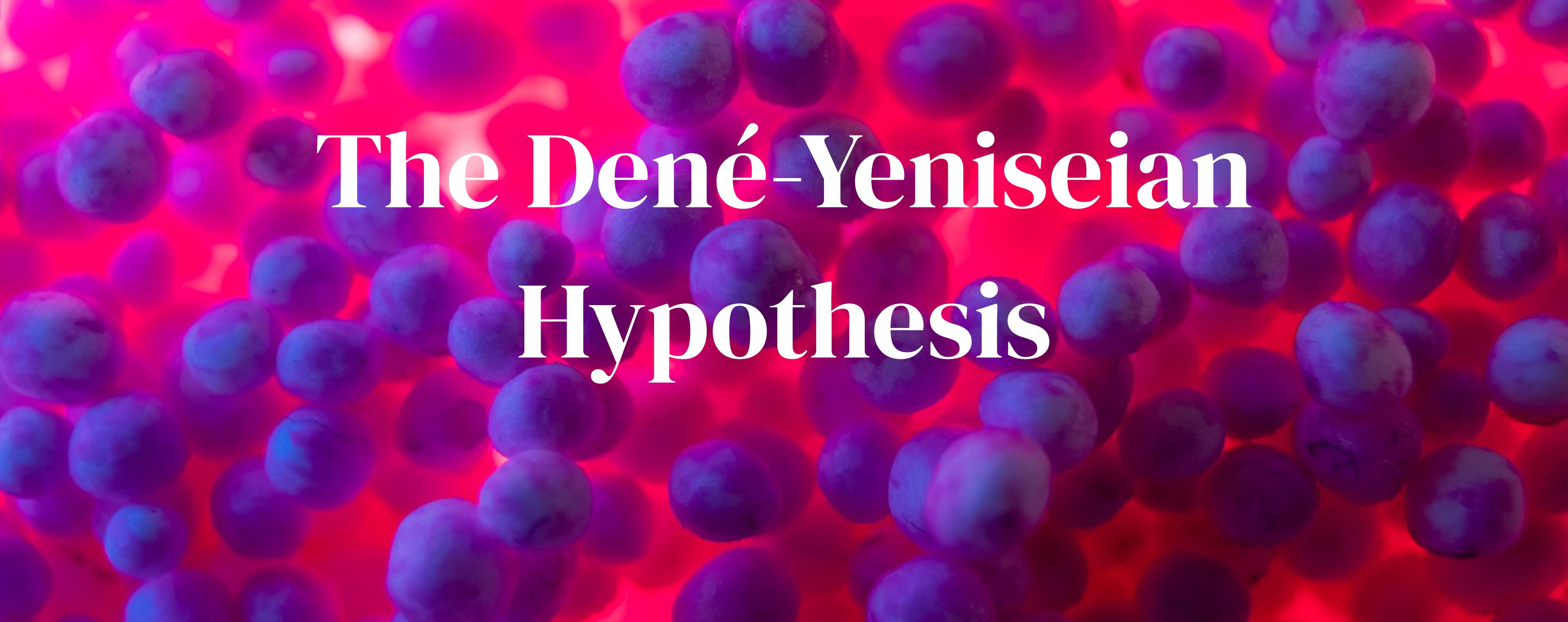


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The Dené-Yeniseian Hypothesis

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Na-Dené and Yeniseian languages



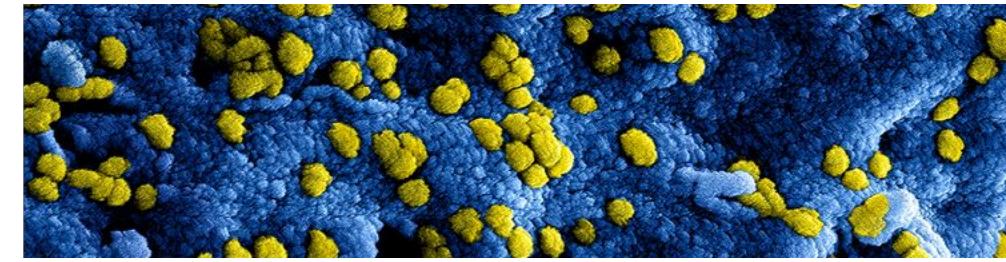
Historical Background of the Hypotheses

1923 to today



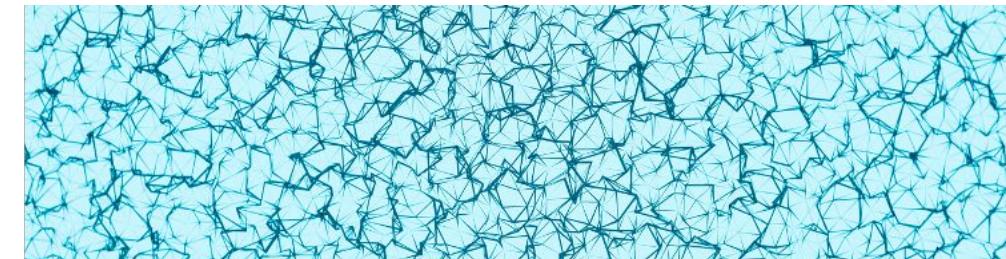
Arguments for Dené-Yeniseian

morpho-genetics from 26,500 BCE?



Criticisms and Challenges

many questions remain



Introduction

Na-Dené Languages



Family spanning North America

Three main branches:

- Athabaskan
 - Eyak †
 - Tlingit

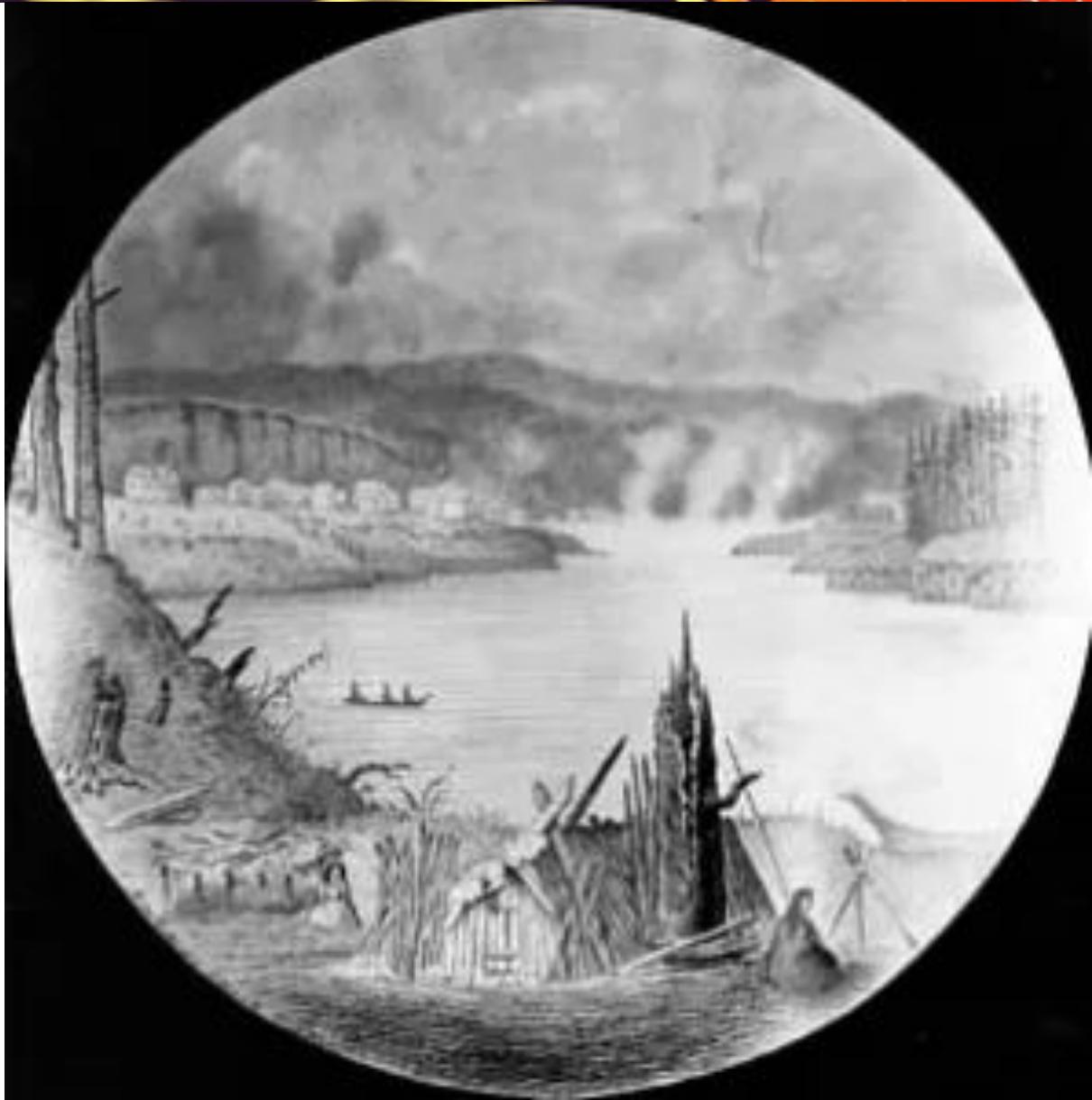
Vastly diverse and distributed

Currently excludes Haida

Kwallioqua–Clatskanie

**Athabaskan-speaking people of the
Willapa Hills and the lower Columbia River.**

**The language was extinct by 1930 at the
latest, documented by explorers and
linguists.**



Yeniseian Languages

Isolated language family along the Yenisei River

Critically endangered:

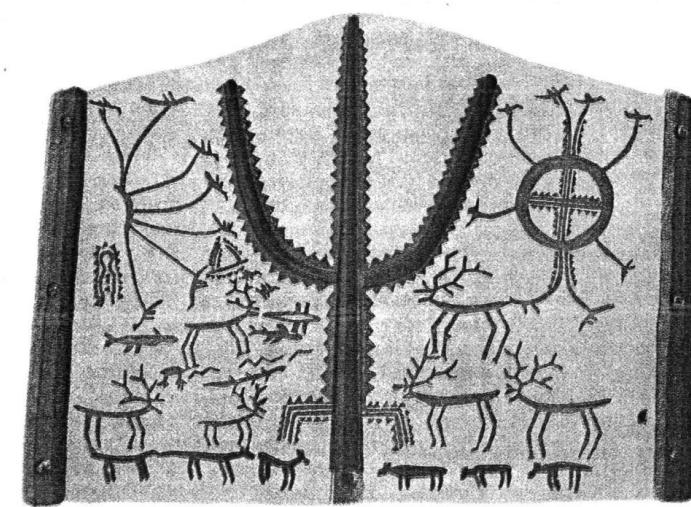
Only Ket remains, less than 50 elderly speakers

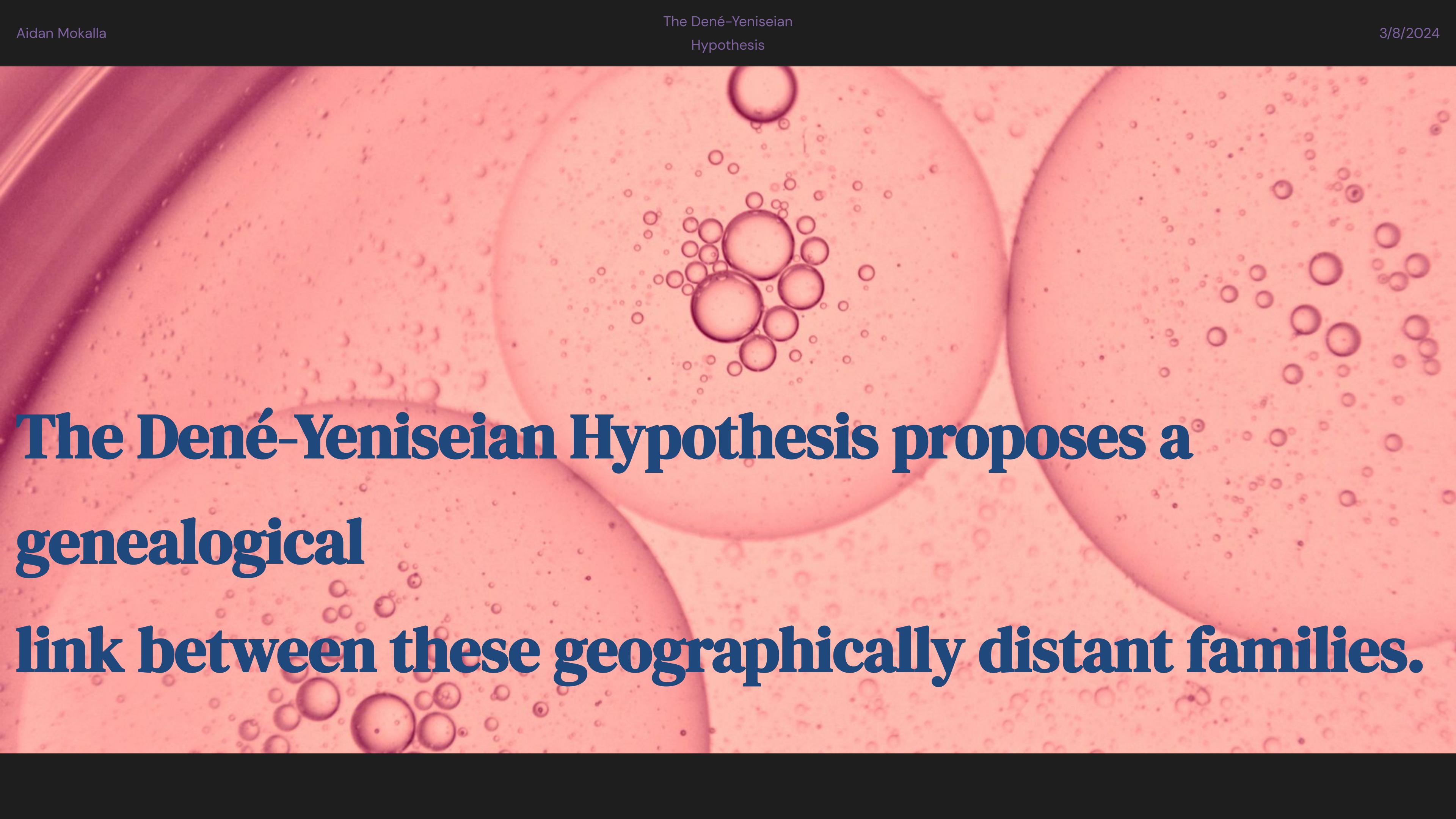
Other Yeniseian languages (e.g., Yugh, Kott) extinct

Historically spoken expansively (right)



Figure 2. World Tree design on backboard of woman's sled





**The Dené-Yeniseian Hypothesis proposes a
genealogical
link between these geographically distant families.**

The Dene-Yeniseian Connection



Map courtesy of Ben Potter, UAF anthropology department



"Vascodene: El grupo más extendido de todos, que parece formar el corazón de la distribución mundial. Incluye el vascuence, los idiomas caucásicos, el uraltaico, drávido, tibetobirmano, chino, austronesia, japonés, chukchi (Siberia), esquimal-aleuta, wakash y nadene; los apaches, pertenecientes a este último, son los que llegaron más al sur en América. El antiguo sumerio parece haber tenido afinidades con este conjunto, acercándose al altaico." - Swadesh (1960)

Many Hypotheses

Over the years, many have attempted to establish a genealogical basis for the supposed connection between Na-Dené and various Asian language families.

Basque–Déné

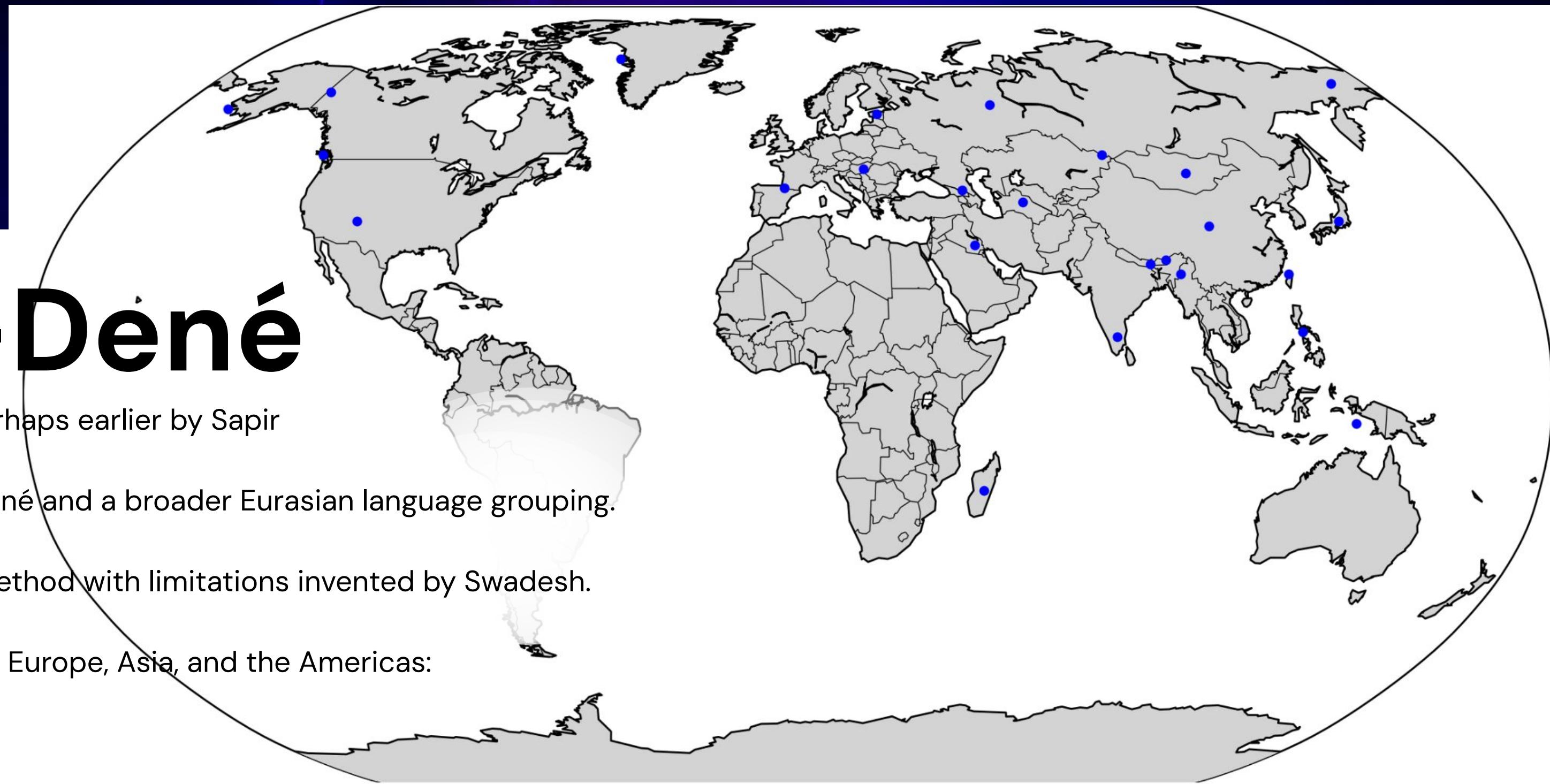
Proposed 1959 by Swadesh and perhaps earlier by Sapir

Proposed a link between Na-Dené and a broader Eurasian language grouping.

Relied on glottochronology, a method with limitations invented by Swadesh.

Included language families from Europe, Asia, and the Americas:

Basque,
Caucasian,
Uralic,
"Altaic,"
Dravidian,
"Tibeto-Burman,"
Chinese,"
Austronesian,
Japanese,
Chukotian,
Eskimo-Aleut,
Wakash,
Na-Dene, and
"possibly Sumerian"
Yeniseian not yet included.





Dené–Caucasian

Series of multiple semi-synchronous propositions following Basque–Dené up until to Bengston (2008)

Reduced the set of related languages within the Basque–Dené Family:

- Basque,
- *Caucasian,
- Tibeto-Burman,
- Chinese,
- Wakash,
- *Yeniseian
- *Sino-Tibetan
- *Na-Dene, and
- still "possibly Sumerian!"

*Gained more traction: Starostin Classification (1982–1991):

glottochronology still,
reconstructions, and
regular phonological correspondences



Dené-Yeniseian

Edward Vajda (2001 to as recent as 2023):

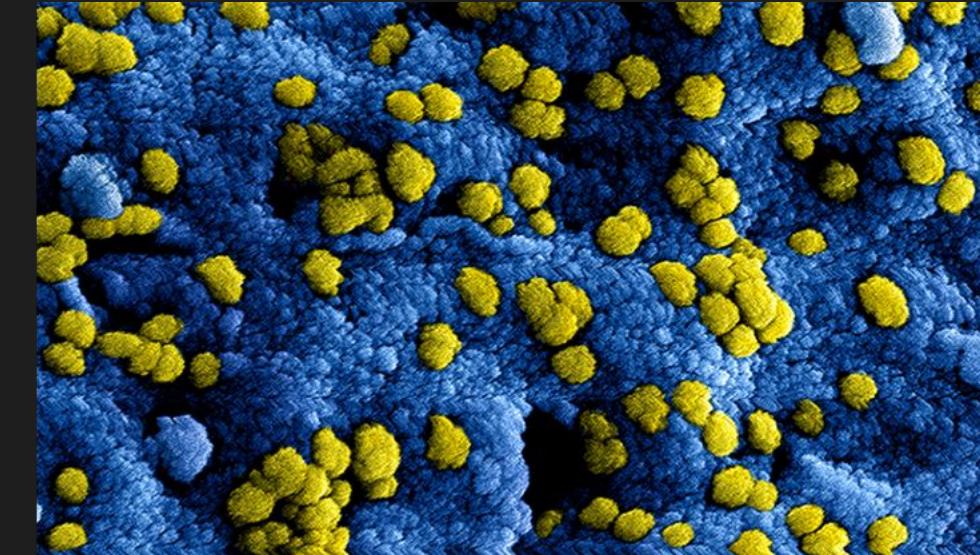
Focus on Yeniseian connections to Na-Dené, excluding other elements

Further use of more rigorous comparative historical methods:

morphology, and
sound correspondences



Evidence



Argument 1:

**There is linguistic evidence
that suggests that the
ancestors of these
languages were genetically
related.**

(1) Slave noun with nasal-class prefix

<i>silá</i>	'my hand'
<i>njlá</i>	'your (sg.) hand'
<i>bjlá ~ mlá</i>	'his/her hand'

(5) Ket

tis-di-ŋten
stone-3INAN.POSS-ADESS
'at the stone'

tis-di-ŋal
stone-3INAN.POSS-ABL
'from the stone'

tis-di-ŋa
stone-3INAN.POSS-DAT
'to the stone'

(6) a. Ket case forms made from the singular noun *ō·p* 'father'

ob-d-a
father-3-MASC.POSS
'the father's'

ob-d-a-ŋ-a
father-3-MASC-POSS-DAT
'to the father'

b. Ket case forms made from the plural noun *obay* 'fathers'

ob-ay-na
father-PL-ANIM.PL.POSS
'the fathers'

ob-ay-na-ŋ-a
father-PL-ANIM.PL-POSS-DAT
'to the fathers'

Morphology

"Possessive prefixes before certain **inalienably possessed nouns** in Dene (Athabaskan) languages involve a **nasal** element not present in conjunction with other nouns ...

It will further be argued that the **nasal element -ŋ-** appearing in these **Yeniseian case forms** is **cognate with the Athabaskan nasal-class prefix** ...

[In Ket, t]he dative, adessive, and ablative forms of nouns and pronouns require **the same pronominal possessive morphemes** ...

The non-congruence of Na-Dene 1sg. and 2sg. pronouns with pronouns in Yeniseian (or other branches of the proposed 'Sino-Dene' or 'Dene-Caucasian' family) might be due to the morphophonemic interaction of a nasal possessive marker with the preceding pronominal forms" (Vajda 2013).

- (10) a. Ket postpositional construction ‘to a rock’
tis-d-i-ŋ-a
rock-3-INAN-POSS-toward
- b. Eyak postpositional construction ‘for a rock’
tsa: -dla: -χa'
rock-QUALIFIER-for

Morphology

“The form *-dla:-* in combinations like Eyak *tsa:-dla:-təwi:s* ‘stone axe’ and *tsa:dla:t'axd* ‘(sheltered) under a rock’ represents a **lexicalized remnant of ancient possessive morphology**. Compare the homologous concatenation of morphemes in the following Ket and Eyak postpositional constructions: [left]” (Vajda 2013).



Lexical Cognates

Na-Dené Forms	Yeniseian Forms	Meaning	Notes
*s-Gə-d ~ s-kə-d (Proto-Na-Dené)	*siy-t̪, sik-t̪ (Proto-Yeniseian)	'hand'	Regular 's/k' shifts, plus shared prefix patterns.
*tɬ'e(:) (*tɬ'i-) (Proto-Athabaskan)	*t̪íl (Kott)	'dog'	Well-established cognate across numerous languages within each family.
*-ts'en ~ -ts'in (Proto-Na-Dené stem)	*tʃen, tʃin (Proto-Yeniseian stem)	'anus', 'rectum'	Example of complex verb stem correspondences
gʷe(:)n (Proto-Athabaskan)	*xun, kun (Proto-Yeniseian)	'person'	Widely distributed forms, important for cultural vocabulary.
*tɬ-e-γəs, tɬ-e-xus (Proto-Athabaskan)	li-Geš (Kott)	'louse'	Example of a less 'core' vocabulary item.
tɬ-e-s-Gen (Proto-Athabaskan)	de-s-k'én (Proto-Yeniseian)	'fingernail', 'claw'	's/k' correspondence, more complex prefix structure
-ts'əy (~-tsiy) (Proto-Athabaskan)	*təy (dəy) (Yugh)	'eye'	Sound correspondences can be intricate, note voicing shifts ('ts' / 'd').
*God (Proto-Athabaskan)	*xot (Proto-Yeniseian)	'fire'	Widely recognized cognate with regular correspondences.

Argument 2:

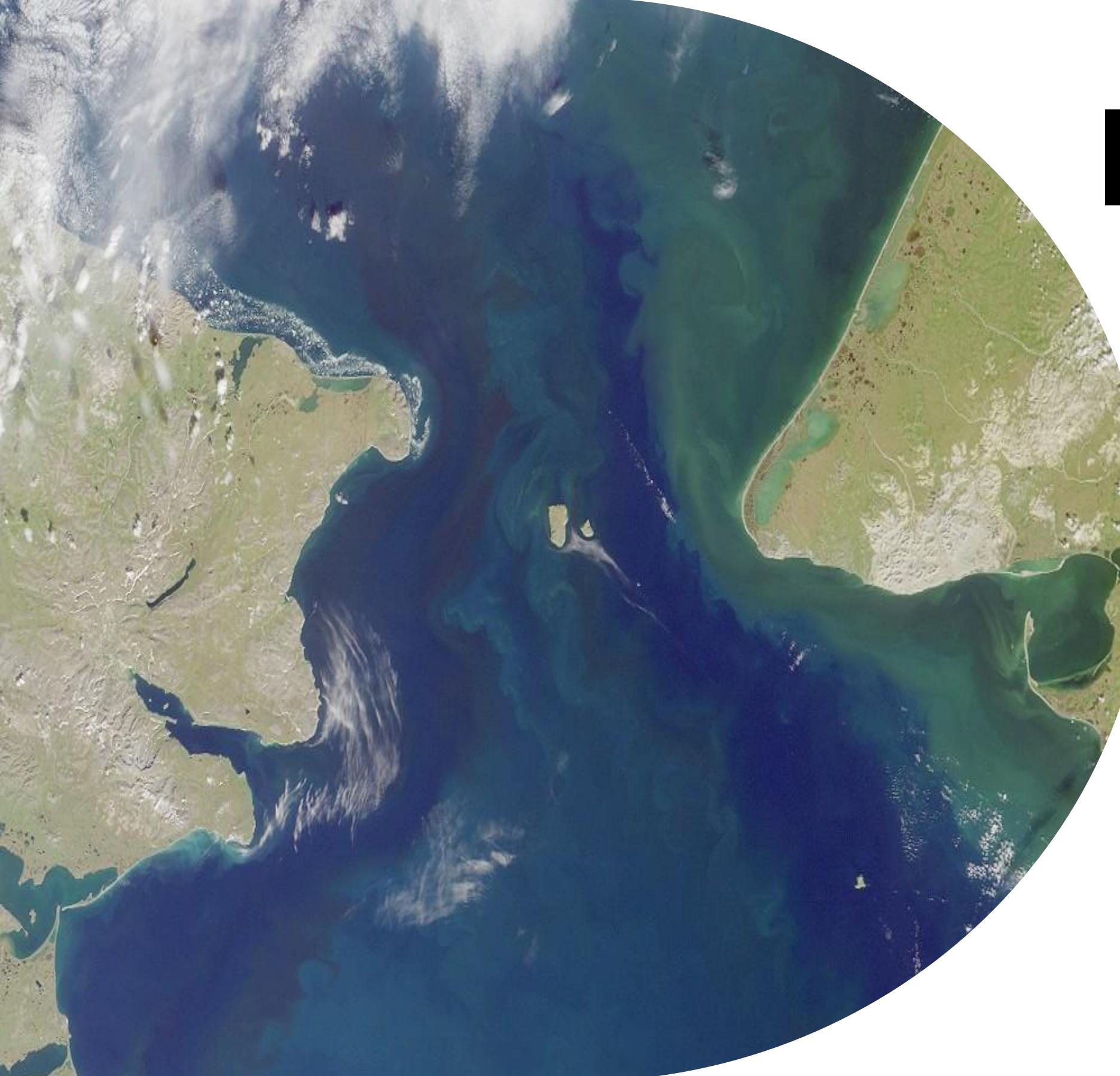
There is non-linguistic evidence that suggests that the speakers of these languages are genetically related.

Genetic Evidence

Research could be interpreted to suggest a shared ancestral population for Na-Dené and Yeniseian speakers:

"We assembled data from 52 Native American and 17 Siberian groups ... We show that **Native Americans descend from at least three streams of Asian gene flow. Most descend entirely from a single ancestral population** that we call 'First American'. However, speakers of Eskimo-Aleut languages from the Arctic inherit almost half their ancestry from a second stream of Asian gene flow, and **the Na-Dene-speaking Chipewyan from Canada inherit roughly one-tenth of their ancestry from a third stream**" (Reich et al., 2012).





Historic Evidence

The Bering Land Bridge \approx 16,000 BCE (Elias et al. 1996)

Timing and Alignment:

Linguistic Timelines \approx 26,000–16,000 BCE

Siberian-Alaskan Archaeological Links (Vajda 2011)

Criticisms and Challenges

Limited Cognates

The number of well-established cognates between Na-Dené and Yeniseian is relatively small compared to some language families. This raises questions about the strength of the overall connection (Dunn 2012).

Alternative Hypotheses

Some linguists propose connections between Na-Dené and other Asian language families (e.g., Sino-Tibetan), or believe that these language families don't share any connections at all.

Yeniseian Data Challenges

The critically endangered status of Yeniseian languages, with limited documentation, makes comparison difficult and increases the potential for errors (Dunn 2012).

Methodological Disagreements

There is much debate among linguists about the best methods for establishing deep historical relationships between languages. Some find Vajda's work convincing, while others call for stricter criteria or different approaches entirely (Campbell 2011).

“

I have attempted throughout to find a middle way between the cavalier optimism of 'lumpers' and the pessimism of orthodox 'splitters' on the matters of deep genetic relationship between the continents.

— Fortescue (1998)

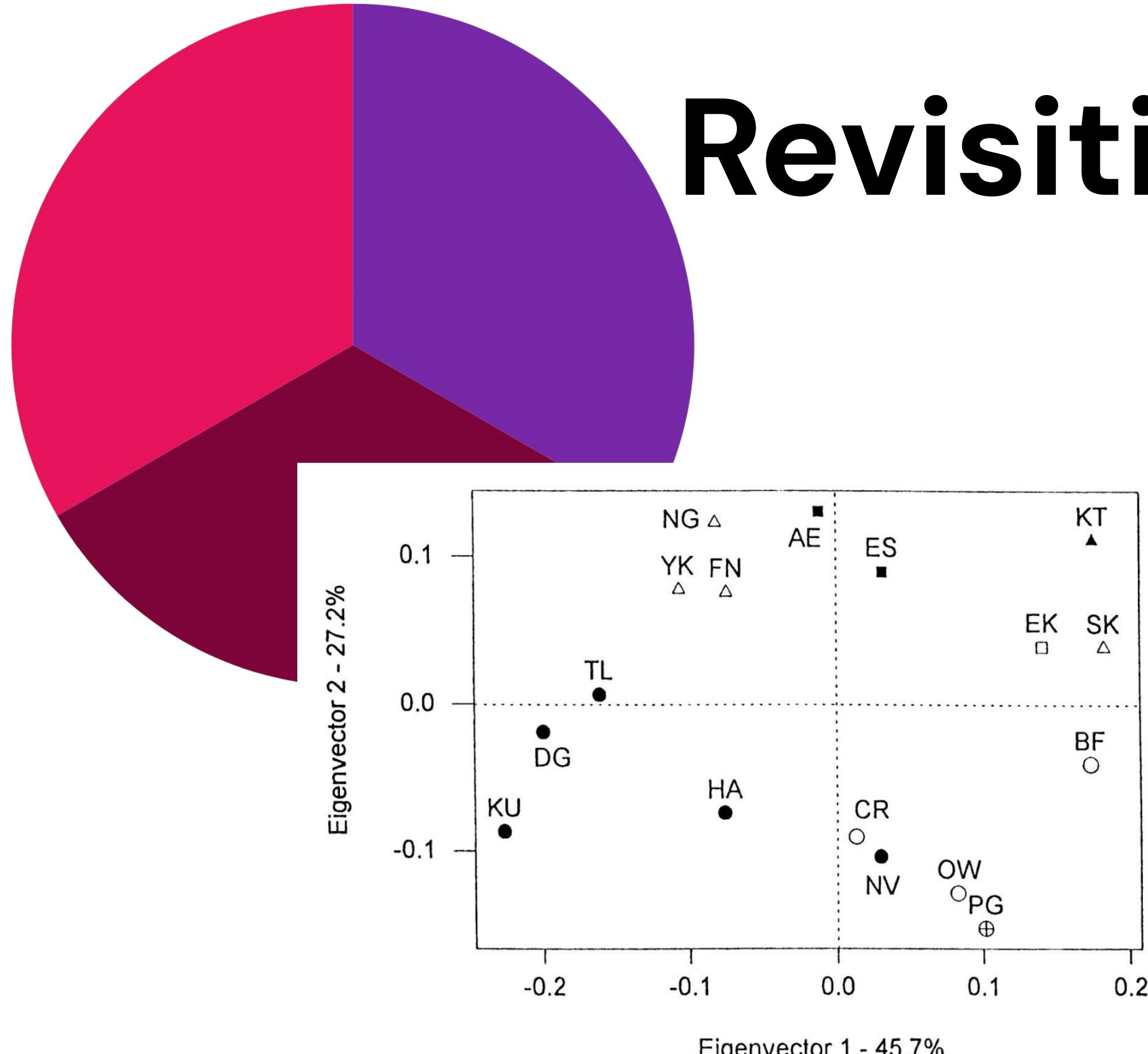


Figure 4. Plot of the relationship between seven Siberian and 10 North American populations using seven alleles. The first two eigenvectors accounted for 72.9% of the total variance.

Revisiting Genetics

Flegontov et al. (2016)

"Kets derive roughly 30–40% of their ancestry from ancient North Eurasians."

Rubicz, Melvin, & Crawford (2002)

"Contrary to Ruhlen's interpretation of the linguistic data, analysis of the genetic data shows that the **Na-Dene cluster with other Native American populations**, while the Kets genetically resemble the surrounding **Siberian groups**. This conclusion is further supported by **correlations that are higher when the Kets are considered unrelated to Na-Dene speakers**, and an insignificant partial correlation between genes and language when geography is held constant, indicating that **spatial patterning accounts for most of the variation present in these populations**."

Concluding thoughts

Concluding thoughts

Strengths & weaknesses Significance & ongoing research Implications for PNW languages What questions do we ask next?

...

...

...

...

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Hypothesis



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