

[kaʔele]

‘keel’

Step b, sound correspondences

- Check for sound correspondences in **the same position** in the words in each cognate set.

Samoan	Māori	Fijian	Hawaiian	
[taʔele]	[takere]	[takele]	[kaʔele]	'keel'
[t]	[t]	[t]	[k]	
[a]	[a]	[a]	[a]	
[ʔ]	[k]	[k]	[ʔ]	
[e]	[e]	[e]	[e]	
[l]	[r]	[l]	[l]	
[e]	[e]	[e]	[e]	

Step c, reconstruct a sound for each position

- Try to determine the earlier protoform by checking
 - For **total correspondence**: same sound in same position
 - Most **natural development**: the most natural sound change

Samoaan	Māori	Fijian	Hawaiian	
[taʔele]	[takere]	[takele]	[kaʔele]	'keel'
[t]	[t]	[t]	[k]	
[a]	[a]	[a]	[a]	
[ʔ]	[k]	[k]	[ʔ]	
[e]	[e]	[e]	[e]	*[_a_e_e]
[l]	[r]	[l]	[l]	
[e]	[e]	[e]	[e]	

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[e]	[e]	[e]	[e]	*[_a_e_e]
[l]	[r]	[l]	[l]	
[e]	[e]	[e]	[e]	

List of common sound changes

- Voiceless sounds become voiced between vowels and before voiced consonants
- Stops become fricatives between vowels
- Consonants become palatalized before non-low front vowels
- Consonants become voiceless at the ends of words
- Difficult consonant clusters are simplified
- Difficult consonant clusters are made easier (for example, voiced aspirated stops might become plain voiced stops).
- Oral vowels become nasalized before nasals
- **Fricatives other than [h] become [h], and (voiceless) stops other than [p] become [p]**
- [h] deletes between vowels
- Clusters of vowels are broken up by consonants

Step c, reconstruct a sound for each position

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Samoaan	Māori	Fijian	Hawaiian	
[taʔele]	[takere]	[takele]	[kaʔele]	'keel'
[t]	[t]	[t]	[k]	
[a]	[a]	[a]	[a]	
[ʔ]	[k]	[k]	[ʔ]	
[e]	[e]	[e]	[e]	*[_ake_e]
[l]	[r]	[l]	[l]	
[e]	[e]	[e]	[e]	

Step c, reconstruct a sound for each position

- Try to determine the earlier protoform by checking
 1. For **total correspondence**: same sound in same position
 2. Most **natural development**: the most natural sound change
 3. **Occam's Razor**: the simplest solution is best

Samoa	Māori	Fijian	Hawaiian	
[taʔele]	[takere]	[takele]	[kaʔele]	'keel'
[t]	[t]	[t]	[k]	
[a]	[a]	[a]	[a]	
[ʔ]	[k]	[k]	[ʔ]	
[e]	[e]	[e]	[e]	*[t akele]
[l]	[r]	[l]	[l]	
[e]	[e]	[e]	[e]	

Step d, check for regularity

- Because sound change is regular, we need to check to make sure our results are consistent across a whole collection of cognates

Samoan	Māori	Fijian	Hawaiian	
[taʔele]	[takere]	[takele]	[kaʔele]	‘keel’
[tapu]	[tapu]	[tabu]	[kapu]	‘taboo’

Step d, check for regularity

*[takele]

*[t]>[k]

*[p]>[b]

Samoan

Māori

Fijian

Hawaiian

[taʔele]

[takere]

[takele]

[kaʔele]

‘keel’

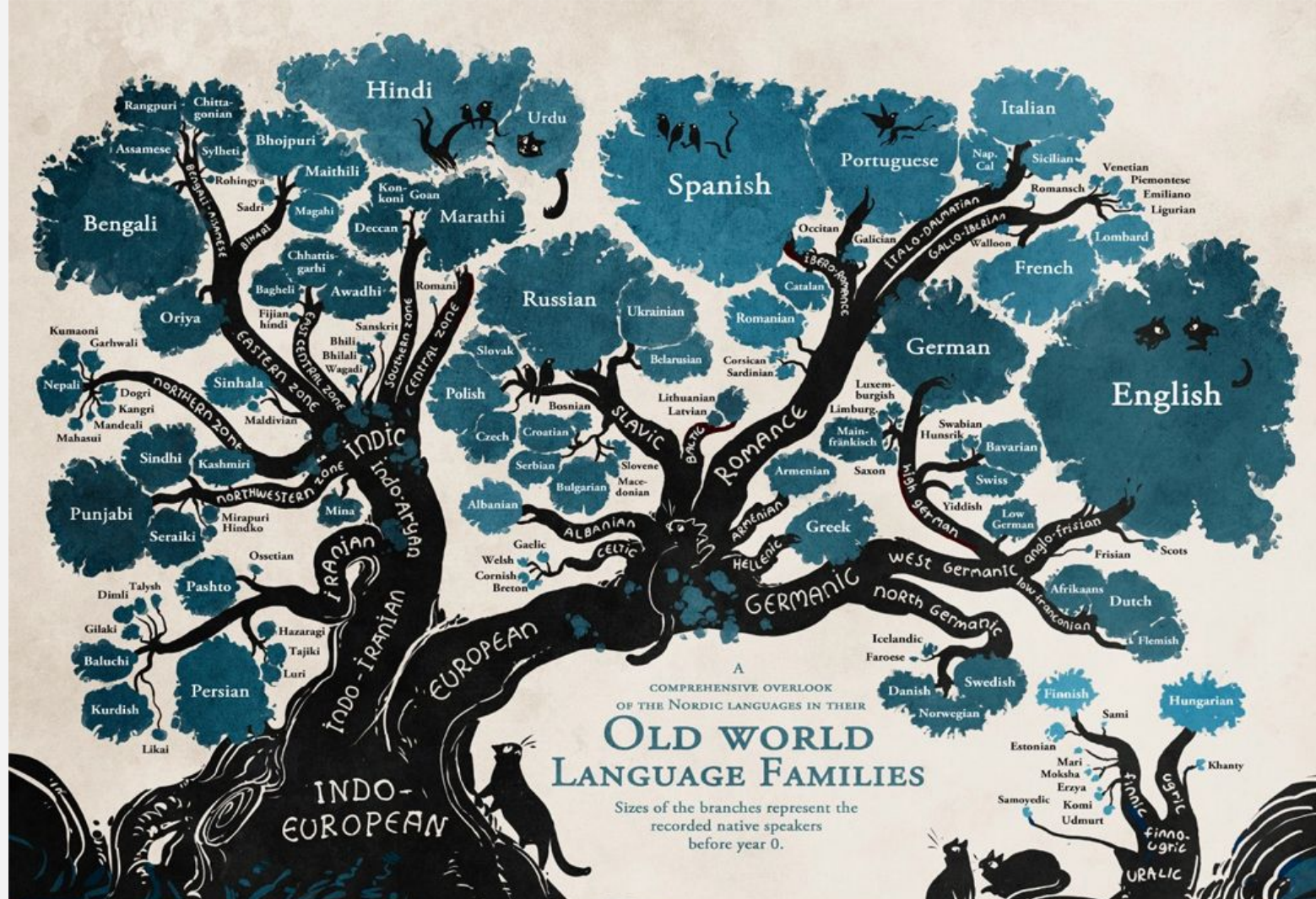
[tapu]

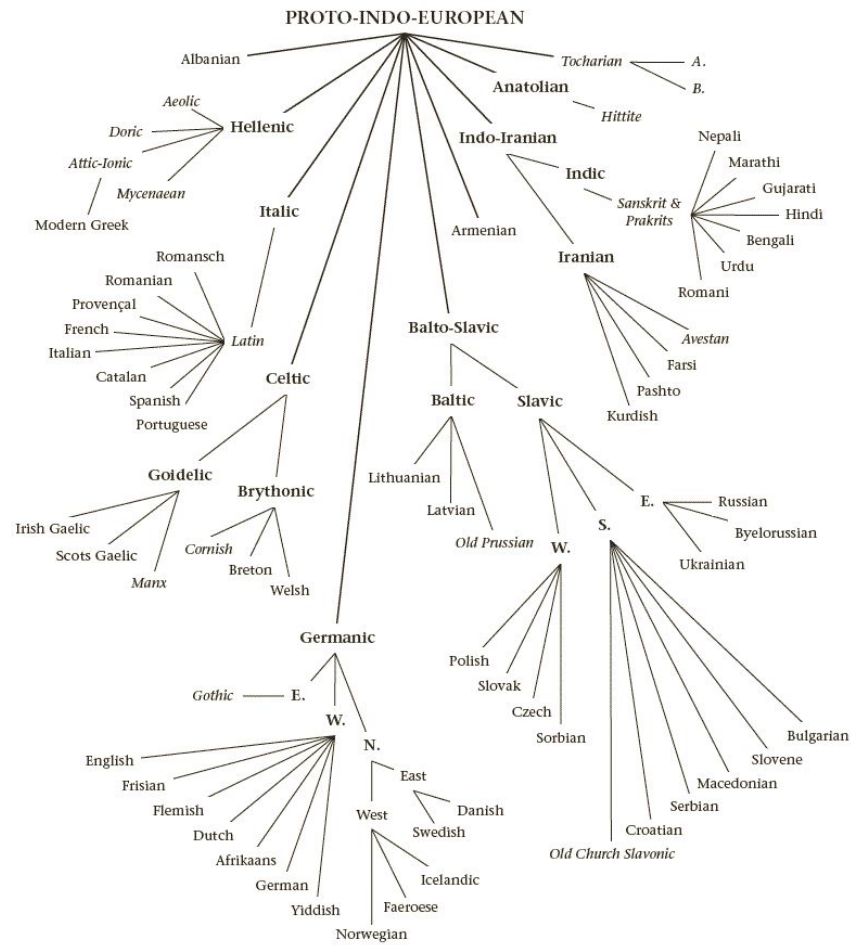
[tapu]

[tabu]

[kapu]

‘taboo’





Languages that are no longer spoken are italicized (*Cornish*), and significant subbranches are in boldface (**Baltic**).

Grimm's Law

- **Grimm's Law:** consonant changes between Proto-Indo-European and Proto-Germanic
- **p t k > f θ x (voiceless stops)**
 - became fricatives in Germanic, but not in Latin, Greek, or Sanskrit
- **b d g > p t k (voiced stops)**
 - devoiced in Germanic, but not in Latin, Greek, or Sanskrit
- **bh dh gh > b d g (aspirated voiced stops)**
 - deaspirated in Germanic, fricated in Latin (f, f, h), devoiced in Greek (ph, th, kh), retained in Sanskrit

Some examples

Grimm's Law

Sound shift	Sanskrit	Greek	Latin	English
p→f	pād-	pod-	ped-	foot
t→th	tanu-	tanaós	tenuis	thin
k→h	çatam	hekatón	centum	hundred
d→t	daça	déka	decem	ten
g→k	arjas	agrós	ager	acre

- **Note:** Grimm's law applies to a reliable set of correspondences between particular Indo-European languages
- NOT a law that applies to language change generally

Another sound change

- Greek has **h** where English, Latin, etc. have **s**:
 - **Hepta** vs **seven**, **septuem**
- In general, proto-Indo-European initial **s** changed into **h** in Greek:
 - **semi** (circle) vs. **hemi** (sphere)
 - **six** vs. **hex** (agon)
 - **same** vs. **homo**(sexual)
 - **super** vs. **hyper**
- This is a common sound change. Something very similar has occurred quite recently in some varieties of Spanish
 - **buenah diah**, **ahta la vihta**

Systematic vs. Chance Resemblance

- Chance resemblances are surprisingly common, but not systematic. For example, the following are unrelated:
 - English **much**, Spanish **mucho**
 - English **bad**, Persian **bæd**
 - German/English haben/have, Latin/French habere/avoir
 - Dutch elkaar “each other”, Basque elkar “each other”
- Examination of systematic correspondences reveal that these are accidental - just a coincidence
 - For example, English **have** corresponds to Latin **capere** (“take”) while Latin **habere** corresponds to English **give**.

What about other kinds of change?

Syntactic Change

- **Modern English:** SVO word order
 - “He thanked God”
- **Old English:** SOV common up to mid-12th century
 - “he Gode þancode” (from Beowulf)

Morphological Change

- **“Strong” verbs** used to be more common:
 - climb/clumb
 - help/holp
 - swell/swoll
- **Overgeneralization** is slowly eliminating them:
 - climb/climbed
- The process continues:
 - sweep, learn, strive, show, speed
- Recall overgeneralization in acquisition:
 - e.g., hold-helded

Semantic Change

- **Extension** – same word with broader meaning.
 - e.g. **dog** originally referred to a specific breed
- **Narrowing** – same word with more tightly focused meaning.
 - Old English **mete** – any food
- **Shift** – word gets a new meaning to reflect change in culture or conditions
 - English **gay**: carefree -> (sexually) uninhibited -> homosexual
 - gay originally borrowed from Old French **gai**, which itself was a borrowing from Germanic...

Borrowings

- Japanese 寿司 [sɯʃi]
- English **sushi**
- English **sushi + bar**
- Japanese [sɯʃiba]

English **animation**

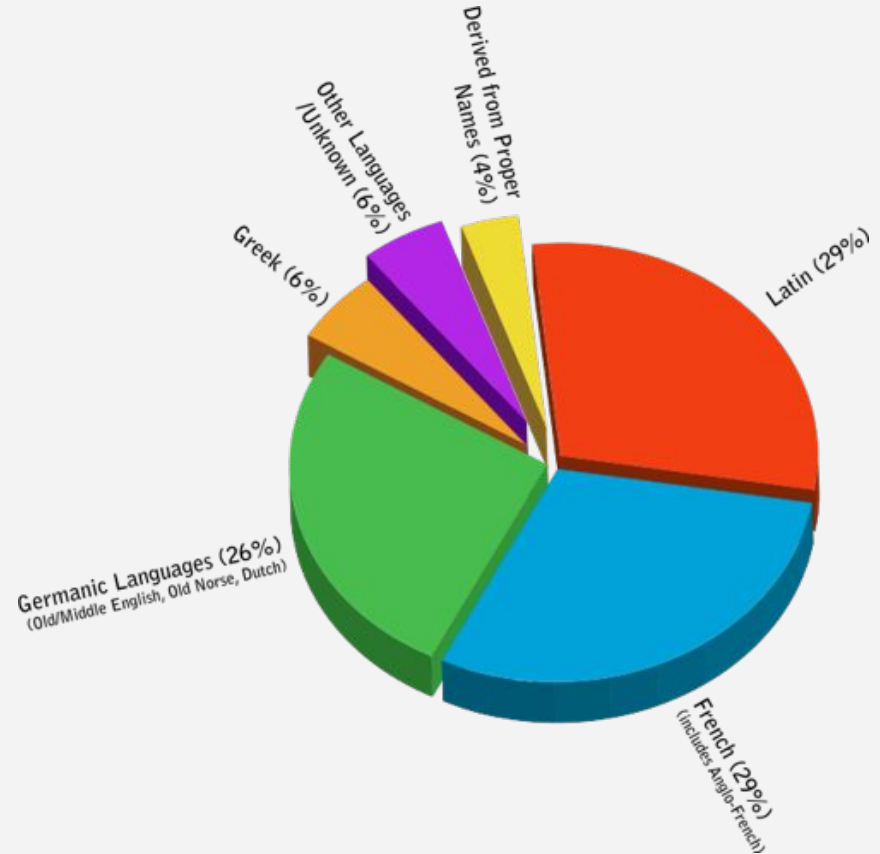
Japanese アニメーション
[animeɪʃən]

Japanese アニメ **[anime]**

English **anime**
(‘Japanese animation’)

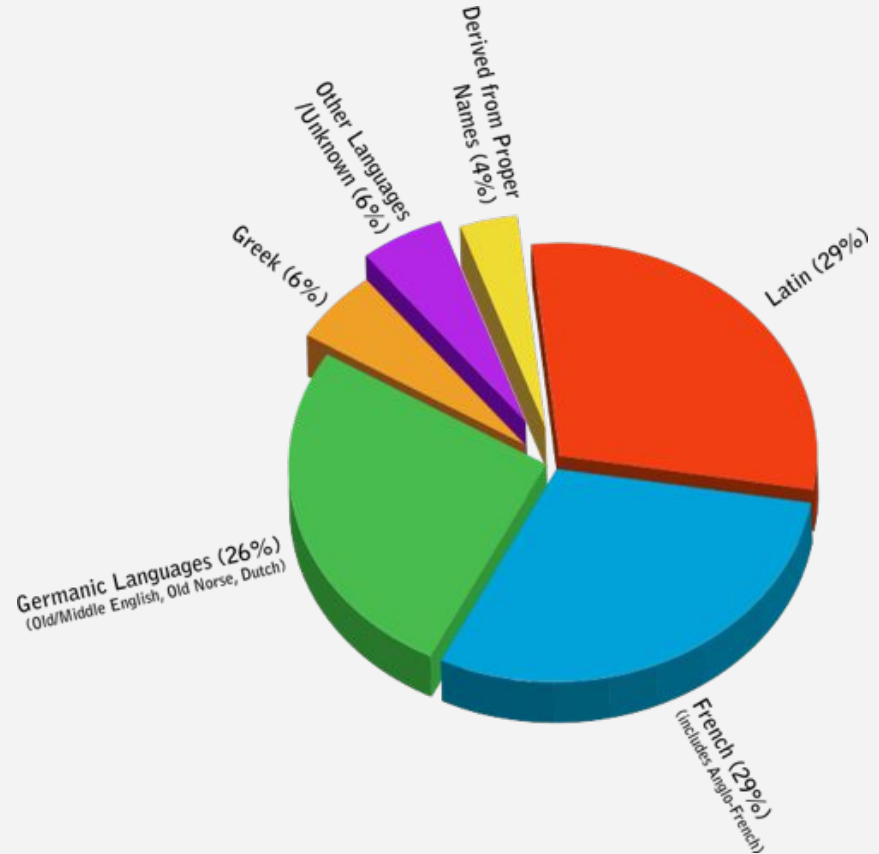
English word origins

- Though most of the words you hear in **day-to-day speech** come from Germanic



How do words change?

- **Phonological change**
 - PIE ***peisk** →
 - Proto-germanic ***fisk** →
 - Old English fisc **/fiʃ/** →
 - Modern English fish **/fɪʃ/**
- More irregular sources of change
 - **Borrowings**
 - **Taboos**
 - **Reanalysis**



Word Taboos

- Words may be avoided and replaced due to taboo associations
 - **Donkey** (for ass), **rooster/cockerel** (for cock)
- Naming powerful things often perceived as dangerous
 - Religion: darn, gosh, heck, sacre bleu...
 - Words for bear in Germanic not cognate with words in many other IE languages (Latin **ursus**, Greek **arktos**, Albanian **ari**, Welsh **arth**)
 - Germanic words likely derived from the word for brown

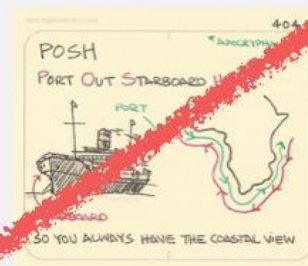
Reanalysis

- Forms can be **reinterpreted**
- Phonological variation reinterpreted as morphological
 - Tooth vs teeth, man vs men
- Separate words interpreted as bound morphemes
 - Romance languages **infinitive + <have> → future tense**
 - French: amier + ai → amerai
 - Spanish: hablar + has → halaras

Folk etymology

Lots of **false etymology** around:

- posh < "Port Out Starboard Home"
- gringo < "Green coat", "Green I grow the rushes"...
- tips < "to insure prompt service"
- isle < island (or vice versa)
- hiccup < hic + cough
- marmalade < "Marie est malade!"



Folk etymology

- **Folk etymology:** changes brought about by misinterpretations of a word's etymology
- Examples:
 - Garden snake < garter snake
 - Sick-as-hell anemia < sickle-cell anemia
 - Old-timer's disease < Alzheimer's Disease
 - Nephew-tism < nepotism

Backformation

- A similar process is involved in backformation, in which a new form is created
 - Not always accidental
- **Hamburger** - something from the town of Hamburg
 - Backformation: burger, beefburger, lambburger
- **Watergate** - a hotel/office complex in DC
 - Backformation: **-gate** = 'a political scandal'
 - Deflategate
- **Burglar** - borrowed from Norman French speakers
 - We assumed: burgle + er, so now we have **burgle** (a new verb)

Where did English come from?

How far back can we go?

- Comparative reconstruction has helped us figure out a number of language families
- But how far back can we go!

How far back can we go?

- Most linguistics would agree that common ancestry for most spoken languages is possible
- But quite likely **impossible** to find good evidence for this
 - Coincidences are surprisingly common
 - Over long time spans, the noise-signal ratio gets very poor
 - Meanings change more dramatically
 - More and more words are replaced or borrowed
 - Systematic correspondences disappear

From Indo-European to English

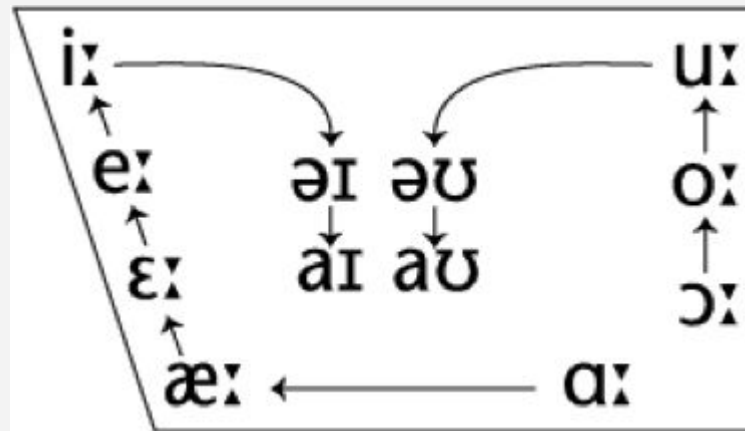
- **4000-3000 BC** - Original Indo-European tribe live in Pontic Steppe/near Caspian Sea
- **3000-2000 BC** - Begin to expand east and west
- **~2000 BC** - Historical evidence of Sanskrit (India), Greek, and Hittite (Turkey) as separate languages
- **~ 500 BC** - Germanic is a separate branch

Key Events in the History of English

- **AD ~450 - Germanic tribes** settle in Britain, take over from native Britons in much of the Island, the beginning of Old English
- **AD 793-886 - Vikings** raid England, settle in North: Heavy impact of **Norse** on Old English
- **AD 1066 - Battle of Hastings**, French speakers from Normandy conquer England, The beginning of Middle English
- **AD 1450-1550** - The **Great Vowel Shift**, the beginning of Modern English

The Great Vowel Shift

- In Middle English
 - **Like** had vowel close to Modern English **leek**
 - **Leek** had vowel close to Modern English **lake**
 - **Lake** had vowel close to Modern English **cat** or **cart**
 - **Mouse** had vowel close to Modern English **moose**
 - **Tooth** had vowel close to Modern English **both**
- **Modern English spelling** is based on the old pronunciations!



English is still changing

- The Northern Cities Shift (around the Great Lakes, esp Syracuse, Rochester, Detroit, Chicago)

- æ > ej: laughs at it
- ɑ > a: on
- ɔ > ɑ: all
- ɛ > ʌ: seventeen
- ʌ > ɔ: fund
-

- Similar: Cot-caught merger



Other classes you might enjoy

- Fall 2020
 - LING217 - Origins and Evolution of Language
 - LING310 - History of the English Language
 - LING411 - Old English
- Spring 2021
 - LING 110 - The History of Words
 - LING 210 - Intro to Language Change
 - LING 496 - Agents and Evolution