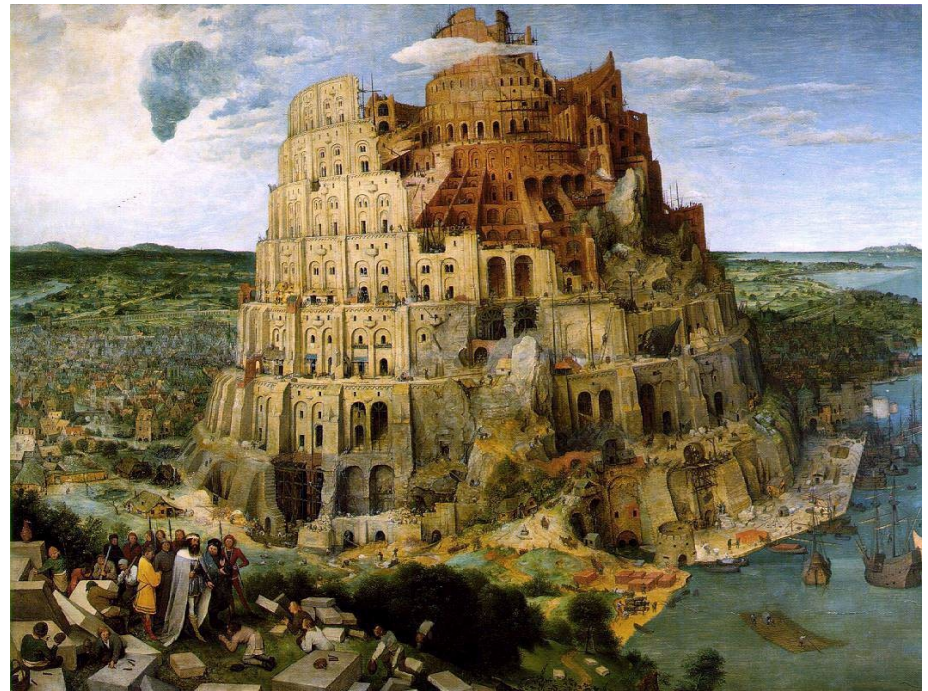


# Today

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- Historical linguistics
- Language change
- Language families





# Language change

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- Languages are constantly changing
- Language change is normal
- Language change  $\neq$  decay, corruption



# Why do languages change?

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Possible reasons:

- Isolated groups develop separately
- Children can introduce innovations
- Optional rules may become obligatory

...



# Historical Linguistics

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- Concerned with
  - How languages change over time
  - How languages are related to one another



# Historical Linguistics

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- **Diachronic** change: language change over time
- **Synchronic** change: language change at a particular point in time



# Historical Linguistics

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- Sir William Jones (1788): noted that Sanskrit shared many similarities with Greek, Latin
- He suggested they had a common *ancestor*



# Comparative Method

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- Deducing genetic relations between languages by comparing cognates
  - **Cognates:** words from different languages that are similar in form and meaning, suggesting a common origin
- Used to reconstruct the **proto-language** (ancestor language)

# 'month'

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## Related

<i>month</i>	English
<i>maand</i>	Dutch
<i>Monat</i>	German
<i>månad</i>	Swedish
<i>mis</i>	Welsh
<i>mí</i>	Gaelic
<i>mois</i>	French
<i>mes</i>	Spanish
<i>mês</i>	Portuguese
<i>mese</i>	Italian
<i>myesyats</i>	Russian
<i>minas</i>	Greek
<i>mahina</i>	Hindi

## Not related

<i>shahr</i>	Arabic (Afro-Asiatic)
<i>kuukausi</i>	Finnish (Uralic)
<i>hilabethe</i>	Basque (Independent)
<i>ay</i>	Turkish (Altaic)
<i>bulan</i>	Malay (Malayo-Polynesian)
<i>inyanga</i>	Zulu (Niger-Congo)
<i>yue</i>	Mandarin (Sino-Tibetan)
<i>timgalu</i>	Kannada (Dravidian)
<i>thang</i>	Vietnamese (Austro-Asiatic)
<i>iyanvda</i>	Cherokee (Iroquoian)
<i>xoydesh</i>	Yiddish (Indo-European)





# 'night'

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*night* English

*nuit* French

*Nacht* German

*nicht* Scots

*natt* Swedish

*nat* Danish

*noch'* Russian

*nox* Latin

*nakti-* Sanskrit

*natë* Albanian

*noche* Spanish

*noite* Portuguese

*notte* Italian

*nit* Catalan

*nótt* Icelandic

*naktis* Lithuanian



# Proto-Indo-European (PIE)

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- The proposed parent language of all Indo-European languages
- No direct evidence for it (unwritten)
- Reconstructed from later Indo-European languages by back-tracking known sound changes
  - PIE *\*wódr̥* 'water', *\*trÉi-* 'three'.



# False cognates

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- Words that are thought to have a common origin, but which are unrelated.  
e.g., Latin *habere*, German *haben* ‘to have’
  - German *haben* < PIE *\*kap*, ‘to grasp’
  - Latin *habere* < PIE *\*ghabh*, ‘to give, receive’



# False friends

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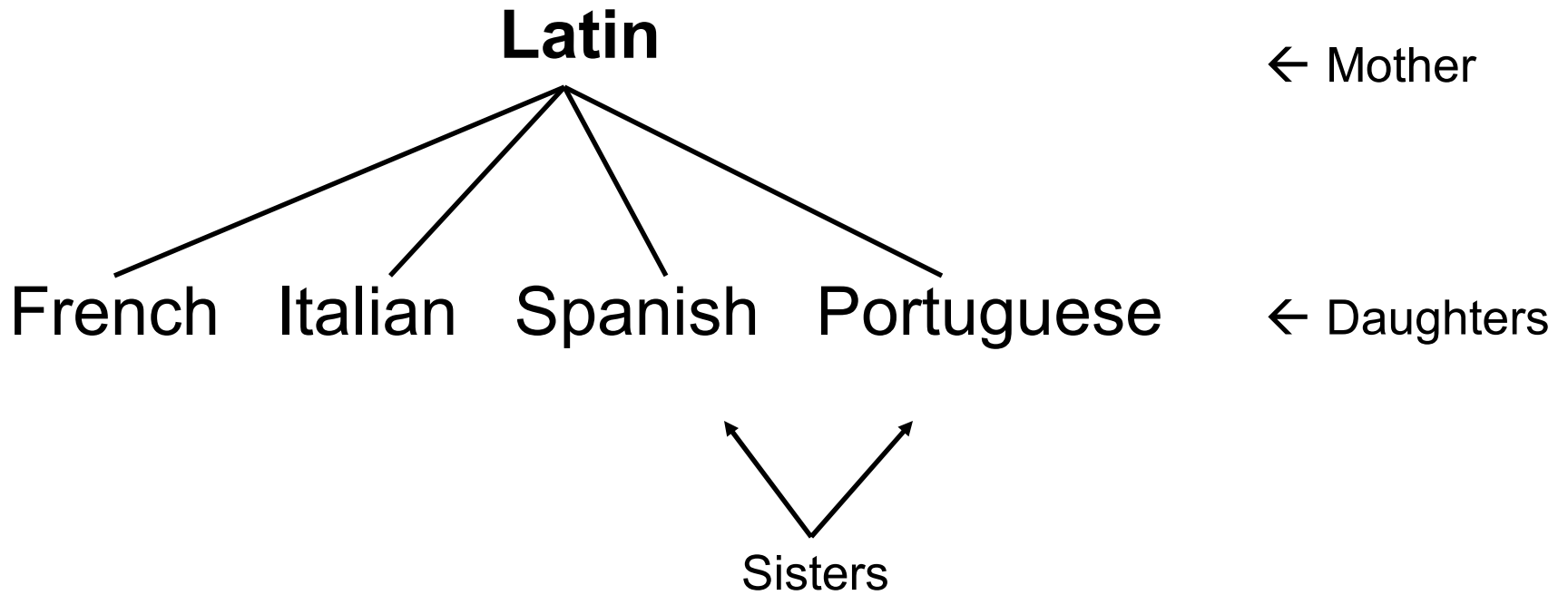
- Words that look and/or sound similar, but differ in meaning, e.g.,
  - English *preservative* is cognate with Russian *prezervativ* ‘condom’
  - Spanish *embarazar* ‘to impregnate’
- Can be related, i.e. cognates



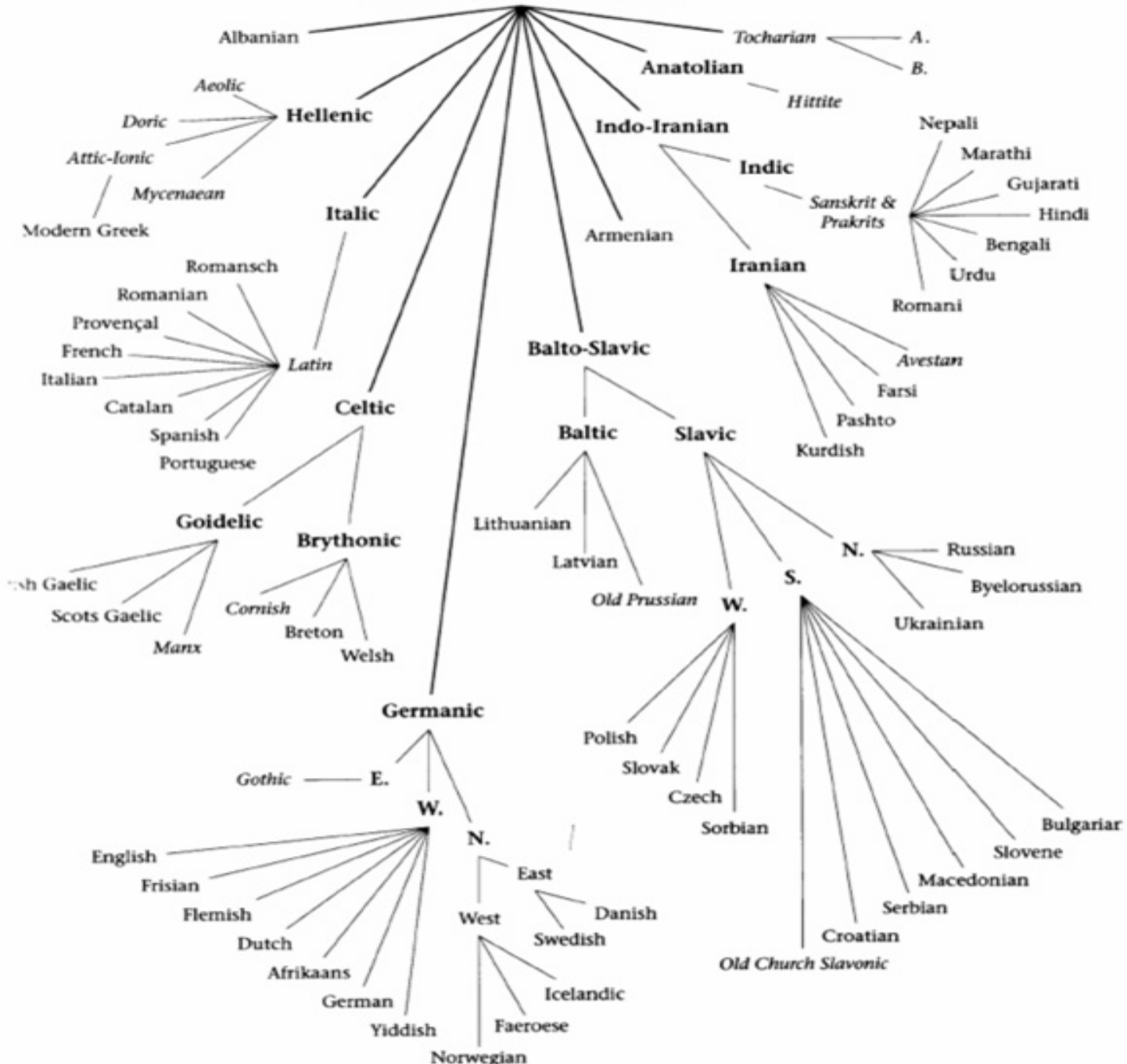
# Family Tree Model

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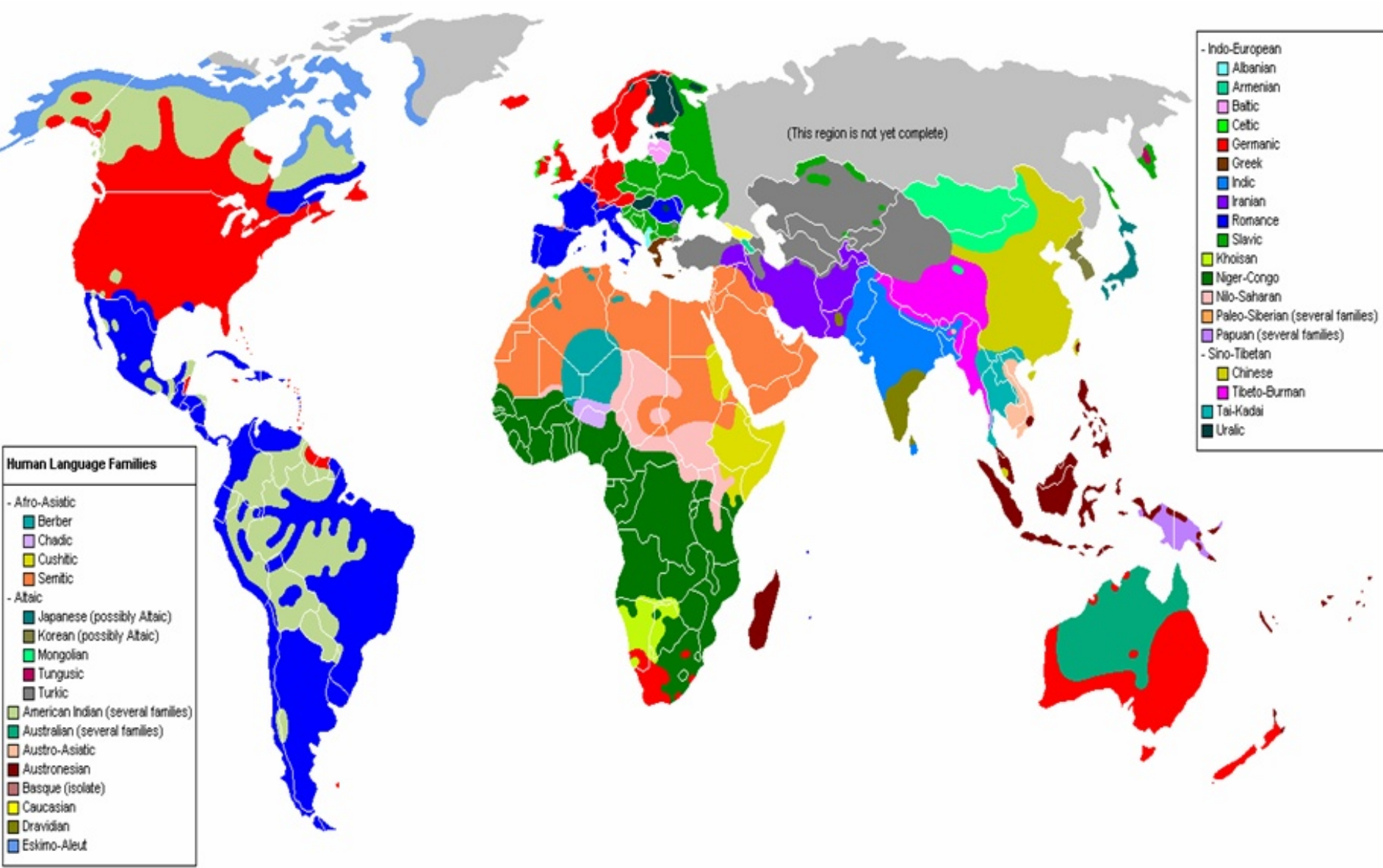
- Indicates genetically related languages that share common ancestor
- The higher up in the tree, the older it is
  - Mother/parent
  - Daughters
  - Sisters



# PROTO-INDO-EUROPEAN



*Extinct langs*  
**Sub-families**



### Human Language Families

- Afro-Asiatic
  - Berber
  - Chadic
  - Cushitic
  - Semitic
- Altaic
  - Japanese (possibly Altaic)
  - Korean (possibly Altaic)
  - Mongolian
  - Tungusic
  - Turkic
- American Indian (several families)
- Australian (several families)
- Austro-Asiatic
- Austronesian
- Basque (isolate)
- Caucasian
- Dravidian
- Eskimo-Aleut

- Indo-European
  - Albanian
  - Armenian
  - Baltic
  - Celtic
  - Germanic
  - Greek
  - Indic
  - Iranian
  - Romance
  - Slavic
- Khoisan
- Niger-Congo
- Nilo-Saharan
- Paleo-Siberian (several families)
- Papuan (several families)
- Sino-Tibetan
  - Chinese
  - Tibeto-Burman
- Tai-Kadai
- Uralic





# Some major Language Families

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- Indo-European
- Uralic (Finnish, Hungarian, Estonian)
- Afro-Asiatic (Arabic, Hebrew)
- Niger-Congo (Swahili, Zulu)
- Sino-Tibetan (Chinese, Tibetan, Burmese)
- Altaic (Mongolic, Turkic, Japanese, Korean)
- Austronesian (Indonesian, Hawaiian)



# Language Isolates

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- No known relatives
  - Basque (Spain, France)
  - Zuñi (New Mexico)
  - Ainu (Hokkaido, Kuril, Honshū, Sakhalin)
  - Burushaski (Pakistan, Kashmir)
- Isolates for known history (e.g., Basque)
- Isolates because known relatives die (e.g., Pirahã)
- Isolates become families (e.g., Japanese)



# Family Tree Model: problems

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- Implies each language is separate, independent from its neighbors
  - But distinctions btw. languages are fuzzy
- Suggests new languages appear/branch off suddenly
  - But languages diverge gradually



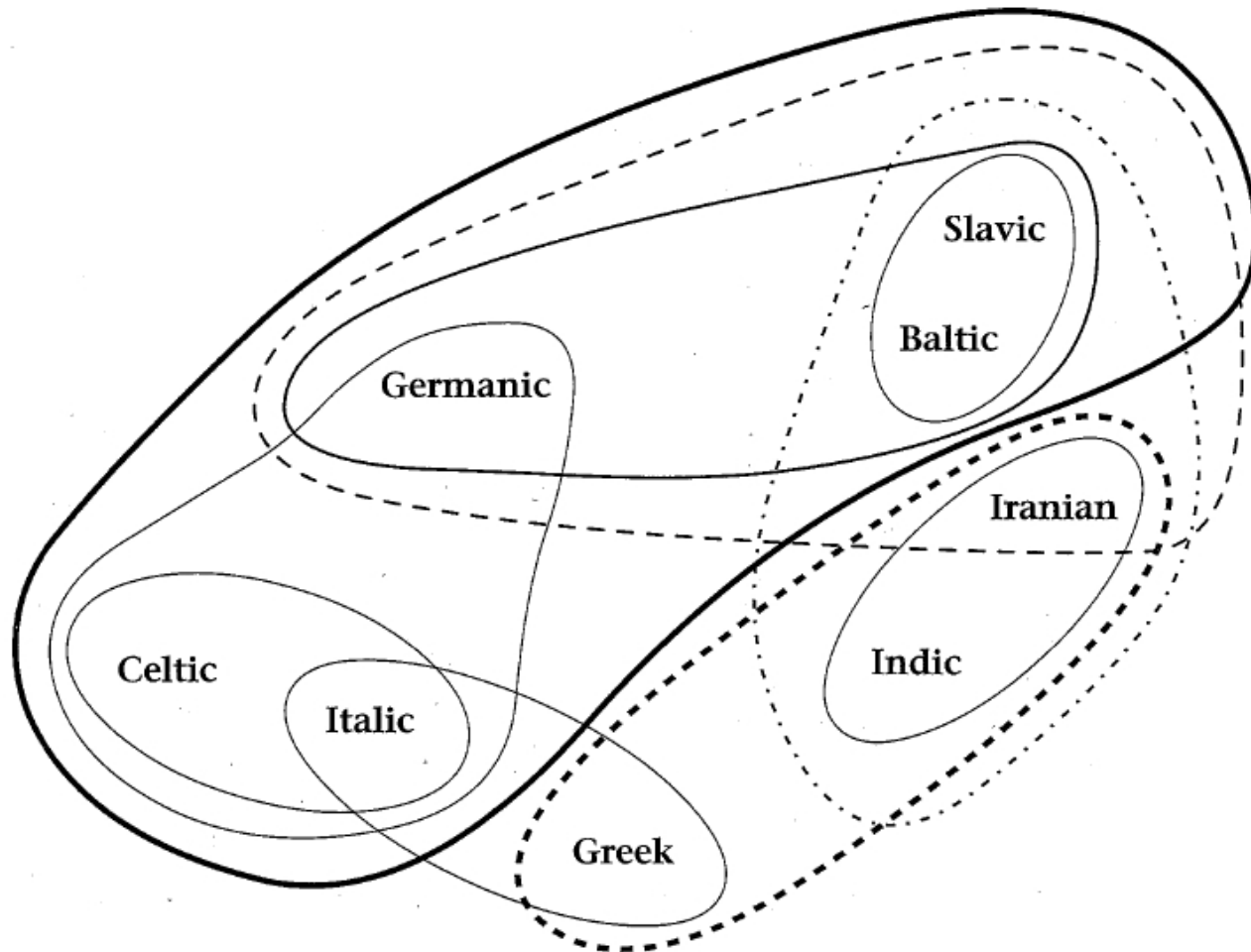
# Wave Model

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- Language changes spread like ripples in a pond
- Different points of origin
- ‘Overlap’ of different waves of change explains synchronic variation

# Wave Model

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# Extinct and Endangered languages

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- Today, approx. 6900 languages
- 90% spoken by < 100,000 speakers
- 5% spoken by < 50 speakers



# Estimates of projected extinction

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- 516 of the world's languages are 'nearly extinct'
- 50-90% loss in coming century

## North America:

- At first contact with Europeans, ~ 400 languages
- Currently, 208 languages



# Why languages die

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- Genocide
- Socioeconomic factors
- Prevalence of dominant language
- Language suppression in education





# Should we care?

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- Negative consequences are both scientific and cultural
- Cultural: impact on communities and descendants
- Scientific: data from more languages = better understanding of linguistic diversity, which in turn = better understanding of Language