

**Pragmatic change:**  
**Expanding functions for impersonal pronouns**

English *one* and French *on* from Latin *homo* = “person”  
German *man* from German *mann* = “man”

*One is always uneasy in such situations*  
*One should take care of one's parents*

French

*On a tué le président*  
ON has killed the president  
“The president was killed”

German

*Man hat ein Haus abgebrannt*  
MAN has a house burned  
“A house was burned”

## **Semantic change:**

### **Drift along metaphoric paths**

Electrical terminology – metaphors from water:

Current, resistance, flow, etc.

## **Syntactic change:**

a) ac he sigewæpnum forsworen hæfde

*but he victory-weapons forsworn had*

b) but he had forsworn (put a spell on) the victory-weapons

**Sound change:**

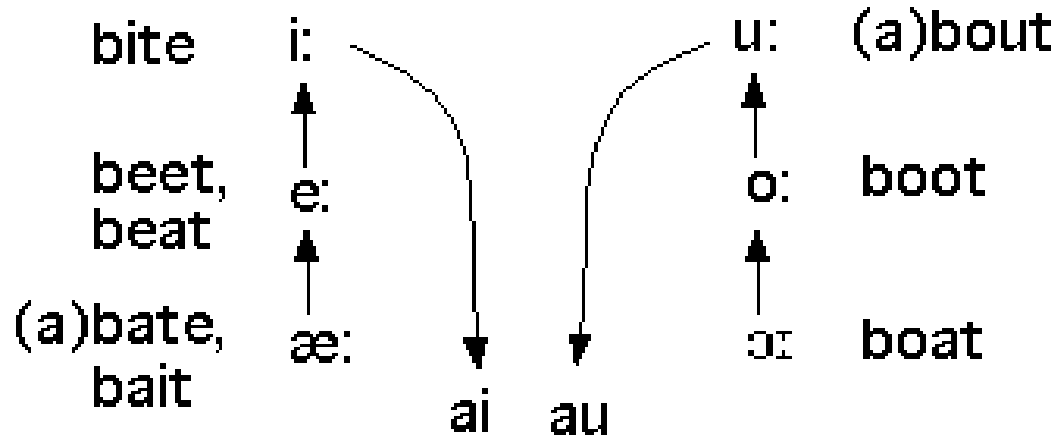
**Mostly regular changes in pronunciation – unconditional and conditional**

Sir William Jones, 1746 - 1794



# Great Vowel Shift: unconditional sound change

## The Great Vowel Shift (1450-1700)



Flapping, Grimm's Law: results of conditioned sound change.

**Grimm's law:**

p → f                      or, voiceless stop → voiceless fricative  
t → θ  
k → x

**Verner's modifications:**

p → p / s\_\_  
p → b / P\_\_σ'            (P = phoneme, σ = syllable    '=stress)  
p → f otherwise            etc.

or,

voiceless stop → unchanged / s\_\_  
voiceless stop → voiced / P\_\_σ□  
Otherwise, voiceless stop → fricative

## Comparative method of historical reconstruction

Word-initial correspondances:

English stop /p/ corresponds to the German affricate /pf/

path	Pfad	pan	Pfanne	pepper	Pfeffer
pipe	Pfeiffe	plant	Pflanze	plum	Pflaume

English /t/ ~ German affricate /ts/, written as z

tame	zahn	to	zu	tongue	Zunge
ten	zehn	twenty	zwanzig	Tin	Zinn

/d/ in English corresponds to German /t/

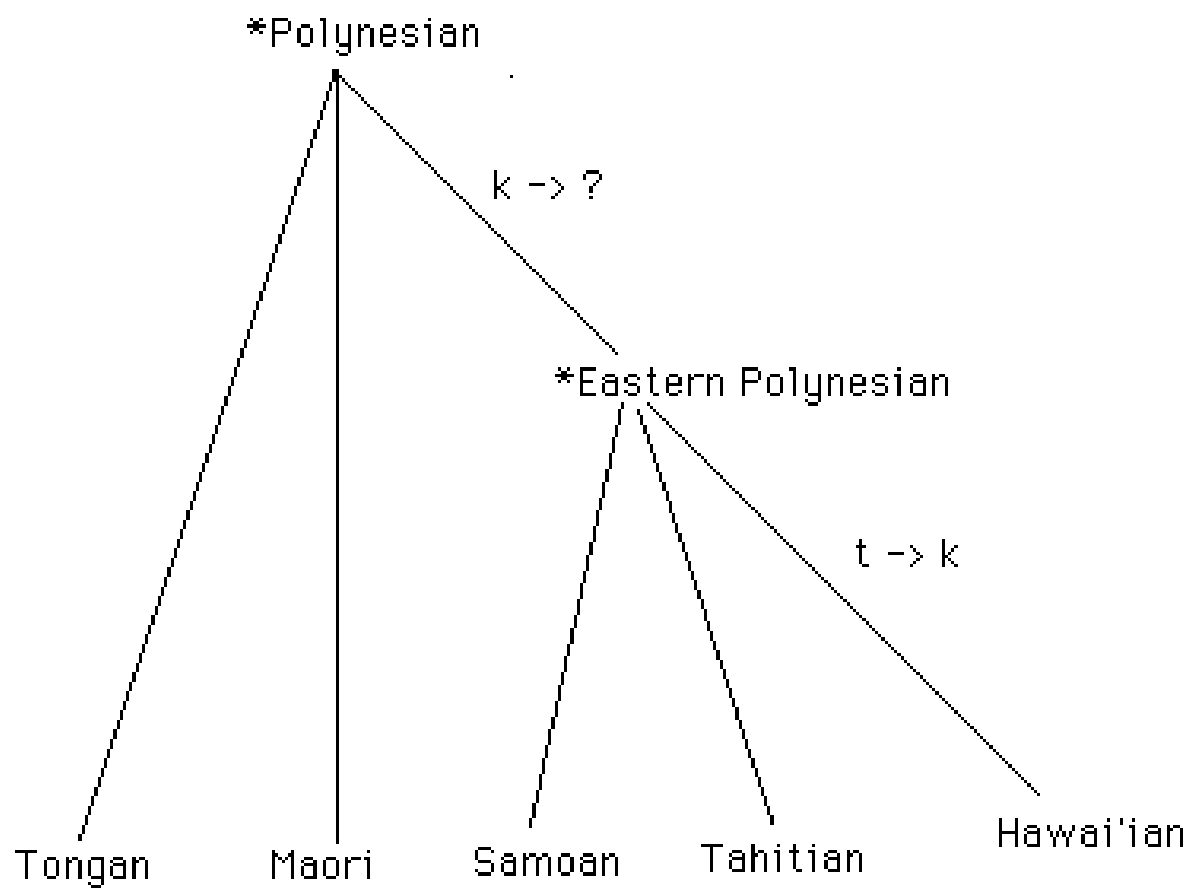
day	Tag	dance	tanzen	dew	Tau
devil	Teufel	drink	trinken	do	tun

English “th” sounds correspond to German /d/:

that	das	thick	dick	thin	dünn
thirst	Durst	three	drei	though	doch

### Polynesian family cognate sets:

English Gloss	Tongan	Maori	Samoaan	Tahitian	Hawai'ian
1. bird	manu	manu	manu	manu	manu
2. fish	ika	ika	iʔa	iʔa	iʔa
3. to eat	kai	kai	ʔai	ʔai	ʔai
4. forbidden	tapu	tapu	tapu	tapu	kapu
5. eye	mata	mata	mata	mata	maka
6. blood	toto	toto	toto	toto	koko

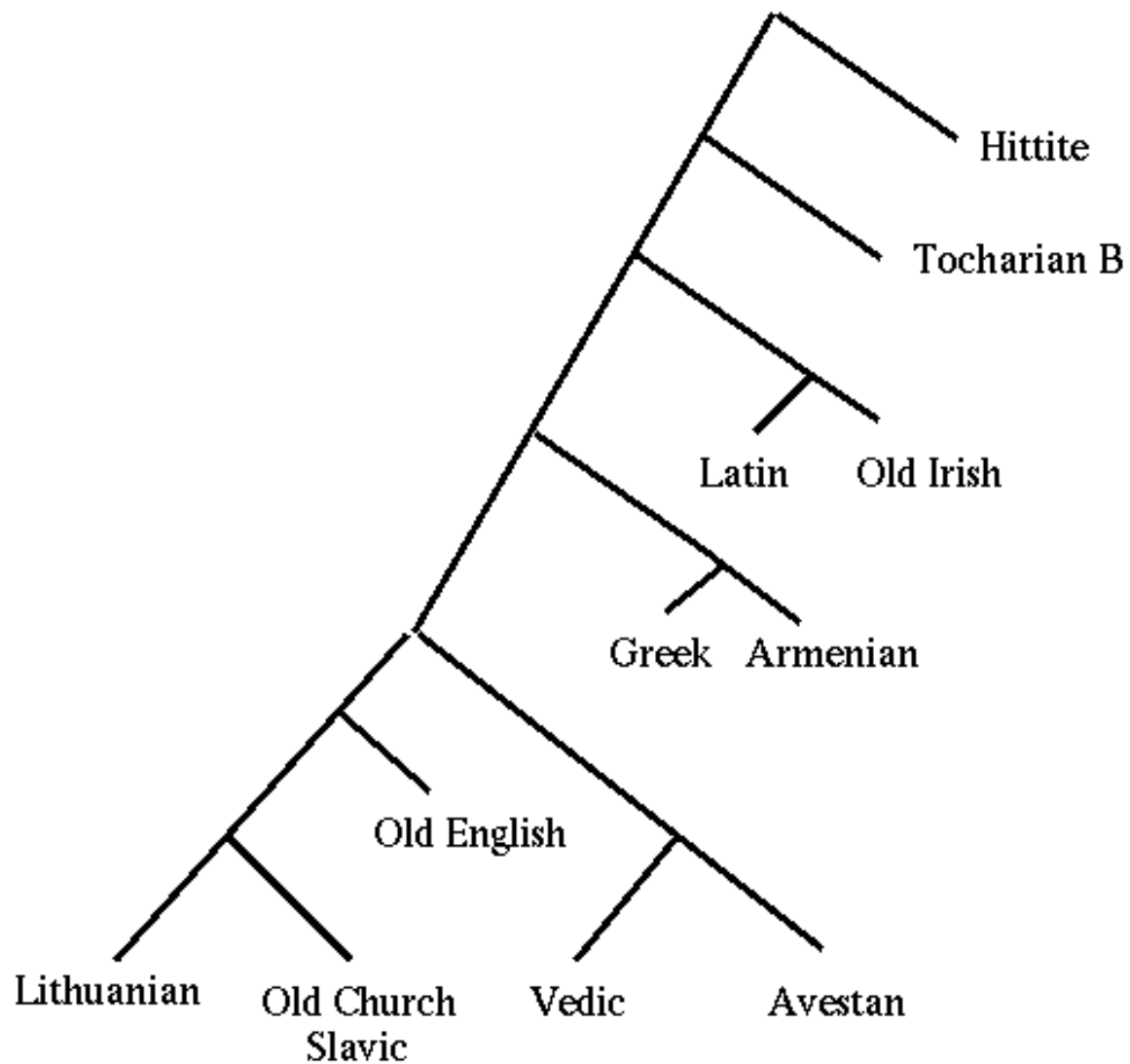


**Northern Cities Shift (USA):  
partial loss of intelligibility**

Original segment	Many people misheard as	First expansion	Second expansion
drop	??? (nonsense word containing vowel in "that")	massive drop	the plane was steady for a while and then it took a massive drop
socks	sacks	y'hadda wear socks	y'hadda wear socks, no sandals
block	black	one block	old senior citizens living on one block
met	mutt	they met	my parents went to Cuba and that's where they met
steady	study	steady for a while	the plane was steady for a while and then it took a massive drop
head	had	shook 'er head	this woman in while, who just smiled at her and shook 'er head

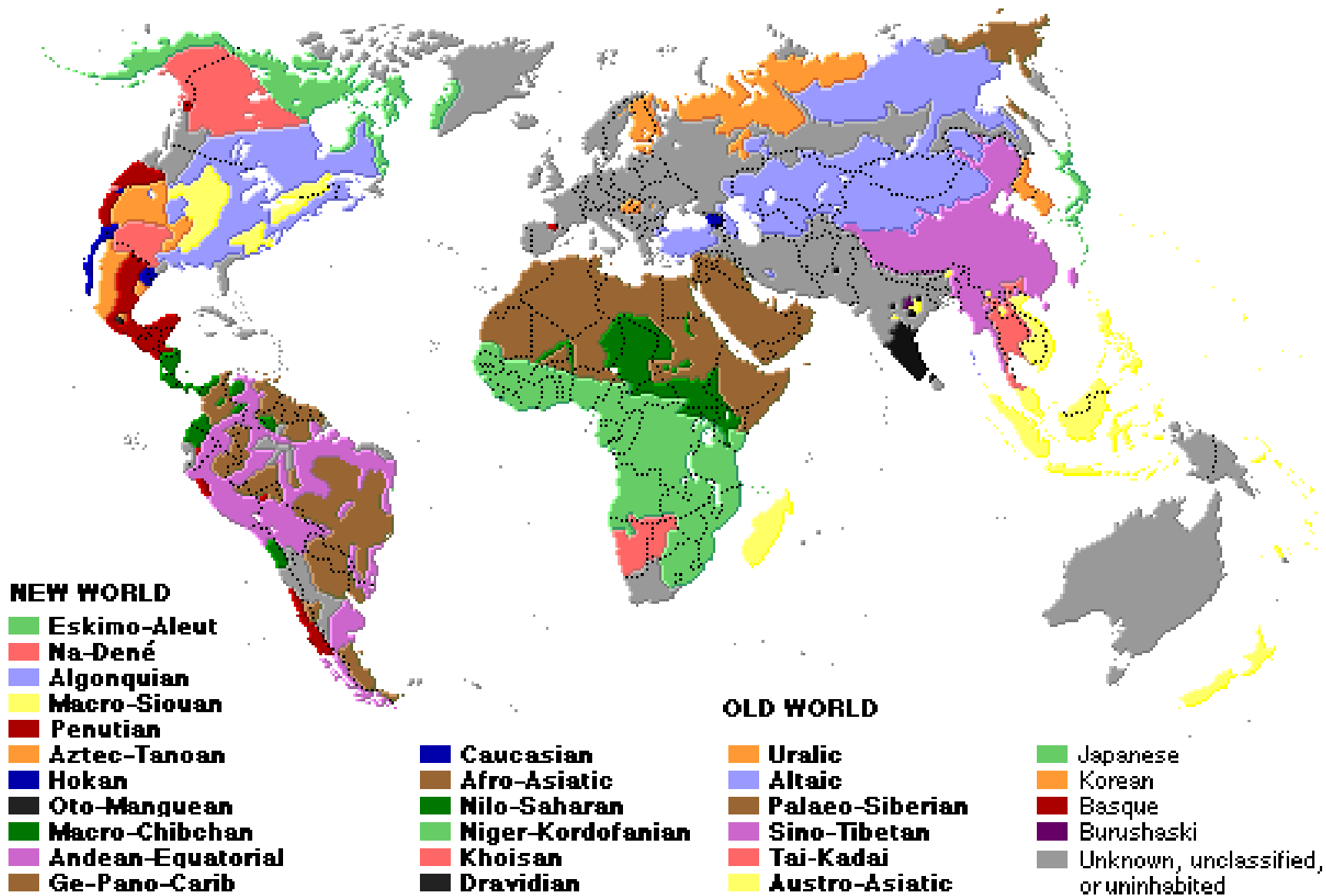


The family tree of Indo-European: note that the nodes of the tree are specific languages rather than sub-families. "Vedic" refers to the oldest form of Sanskrit, and thus represents the position of Indic in the tree.)



The Ethnologue web-page lists 430 modern [Indo-European](#) languages.

This map shows all of the the other **major language families of the world**, as well as many of the minor families. Much of the gray territory on this map is the area covered by Indo-European languages.



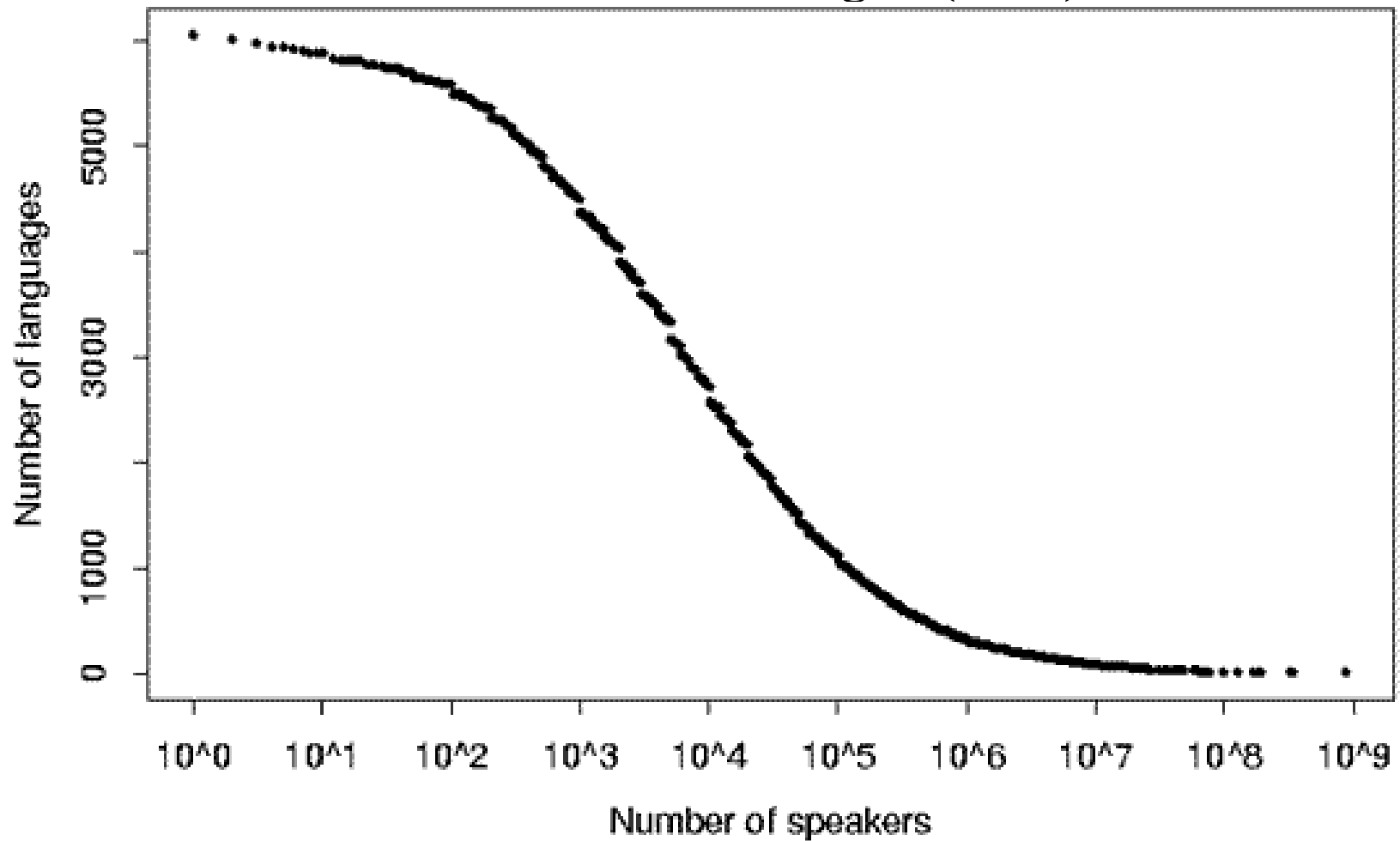
One might object to some of the details of how the languages are divided up here, but it gives a good general idea.

## Languages of the World

	<u>Living Languages</u>	<u>Percentage</u>
The Americas	1,002	14.5%
Africa	2,092	30.3%
Europe	239	3.5%
Asia	2,269	32.8%
The Pacific	1,310	19%
TOTAL	6,912	100%

A **graphical representation of this distribution** of sizes can be seen in the figure below, which plots the number of languages with N or more speakers, for N from one to one billion.

### Speaker count versus language count: Data from the Ethnologue (1999)



The CIA World Factbook (figures are 2004 estimates):

Mandarin Chinese 13.69%

Spanish 5.05%

English 4.84%

Hindi 2.82%

Portuguese 2.77%

Bengali 2.68%

Russian 2.27%

Japanese 1.99%

Standard German 1.49%

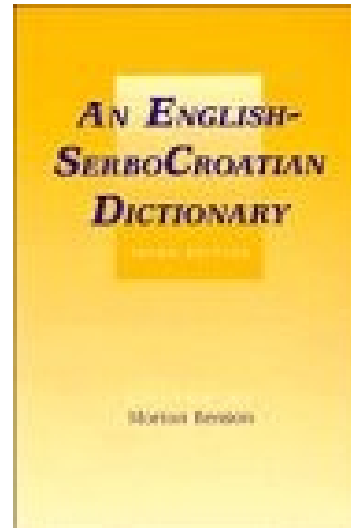
Wu Chinese 1.21%

## Problems of counting

Ethnologue considers the **local colloquial varieties** of Arabic to be **separate languages**. Here are the largest ones.

<b>Variety</b>	<b>Native speakers (in millions)</b>
Egyptian	46.3
Algerian	22.4
Moroccan	19.5
Upper Egyptian	18.9
Sudanese	17.5
Lebanese-Syrian	15.0
Iraqi	13.9

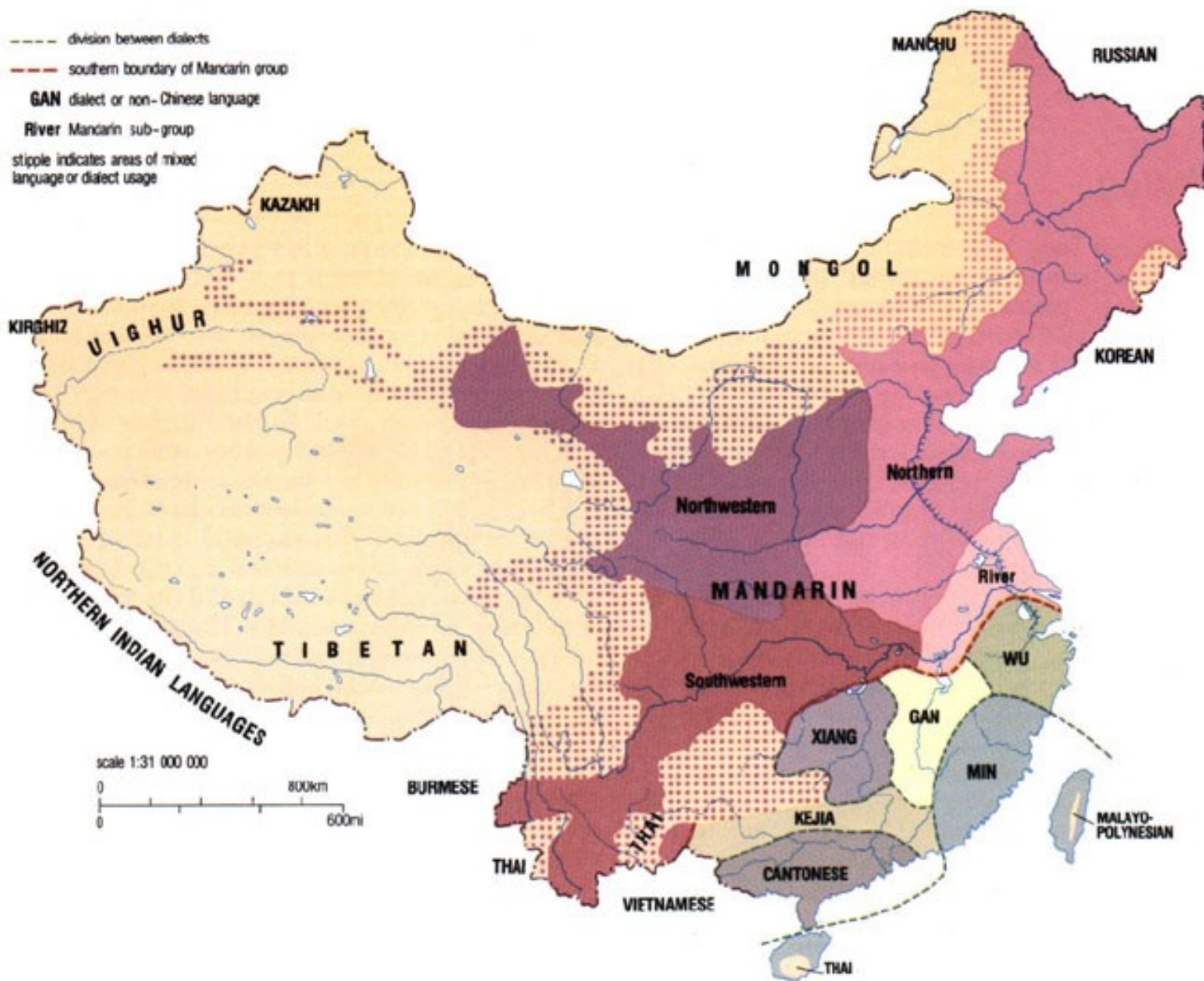
**Serbo-Croatian** from fifteen years ago to today:



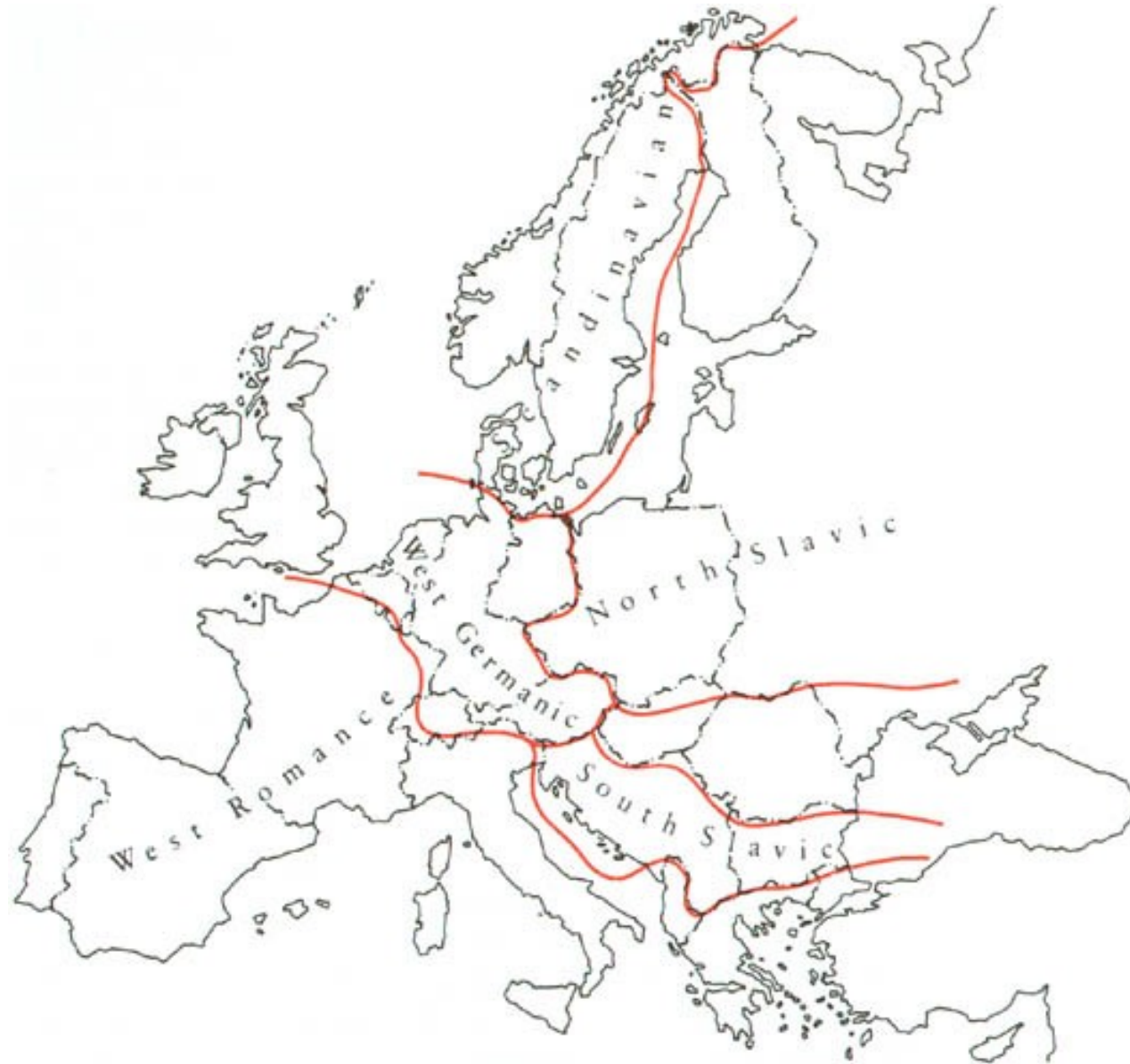
Now - Serbian, Croatian, and Bosnian.



# "Dialects" again



# Dialect continuums in Europe

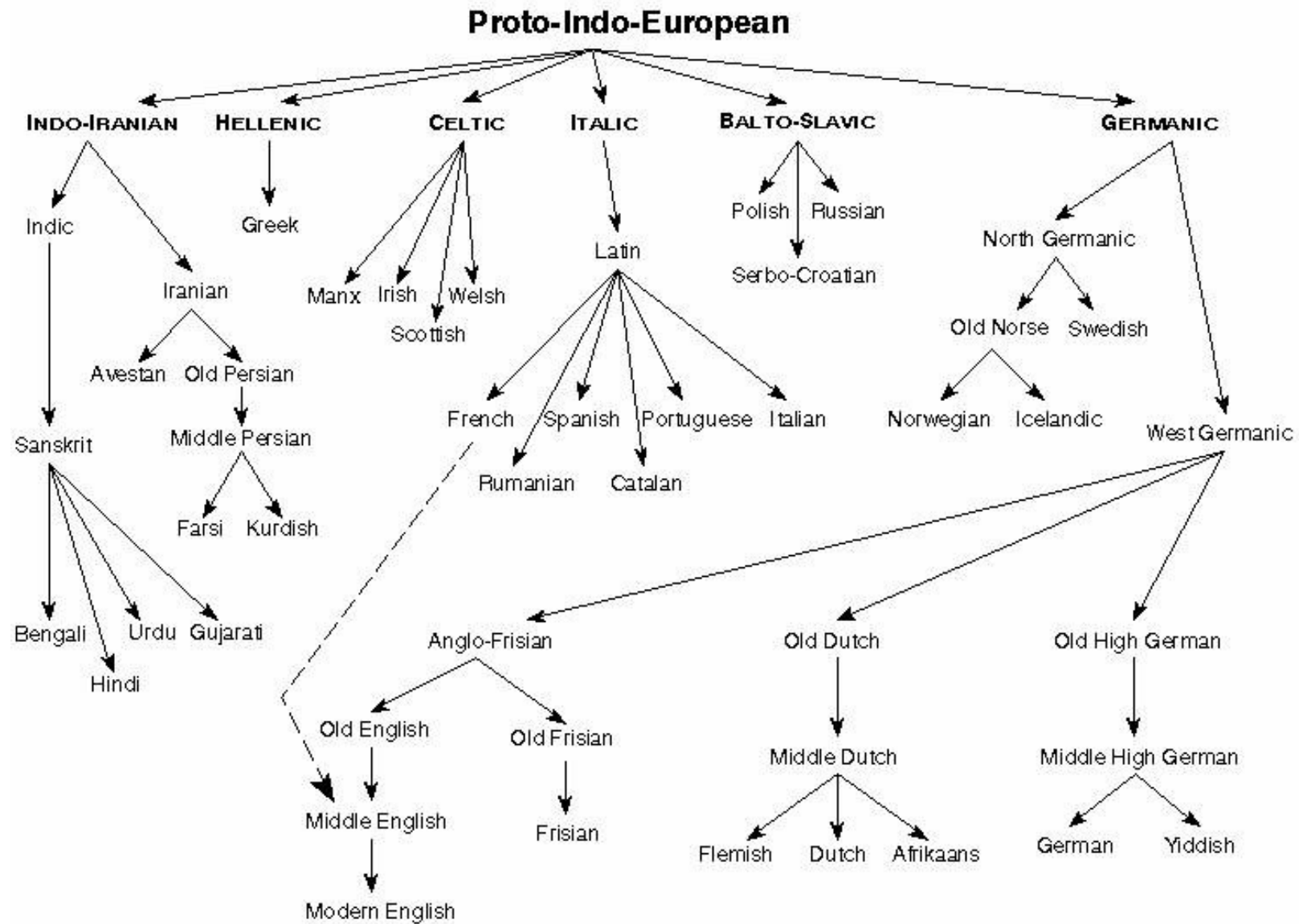


<u>Low German &amp; Dutch</u>	<u>High German</u>	
ik	ich	"I"
maken	machen	"make"
dorp	dorf	"village" ( <i>thorp</i> )
dat	das	"that"

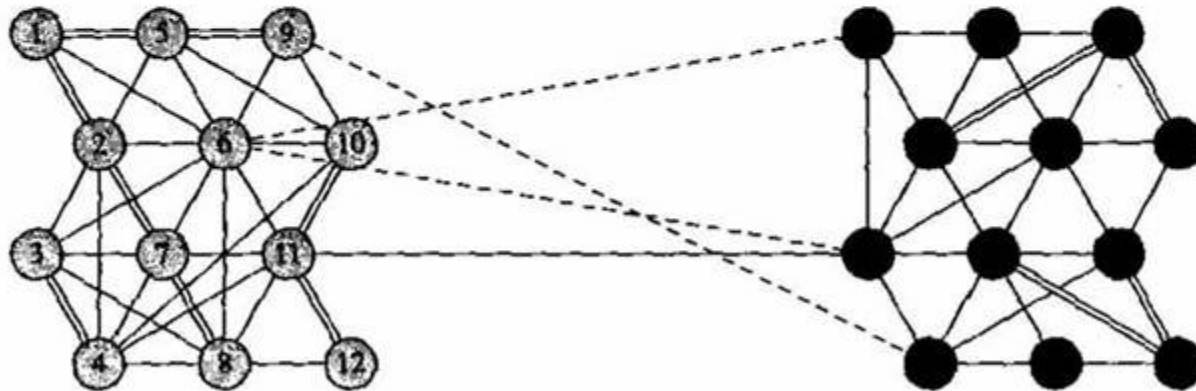
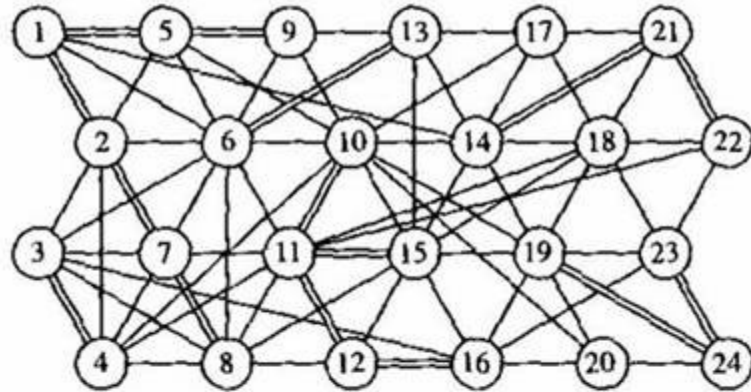
Incoherent quote:

"Many of the languages listed are technically dialects, not separate languages. They are listed separately because they differ from each other enough to be mutually unintelligible."

# Another IE family-tree diagram:

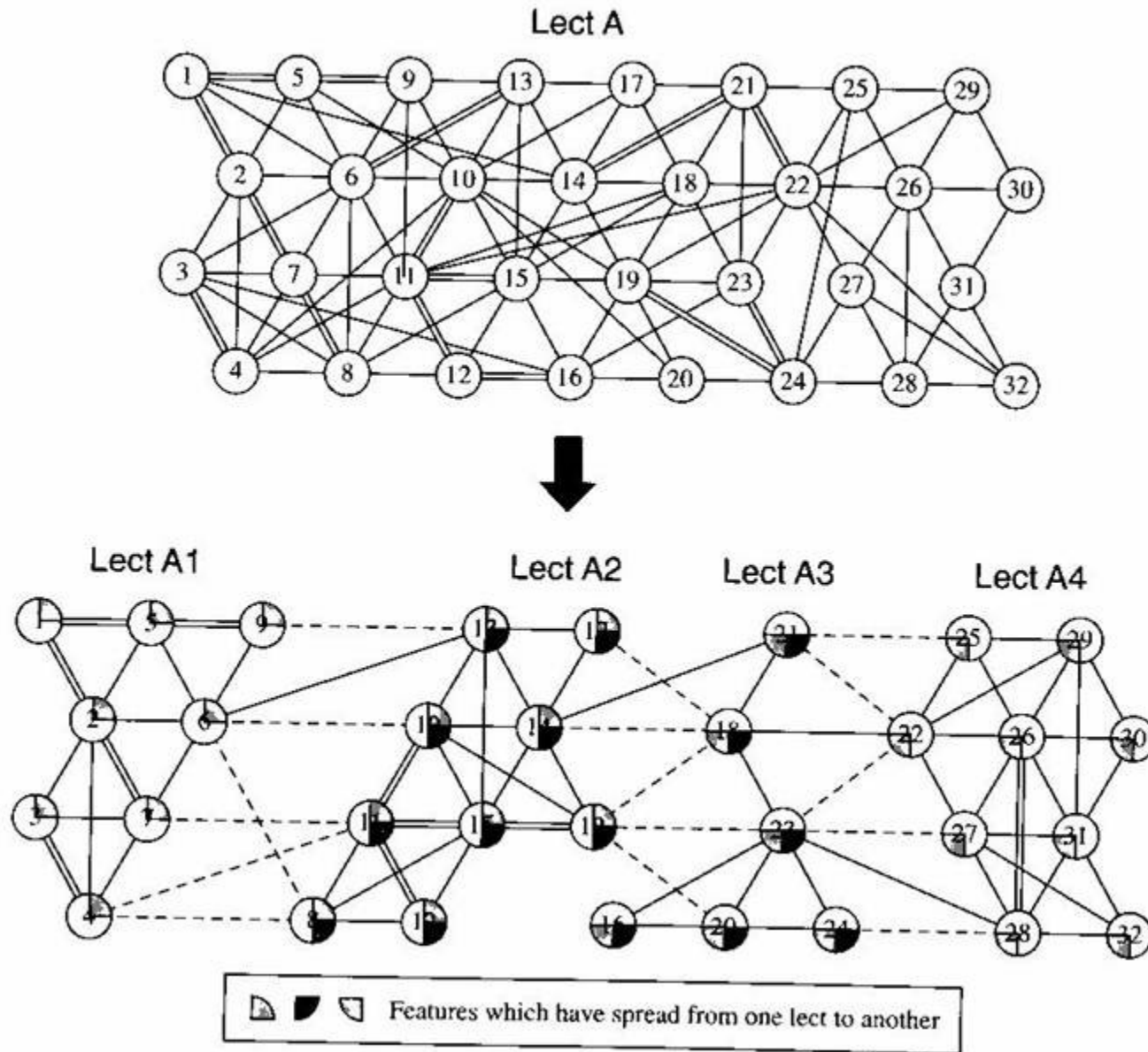


# Language fissure:



T1 Time 1  
T2 Time 2  
Each shading represents the spread of a set of innovations

**Dialectal/Lectal differentiation** resulting in a *dialect continuum*, also called a *linkage*:



*Koineization:*

