

What does it mean to study linguistics?

languages.dialects.**what** and how we
think.computer programming.speech
recognition.etymology.syntax.grammar.**neurolog**
y.**psycho**linguistics.**Chomsky**.morpho
logy.semantics.**ethno**graphy.acquisition.**sociolingu**
stics.**meaning**.speechdisorders.**endangere**
dlanguages.revitalization.morphology.**historic**
allinguistics.**gender****and**language.**acquisi**
tion.**accents**.writing.**brain**.processing.
pragmatics.

Why study linguistics?



we live in the world of language

WHAT DOES IT
MEAN TO KNOW
A LANGUAGE?

DO WE ONLY KNOW
WHAT WE SEE OR DO WE
SEE WHAT WE SOMEHOW
ALREADY KNOW?

WHILE IT APPEARS THAT WE CAN INDEED THINK WITHOUT LANGUAGE, IT IS ALSO THE CASE THAT THERE ARE CERTAIN KINDS OF THINKING THAT ARE MADE POSSIBLE BY LANGUAGE... WE MAY BE ABLE TO THINK WITHOUT LANGUAGE, BUT LANGUAGE LETS US KNOW THAT WE ARE THINKING.

**IF WE ELIMINATE RACIST AND SEXIST
LANGUAGE**

WILL WE BE LESS RACIST AND SEXIST?

SOME FUN FACTS ABOUT LANGUAGE

- ▶ **There are no primitive languages**
- ▶ **All languages change through time**
- ▶ **The relationship between sounds and meanings are arbitrary**
- ▶ **All languages use finite sound to express infinite ideas**
- ▶ **The ability of human beings to acquire, know and use language is a biologically based ability rooted in the structure of the human brain and expressed in spoken modality**

SOME FUN FACTS ABOUT LANGUAGE

- ▶ One country has more than 800 languages. Any ideas?
- ▶ What are 2 of the most translated documents?
- ▶ Where did English language originate?
- ▶ The first language spoken in space?
- ▶ Did you know that in Indonesian, “air” means “water”?
- ▶ Speaking Mandarin takes more brainpower than speaking English. Mandarin speakers use both sides of their brain to understand the language in comparison to English language speakers, which only uses one side of the brain, which side?

How many languages are in the world?

How many languages have writing systems?

WE PRODUCE SOUNDS AND PEOPLE UNDERSTAND THEM

Phonetics / Phonology



WRITING



A visual system for representing language.

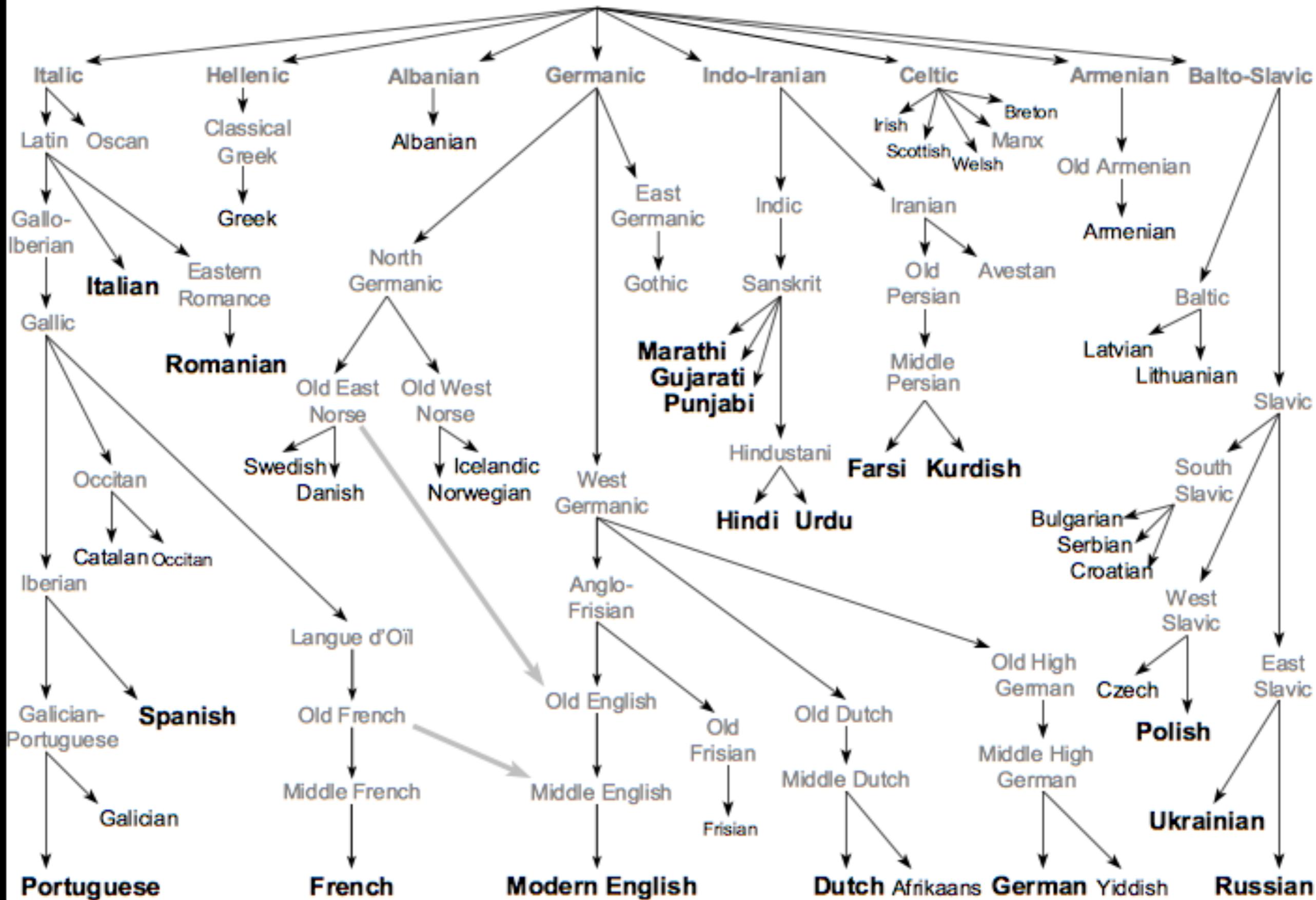
What came first?



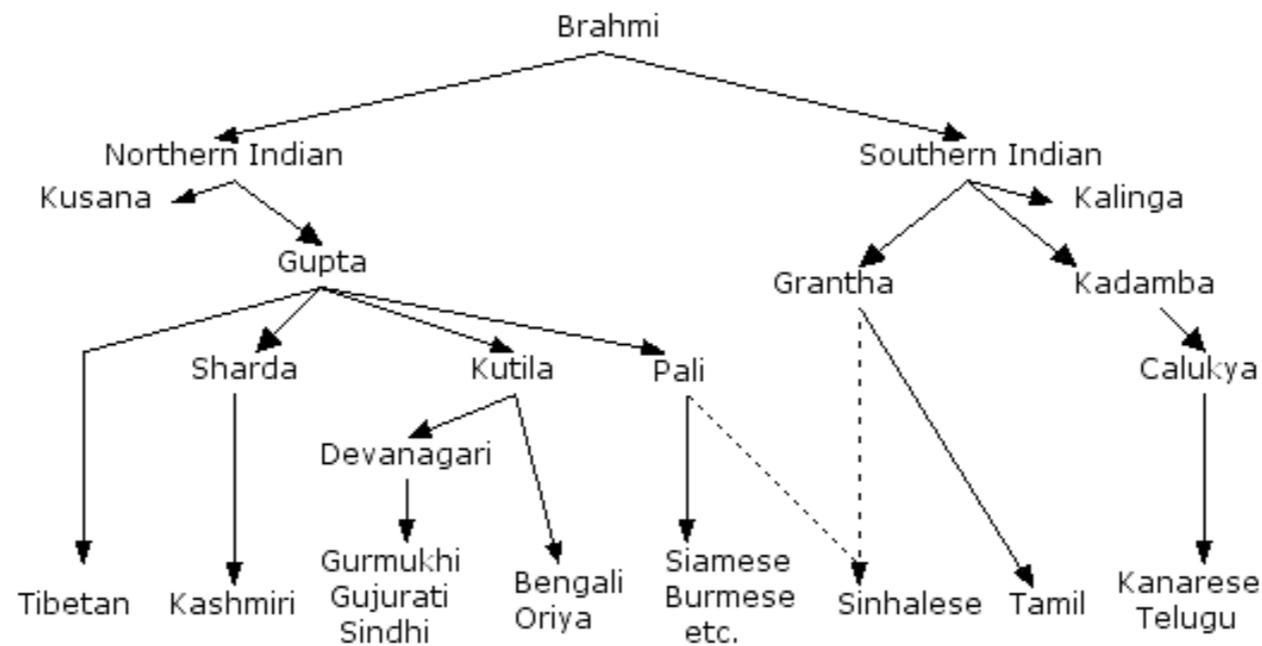
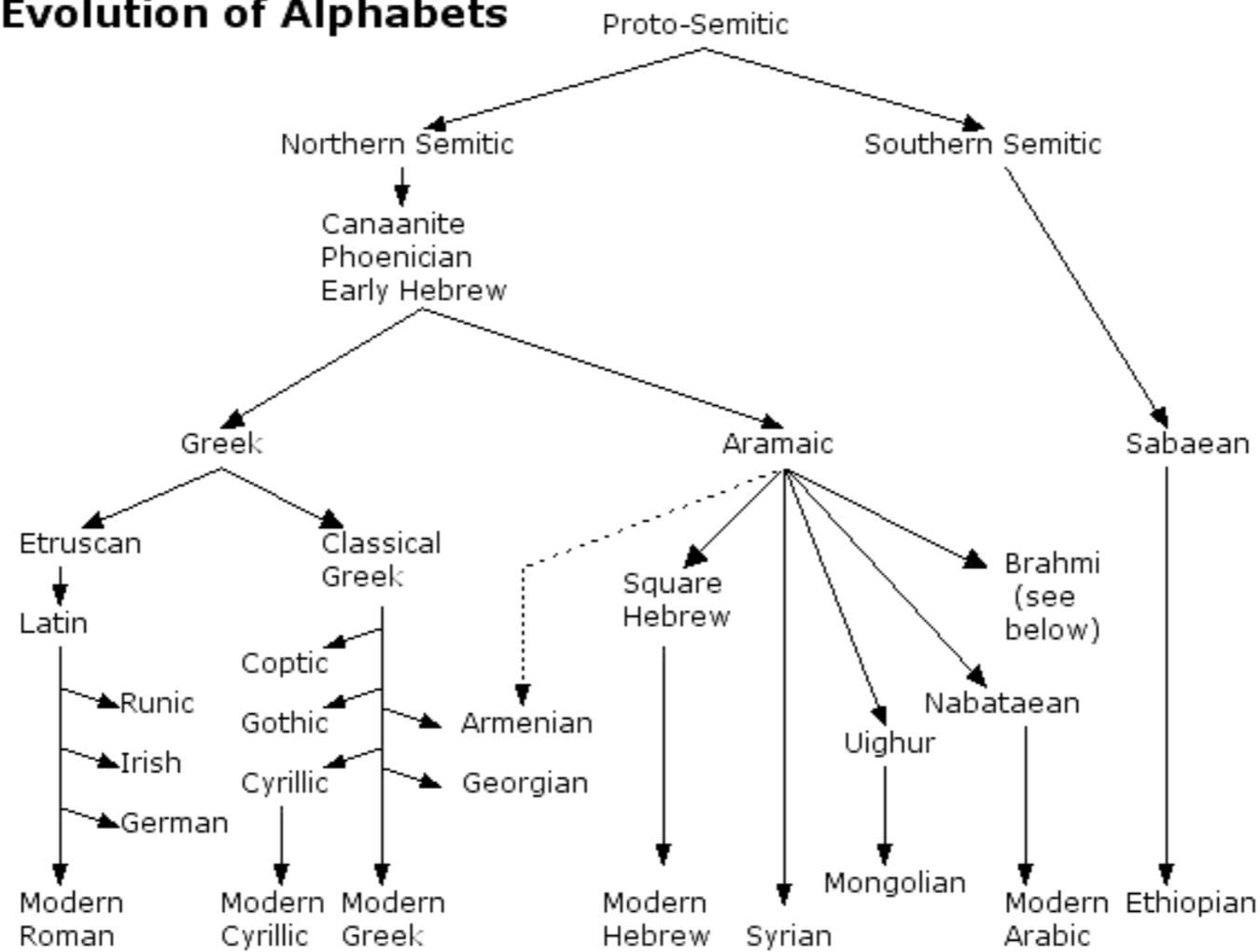
Petroglyphs



Proto-Indo-European



Evolution of Alphabets



There are close to 7,000 languages in the world

1/2 - Writing

95% of the world's people speak fewer than 100 of the 7,000 different languages

Perhaps as many as 90% of all world languages will be extinct or moribund within the next 100 years

Every 3 months, somewhere in the world a language dies

An entire way of thinking is lost each time a language becomes extinct

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Endangered Language Documentation & Revitalization



Fieldwork - 2012
Xinaliq, Azerbaijan



Xinaliq, Azerbaijan



Fatima

How do we determine that a language is endangered?

- (1) Absolute number of speakers.**
- (2) Intergenerational transmission: Are children learning the language? How old are the youngest speakers?**
- (3) Are the numbers of speakers declining?**
- (4) Are the domains of language use receding?**
- (5) Is the number of speakers becoming smaller with respect to the total ethnic population?**

In the world:

457 languages have fewer than **10 speakers**.

Most will be extinct in your lifetime.

749 languages have fewer than **100 speakers**.

11% of all languages.

LANGUAGES
NATURALLY CHANGE
AND SOME DIE.
WHY?

Language extinction is not new.

So, why the crisis?



Because of the alarmingly accelerated rate of language extinction today!

Why does this matter?

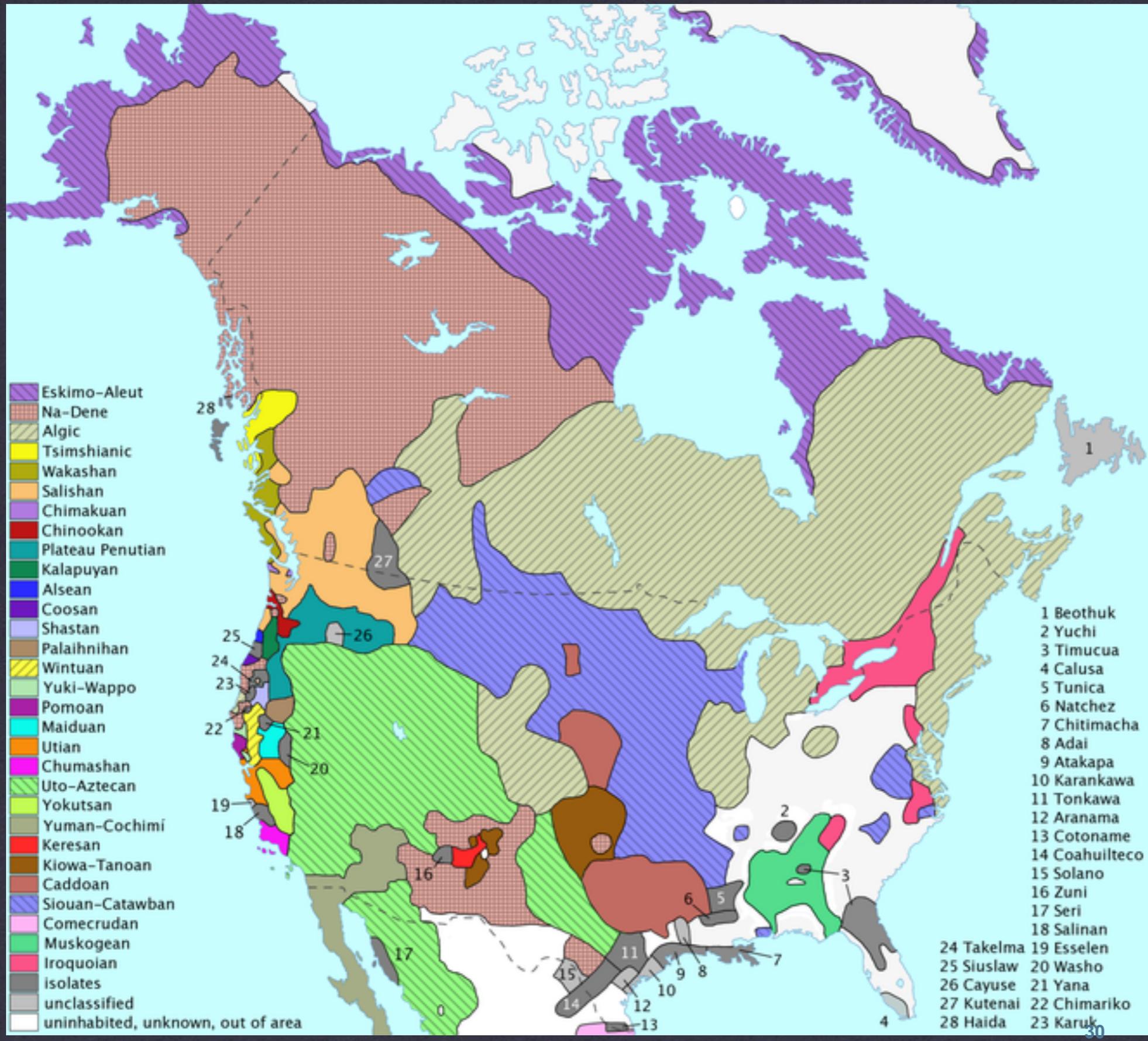
Why should you care?

The fear is the rate of language loss is currently so great we may undergo a mass cultural extinction without realizing it.

If language is the greatest human invention and the greatest human innate ability, if it tells us something very important about being human, how much of it can we afford to lose or gamble away?



Ethical and Human Rights reasons:
Language loss is often not voluntary.



U.S.
29 families
296
languages

History:

we recover great reservoirs of historical information from languages.

Lost knowledge:

Specific knowledge is held by the smaller speech communities of the world – of medicinal plants and cures, plants and animals yet unknown scientifically, new crops, etc.

Loss of Knowledge

Loss of **Systems** environment, ecology, plants, medicines.

Nivaclé skletsex 'cipoy'
[*Jacaratia hassleriana*]

a plant with bulky tuber, used for water when hunting/gathering in the bush; used on long journeys. It contains much liquid.



Young people no longer know its name nor how to identify it, though they still live in the same environment –

Loss of such knowledge could be a threat to their

Seri (Mexico, 700 speakers):

xnois 'eelgrass seed' (*Zostera marina* L.):

It's the only known grain from the sea used as a human food

source. Its cultivation requires no water, pesticides, or artificial fertilizers.



Nivacle (Matacoan) medicines:

yiklaʔx 'quebracho blanco' [*Aspidosperma quebracho*]

cure for fever, flu, dysentery, contraceptive



Medicines:

75% of plant-derived pharmaceuticals were

discovered by examining traditional medicines,

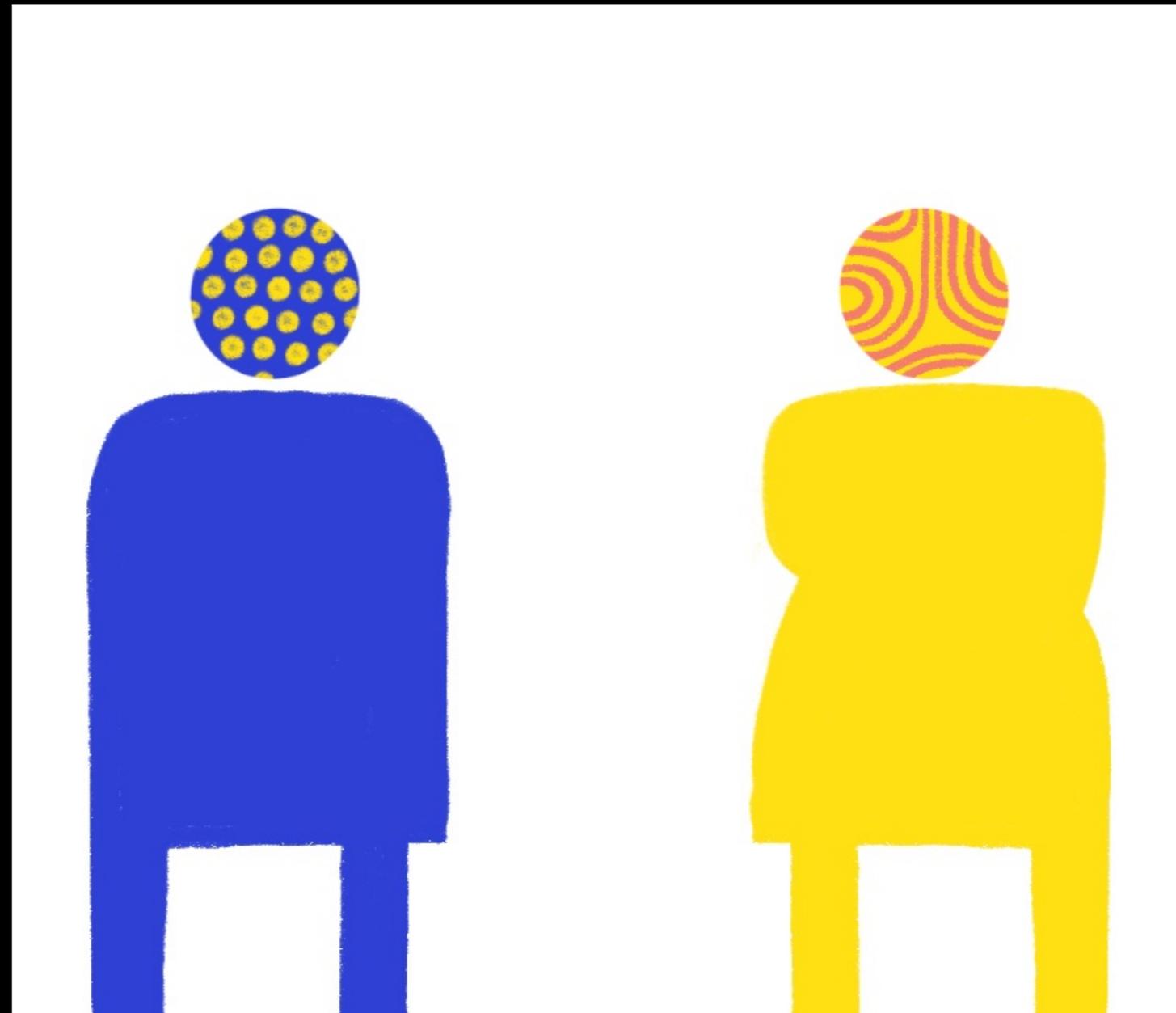
where the language of curers often played a

key role.

Scientific understanding of language:

Linguists have the goal of discovering what is possible and impossible in human languages, in order to advance knowledge of how the human mind works.

**What is possible in human language and how
that reflects
human cognition.**



O V S
toto yonoye kamu
man ate jaguar
'The jaguar ate the man



But, Hixkaryana (Brazil, 350 speakers) was discovered to have OVS basic word order



When a language is not passed on to the next generation, the knowledge of the natural and cultural world encoded in that language fails to be transmitted.

Culture:

Languages are treasure houses of information on history, literature, philosophy, and art.

Their stories, ideas, and words help us make sense of our own lives and the world around us.

Literature:

The life-enriching value of **literature** is well-understood, and this is true also of the oral literatures of the indigenous peoples of the world – they, too, have grappled with the complexities of their world and the problems of life, and the insights and discoveries represented in their literatures are of value to us all.



Xinaliq



Lihdiah making Qutab, Xinaliq, Azerbaijan
A wedding in Quba, Azerbaijan



Shepherd in Avar village, Daghestan
dung used for home construction and heating, Xinaliq, Azerbaijan



Linguistic "monocultures" impoverish our mental evolution

Worldview, a window, a way of thinking

We need diverse group of problem-solvers and advocates

In today's world, biological and cultural diversity – diversity of genes, species, ecosystems, landscapes and seascapes, diversity of languages, livelihoods, values, knowledge systems, social and political systems, beliefs, spirituality and world views - will help us survive and thrive.

Every language carries with it immense reserves of cultural, historical, ecological and botanical information, that help us adapt to changes in the environment.

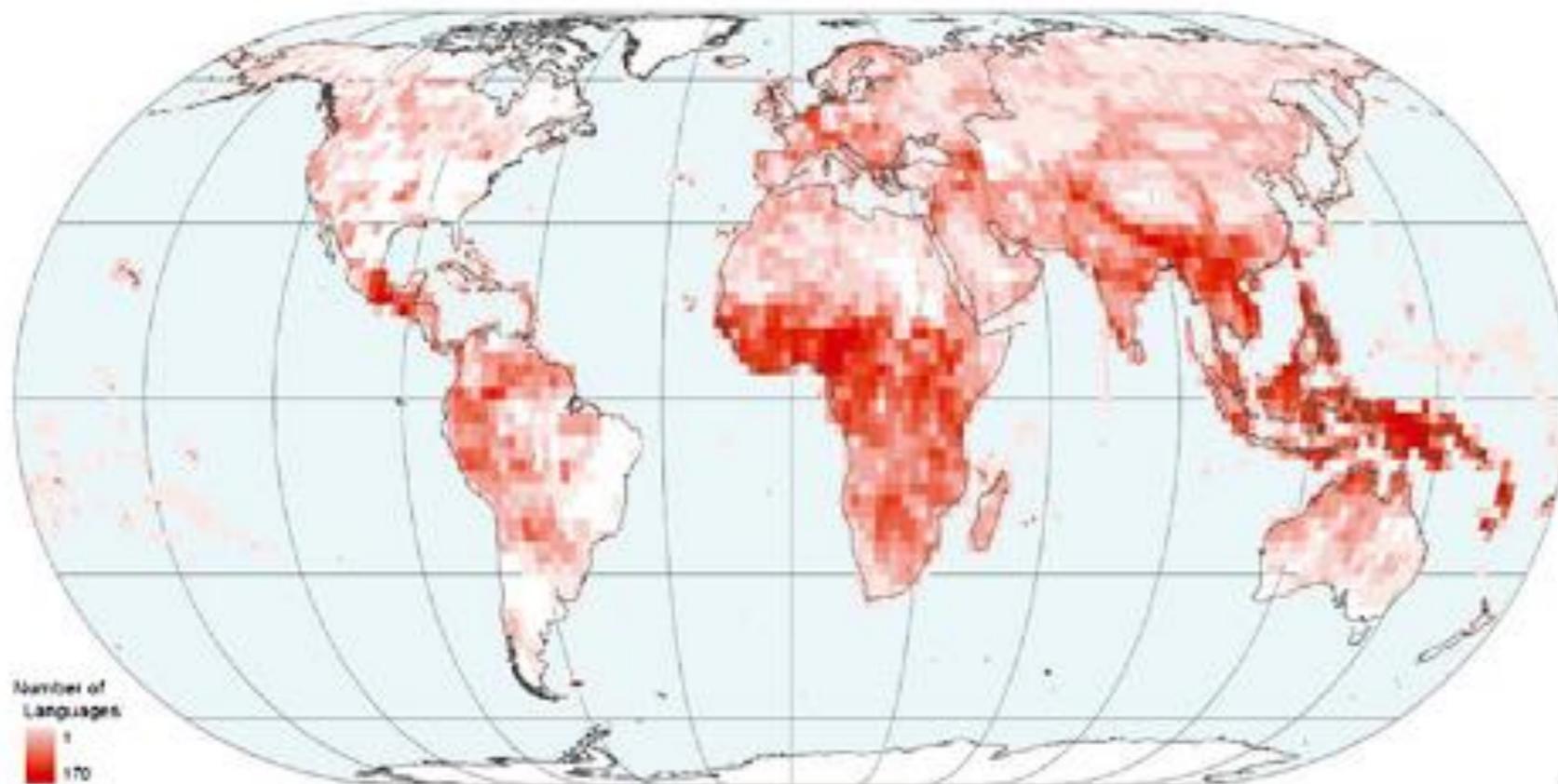
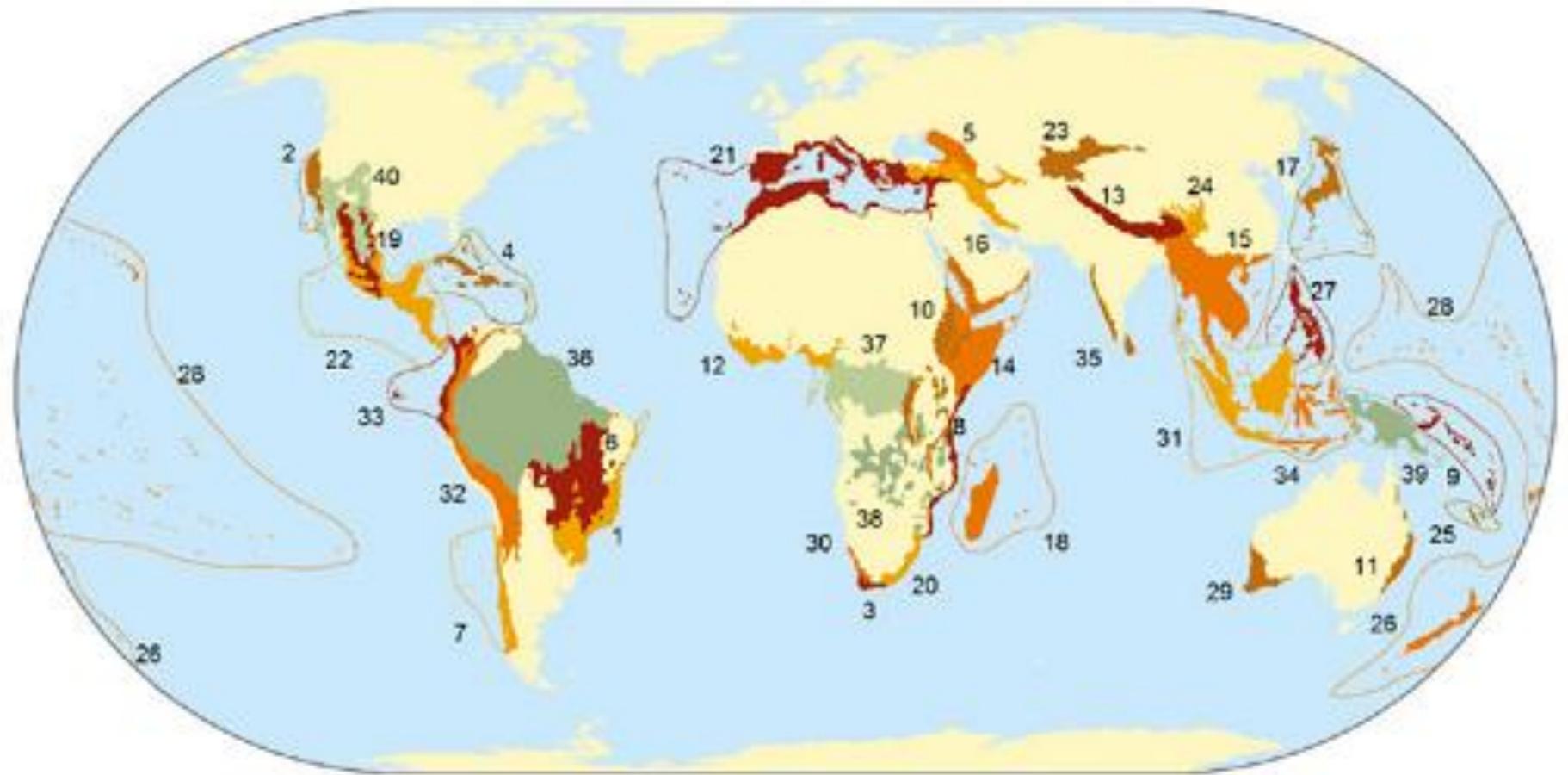




Languages-biological species density comparisons



Biodiversity hotspots and high biodiversity wilderness areas



Geographic distribution of indigenous and non-migrant languages in 2009

Adapted from: Gorenflo et. al (2012)

The extinction of an individual language is a monumental loss of scientific and human information, comparable in gravity to the loss of a whole species, say the Siberian tiger (350-450 population).



Language obituaries

Tommy George

The last fluent speaker of
Awu Laya

An aboriginal language
[Australia], died August
12, 2016, at age of 87.

He helped document his
language and traditional
fire management of land.



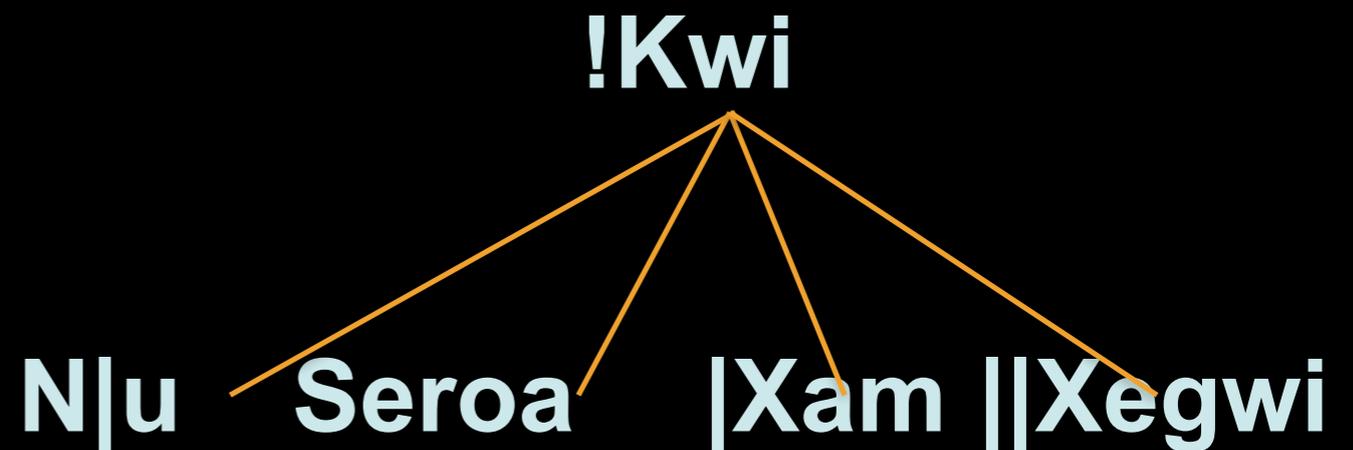
Language obituaries

**Jopi
Mabinda**

Murdered in 1988

**Last speaker of
||Xegwi (Batwa), South Africa**

**A whole language family
disappeared with his death.**



Language obituaries

Eyak (Alaska) lost its last speaker when **Marie Smith Jones** died at the age of 89, January 21, 2008. (Very famous case.)



Language obituaries



Doris Jean Lamar-McLemore, the last Wichita speaker, passed away on August 30, 2016; she was 89.

Language obituaries

Edwin Benson, last known native speaker of **Mandan**, died in December of 2016 at 85 years of age.

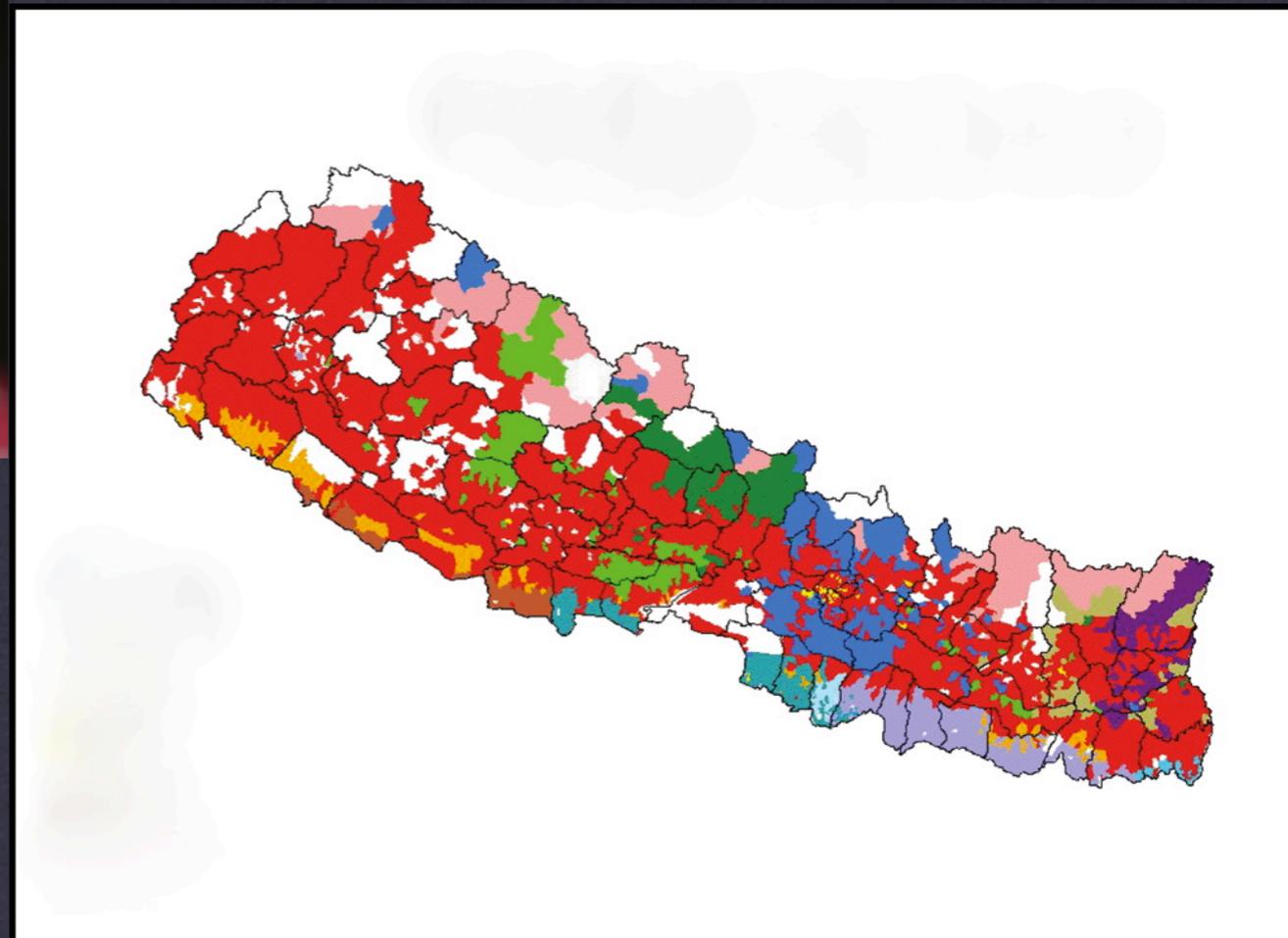


Edwin Benson of Twin Buttes, N.D., says a prayer in his native language during a dedication ceremony for four Mandan earth lodges built on the University of Mary campus in Bismarck, N.D., in 2004. Benson will receive an honorary doctorate from the University of North Dakota on Saturday.
Photo by MIKE McCLEARY/Bismarck Tribune





gyani maiyi sen



Kusunda language - **Nepal**

**"In any man who dies there dies with him,
his first snow and kiss and fight ...
Not people die but worlds die in them."**

Yevgeny Yevtushenko (b. 1933)
russian poet

A low-angle photograph looking up at a dense forest canopy. Sunlight filters through the thick green leaves, creating a dappled light effect. The perspective makes the trees appear to converge towards the top of the frame, creating a sense of height and depth. The overall mood is serene and natural.

Life Is The **Network**, Not The Self

Endangered Language Documentation and Revitalization