Change Over Time

The Great Divide

"The opposition between the two view points, the synchronic and the diachronic, is absolute and allows no compromise."

– Ferdinand de Saussure

- Synchronic description: Static, a single point in time.
  - Ferdinand de Saussure
  - Structuralism
  - *What* Question
- Diachronic description: Dynamic, across time.
  - Sir William Jones
  - Transformism
  - The *Why* Question

Historical Linguistics

- Goals
  - Understanding linguistic relatedness
  - Deduce regularities of language change
- Method
  - Reconstruct prior-language states
  - Multiple methods of reconstruction

Linguistic Relatedness

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.

(Sir William Jones, 1786)

Sir William Jones

- 1786 gave an address to Royal Asiatic Society
- British man who worked at a post in India
- Knew Greek, Latin, English, and German
- Learned Sanskrit
- Realized the similarities among all these were too great to be attributable to chance alone

What similarities do you see?

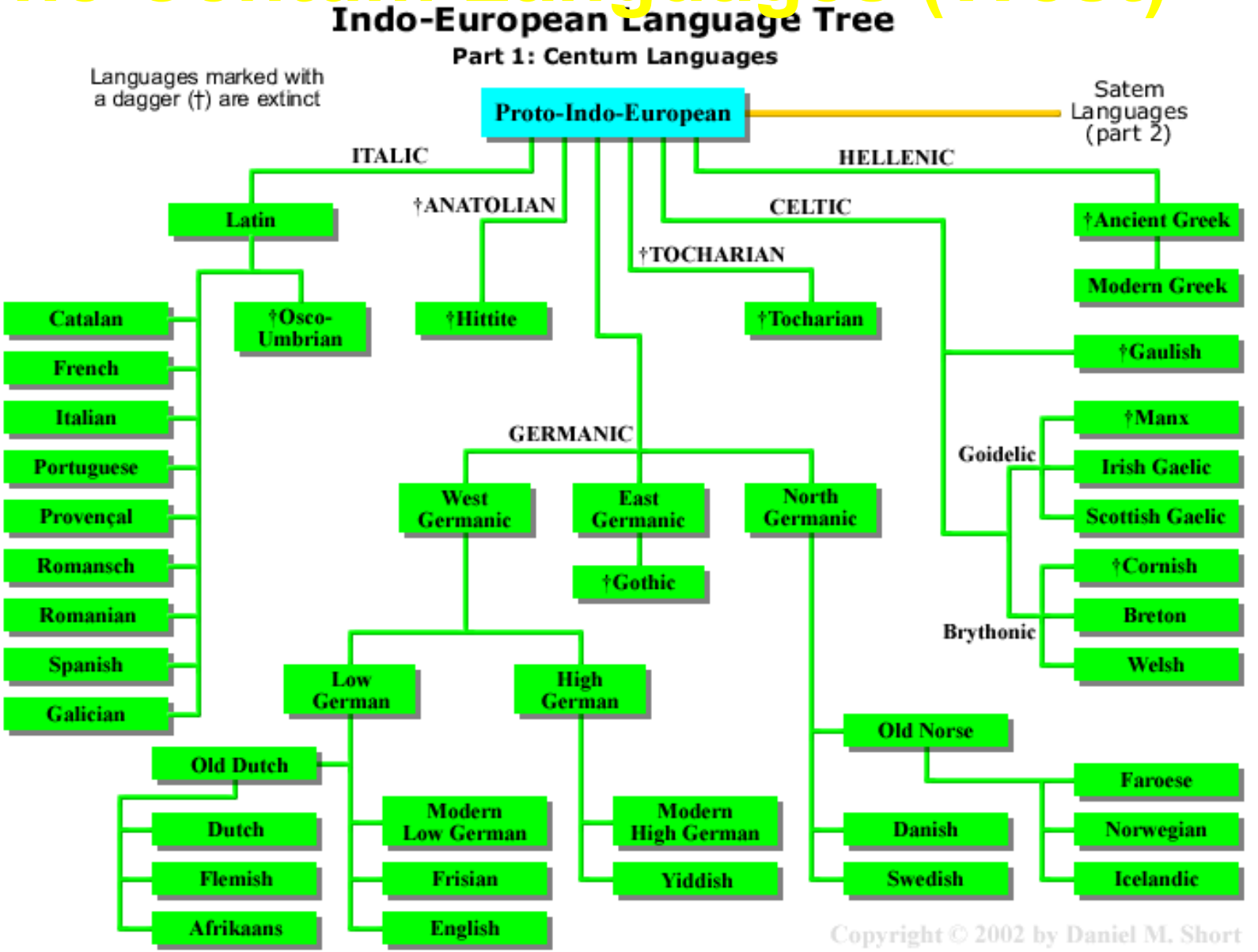
Sanskrit	Latin	Greek	English
aja:mi	ago:		‘I drive’
ajras	ager	agrós	‘field’
vidhava	vidva		‘widow’
mi:dha ‘prize’		misthos	‘pay’
pitar	pater	patér	‘father’
dva	duo		‘two’
dan	den-		‘tooth’
bhráta	frater	phrater	‘brother’
bhar-	fer-	pher-	‘bear’
saptá	septem	heptá	‘seven’
nákt-	nokt-	nukt-	‘night’
ad-	edō	édō	‘eat’
pad-	ped-	pod-	‘foot’

The Indo-European Family of Languages

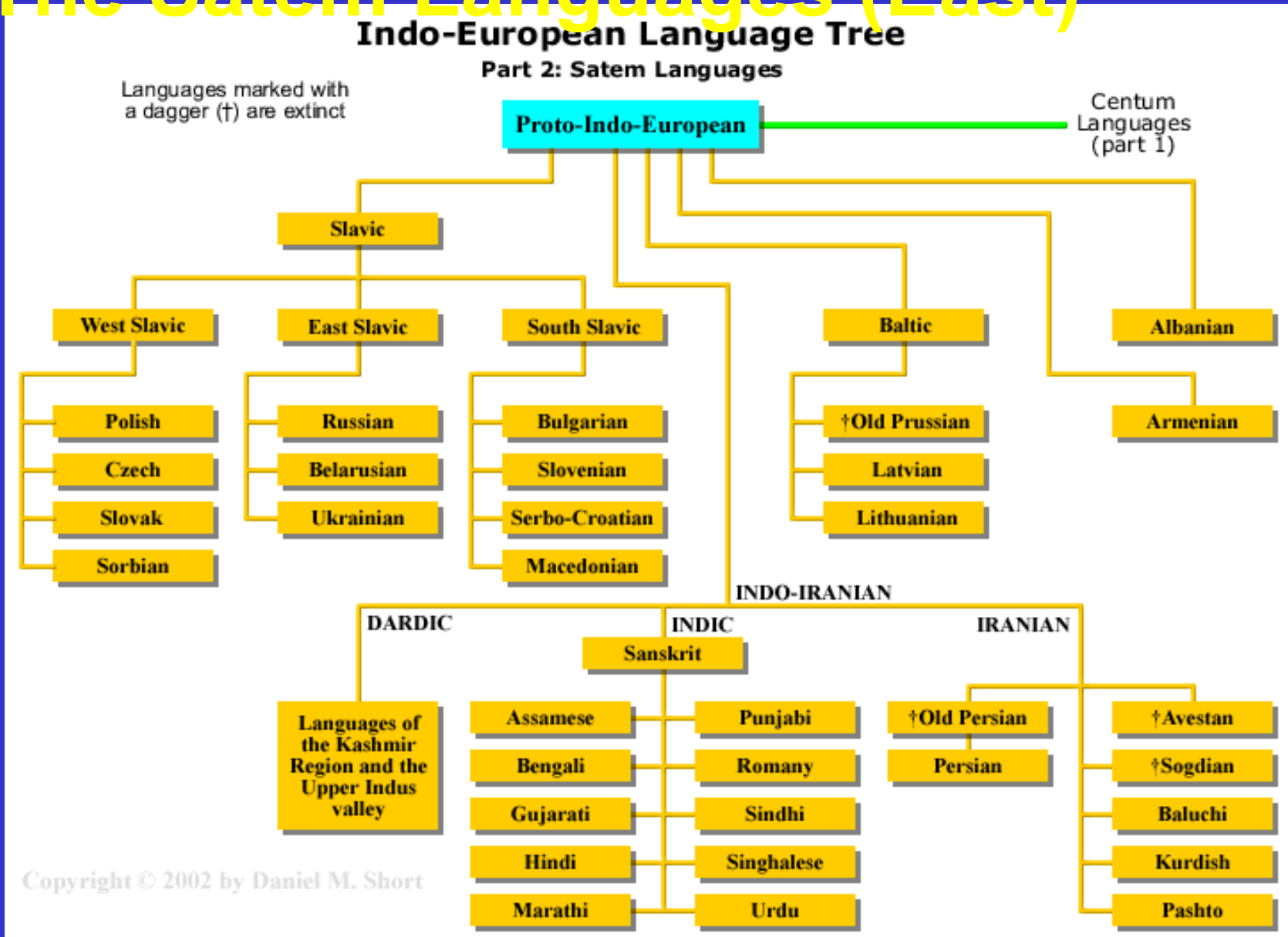
A superfamily of languages which stretches across Europe (and much of the world through recent colonization) and all the way into the Indian subcontinent.

Members of a family of languages are genetically related, just like genetic lineage with people. Traits are passed on and mutations can occur within subfamilies. We use traits and mutations to assume and determine relatedness.

The Centum Languages (West)



The Satem Languages (East)



Methods of Reconstruction

1. Comparative historical linguistics
   Comparisons between languages
2. Typological reconstruction
   Regularities across languages
3. Internal reconstruction
   Focus on irregular forms

Rask, Grimm, Grassman, Verner, and the Neogrammarians of the 19th century gave us a scientific methodology for determining relatedness between languages.

The Comparative Method

Comparative Method

- Assumptions
  - Arbitrariness of sign
  - Sound change is regular
- Search for cognates
  - Cognates: Words descended from the same source
    - con- + gn 'born together'
  - Reconstruct the proto word form.
- Distinguish between real cognates and false cognates

  False cognate examples:
  - Jaqaru *aska* and English *ask*
  - Spanish *mucho* and English *much*

Text-Based Data

- Dated written materials

  Beowulf—Chaucer—Shakespeare

- Rhymes & Puns

  You spotted snakes with double tongues / Thorny hedge-hogs, be not seen / Newts, and blind-worms do no wrong / Come not near our fairy queen. (*Midsummer Night's Dream*)

- Old Grammarians

  We produce this letter by pressing the lower lip of the mouth on the upper teeth. The tongue is turned back towards the roof of the mouth, and the sound is accompanied by a gentle puff of breath. (Roman grammarian, Victorinus)

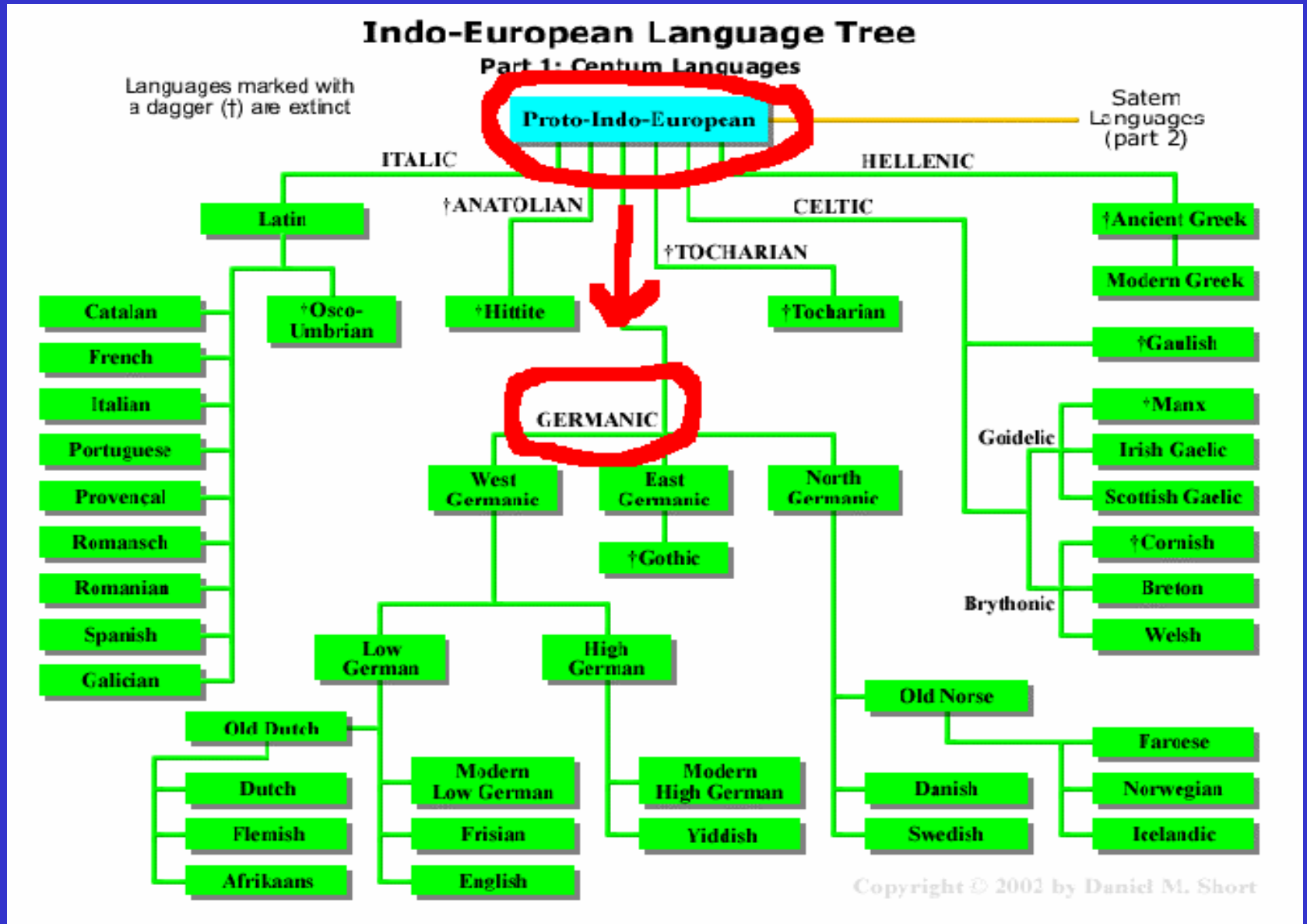
Another Example of Sound Change Regularity

English	Spanish	French
foot	pie	pied
father	padre	père
tooth	diente	dent
two	dos	deux

The Data of Rask and Grimm

Sanskrit	Avestan	Greek	Latin	Gothic	English
pita		pater	pater	fadar	father
padam		poda	pedem	fotu	foot
bhratar		phrater	frater	brothar	brother
bharami	barami	phero	fero	baira	bear
jivah ('living')	jivo		wiwos	qius	quick
sanah	hano	henee	senex	sinista	senile
virah ('man')	viro		wir	wair	were(wolf)
		tris	tres	thri	three
		deka	decem	taihun	ten
	satem	he-katon	centum	hund(rath)	hundred

Rask and Grimm wanted to explain the PIE > PG changes



Grimm's Law

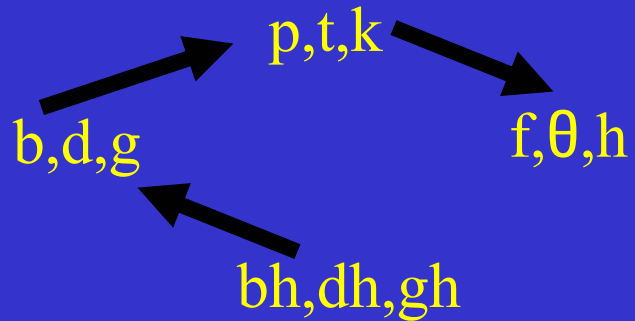
To explain the previously unexplained difference between Germanic and other IE languages (from PIE to PG)

--might be called Rask's hard work and Grimm's nice summary and synthesis.

i. PIE voiceless stops become voiceless fricatives

ii. PIE voiced stops become voiceless stops

iii. PIE voice aspirates become voiced stops or fricatives (depending on the context in which they occur)



The First Germanic Sound Shift

The Data of Rask and Grimm

Sanskrit	Avestan	Greek	Latin	Gothic	English	
pita		pater	pater	fadar	father	p > f
padam		poda	pedem	fotu	foot	
bhratar		phrater	frater	brothar	brother	bh > b
bharami	barami	phero	fero	baira	bear	
jivah ('living')	jivo		wiwos	qius	quick	
sanah	hano	henee	senex	sinista	senile	
virah ('man')	viro		wir	wair	were(wolf)	
		tris	tres	thri	three	t > θ
		deka	decem	taihun	ten	d > t
	satem	he-katon	centum	hund(rath)	hundred	k > h

The Comparative Method and Historical Linguistics:

--a means of determining the degree of linguistic 'genetic' relatedness between a variety of languages, assumed to be related

-- by establishing regular sound change patterns

--which enable the researcher to propose a reconstruction of the earlier sounds in the 'parent' language

--as well as to propose subgroups, denoting shared history between particular varieties which exhibit participation in the same innovations from the proto-form.

The Neogrammarian Hypothesis and the Comparative Method

- sound change is regular—exceptionless
- still in use today, though somewhat debated
- problems with the basic Neogrammarian assumptions:
  - language contact, borrowing and interference
  - lexical diffusion (sound change working through the lexicon)—does this lead to 'apparent' irregularities until the change is finished?

Typological Data

- Inferring structure from the typical characteristics of language
  - Entailments of different word orders
    - VO language place auxiliaries before verb
      - E.g., *Bears may eat honey.* (English, French, Spanish)
    - OV language places auxiliaries after verb
      - E.g., *Bears honey eat may.* (Japanese, Hindi, Turkish)
  - Entailments of sound inventories
    - Gaps in a system, tend to be filled
      - E.g., p/b, t/__, k/g → probably "d" also

Language-Internal Data

Assumption:

- Current irregularities were once regular.

1. Compile irregularities
2. Discover regularity

Regular: *pure/purity* *obscure/obscurity*

Irregular: *sane/sanity* *serene/serenity*

*These irregular forms due to The Great Vowel Shift.