

# **Uralic**

**as a Eurasian language family**

**with transcontinental dimensions**

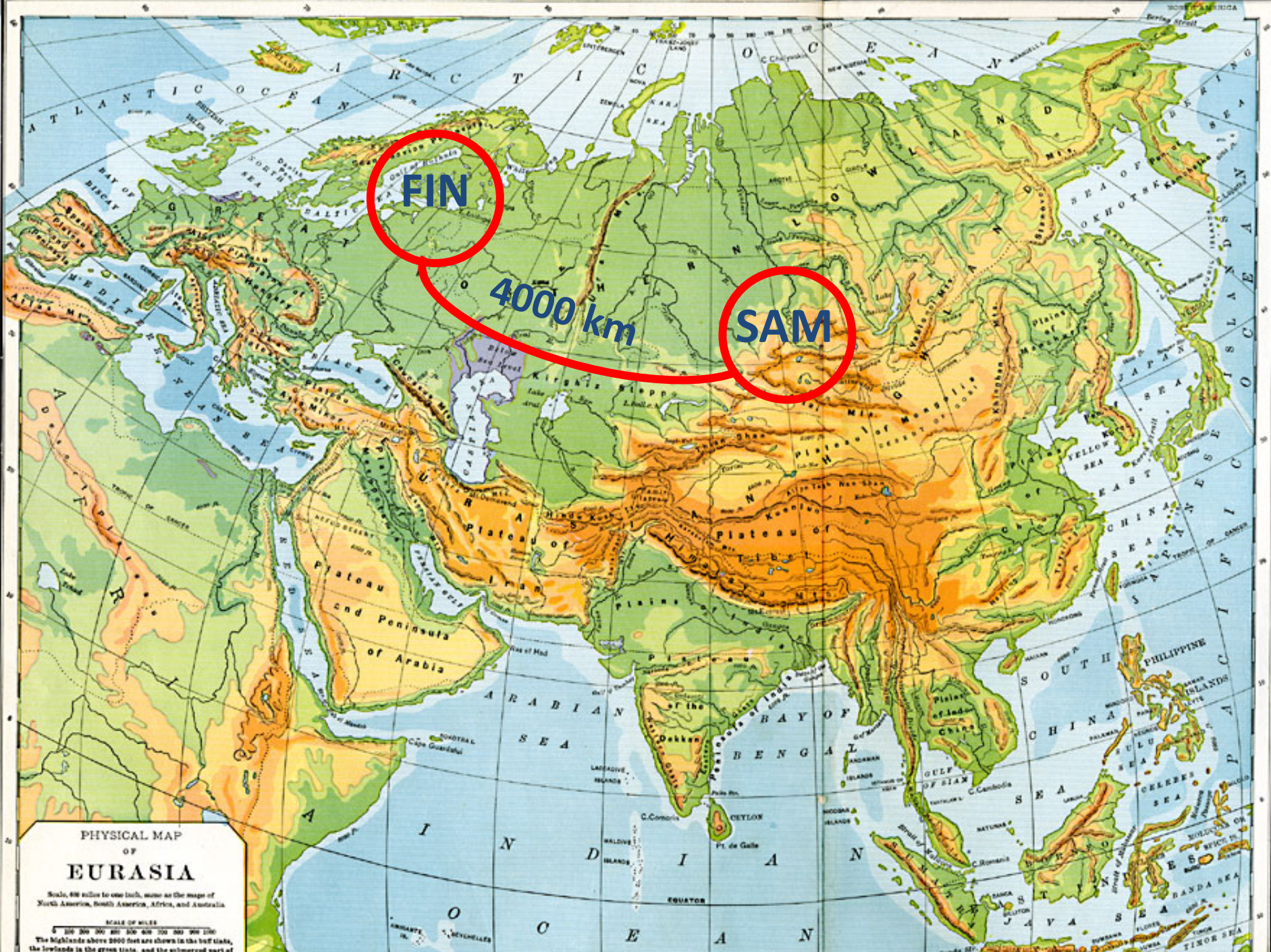
**Juha Janhunen (ИЛИ РАН ILS RAS)**

**UIC Talk Series 27 April 2025**

# Issues

## Traditional paradigm:

- Sounds and notation
- Taxonomy
- Chronology
- Homeland
- Directions of spread
- Areal connections
- Place in Eurasia



FIN

4000 km

SAM

PHYSICAL MAP  
OF  
EURASIA

Scale, 400 miles to one inch, same as the maps of  
North America, South America, Africa, and Australia.

SCALE OF MILES

0 100 200 300 400 500 600 700 800 900 1000  
The highlands above 5000 feet are shown in the buff tints,  
the lowlands in the green tints, and the submerged part of  
the continental platform in the light blue tint.

# PU Consonants [17]

\*m

\*n

\*ñ

\*ŋ

\*p

\*t

\*ç

\*k

\*s

\*c

\*d

\*j

\*w

\*y

\*x

\*r

\*l

# Cf. Proto-Tungusic [18]

\*m

\*n

\*ñ

\*ŋ

\*p

\*t

\*c

\*k

\*b

\*d

\*j

\*g

\*s

\*x

\*w

\*y

\*r

\*l

# Sibilants s ś č = s ɕ c

\*m

\*n

\*ñ

\*ŋ

\*p

\*t

\*ɕ

\*k

\*s

\*c

\*d

\*j

\*w

\*y

\*x

\*r

\*l

# “Spirants” $\beta$ $\delta$ $\delta'$ $\gamma$ = w d j x

\*m

\*n

\*ñ

\*ŋ

\*p

\*t

\*ç

\*k

\*s

\*c

\*w

\*d

\*j

\*y

\*x

\*r

\*l

# Palatals $\acute{n}$ $\acute{s}$ $\delta'$ $j = \tilde{n}$ $\zeta$ $j$ $y$

\*m

\*n

\* $\tilde{n}$

\* $\eta$

\*p

\*t

\* $\zeta$

\*k

\*s

\*c

\*d

\*j

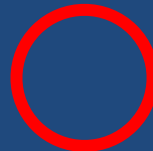
\*w

\*y

\*x

\*r

\*l



# Pre-Proto-Samoyedic [14]

\*m

\*n

\*ñ

\*ŋ

\*p

\*t

\*s

\*k

\*s

\*c

\*w

\*d

\*j

\*y

\*x

\*r

\*l

# Pre-Proto-Finnic [18-20]

\*m

\*n

\*ñ

\*ŋ

\*p

\*t

\*ç

\*k

\*s

\*š

\*c

\*d

\*j

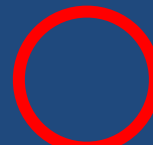
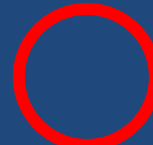
\*w

\*y

\*x

\*r

\*l



# Proto-Finnic [11]

\*m

\*n

\*ñ

\*ŋ

\*p

\*t

\*ç

\*k

\*s

\*š

\*c

\*d

\*j

\*w

\*y

\*x

\*r

\*l

# PU Vowels [8/3]

\*u

\*ï

\*ü

\*i

\*o

\*e

\*a

\*ä

initial slb

non-initial slbs

\*ə

\*a

\*ä

# Pre-Proto-Finnic [7/3]

\*u

\*ü

\*i

\*o

\*e

\*a

\*ä

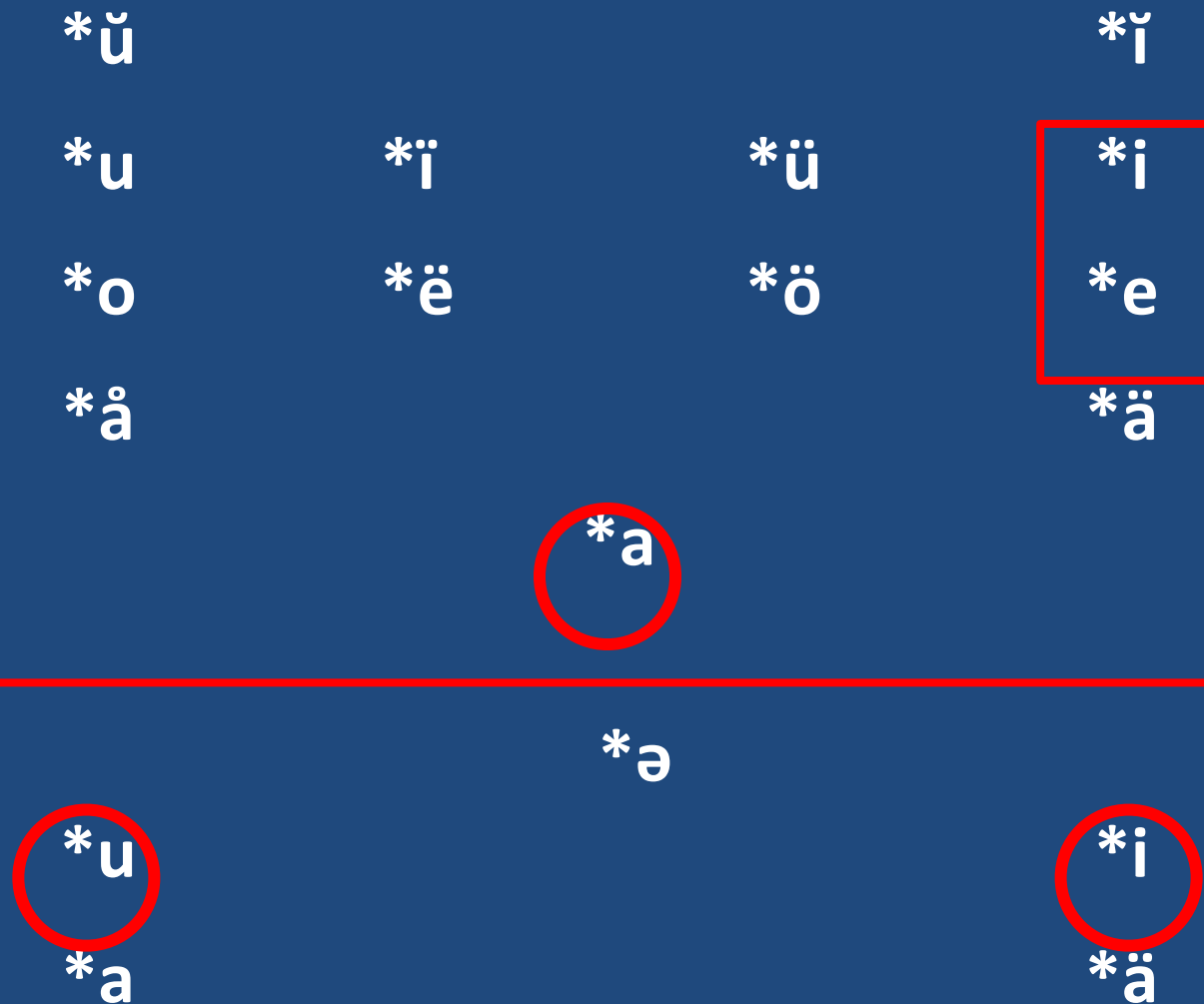
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\*i

\*a

\*ä

# Pre-Proto-Samoyedic [13/5]



# Finnic long vowels

Itkonen 1969

Pystynen 2018

Lehtinen 1967

Aikio 2012

Aikio 2015

- \*EE–i < \*A–ə  
*niele-* < \*ñälə-

- \*oo–i < \*ä–ä  
*puoli* < \*pälä

- \*VV–i < \*Vx–ə  
*pieli* < \*peeli < \*pexlə  
*viisi* < \*wiiti < \*wixtə

# The “laryngeal” \*x

\*tul/ə  
‘fire’

\*tuxl/ə  
‘wind/wing’

\*tuxl-ka  
‘feather’

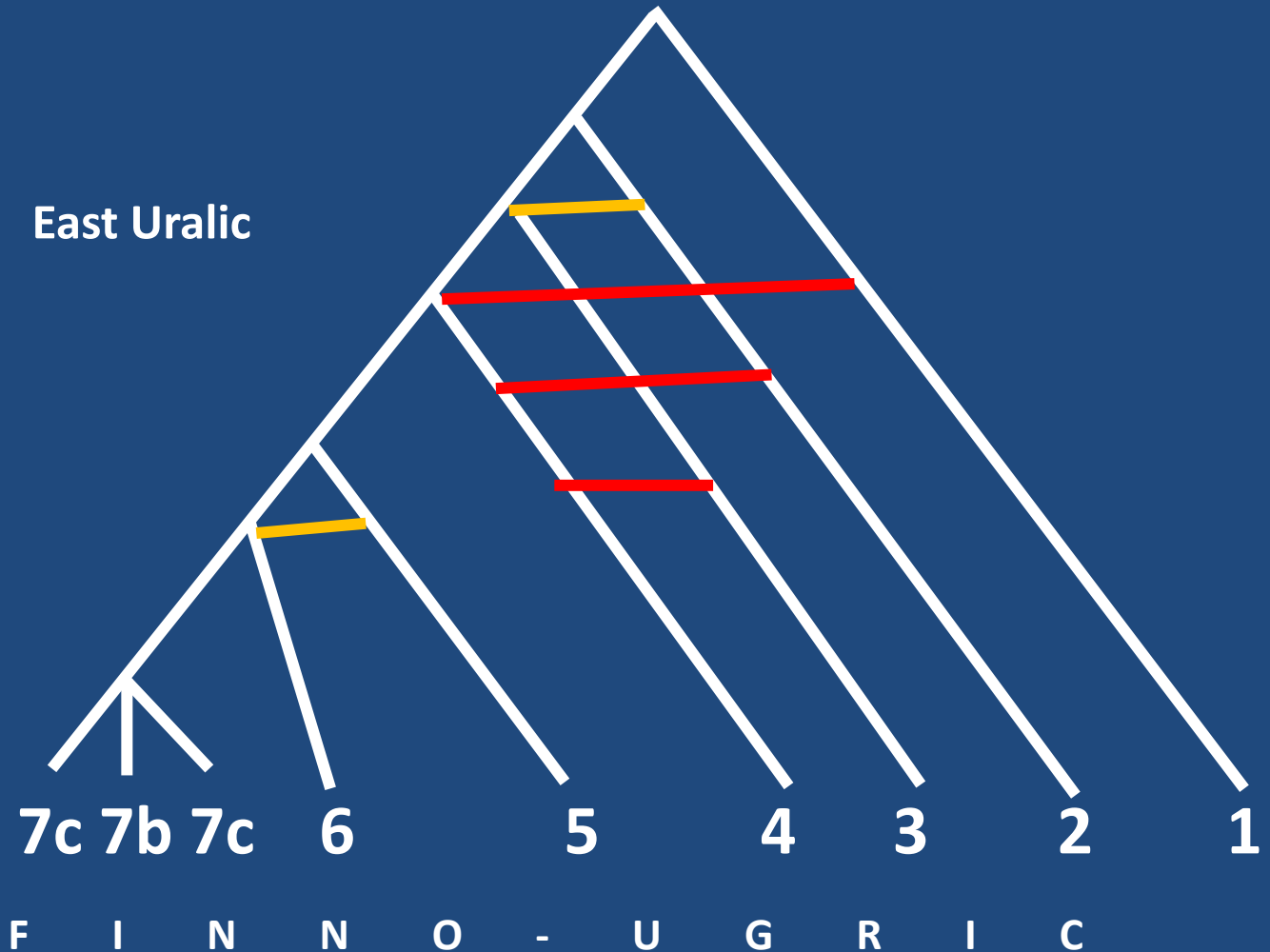
|     |              |              |              |
|-----|--------------|--------------|--------------|
| FIN | <i>tuli</i>  | <i>tuuli</i> | <i>sulka</i> |
| SAA | <i>dolla</i> | -            | <i>dolgi</i> |
| MOR | <i>tol</i>   | -            | <i>tolga</i> |
| MAR | <i>tŭl</i>   | <i>tul</i>   | -            |
| PER | <i>tīl</i>   | <i>tēl</i>   | <i>tīl</i>   |
| KHA | -            | -            | <i>tŭgəl</i> |
| MAN | -            | -            | <i>towəl</i> |
| HUN | -            | -            | <i>toll</i>  |
| SAM | *tuy         | *tuəy        | -            |

# Taxonomy

- **Family tree model**
  - gradual series of binary splits
- **Bush model**
  - secondary inter-branch links
- **Comb/rake model**
  - rapid linear expansion
- **Big bang model**
  - rapid radial diversification

# Uralic family tree

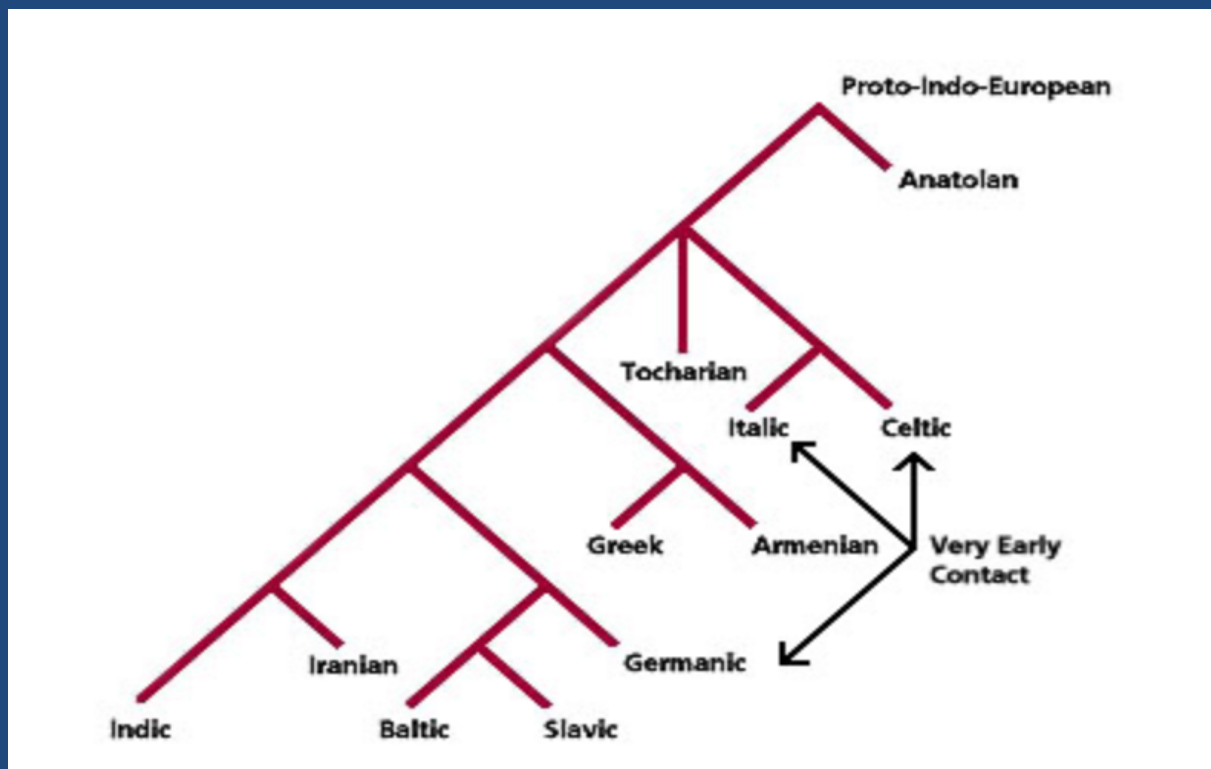
- 1 Samoyedic
- 2 Hungarian
- 3 Mansi
- 4 Khanty
- 5 Permic
- 6 Mari
- 7 West Uralic
  - a Mordva
  - b Saami
  - c Finnic



# Areal bonds

- East Uralic
  - Sibilant system: \*ç > [s] vs. \*s > [θ] > [t]
- Ugric
  - Lexical parallels: numerals, steppe culture
- Ob-Ugric
  - Typological convergence, pronouns
  - Some shared phonological innovations
  - Similarities increasing towards the north

# Cf. Indo-Hittite



A succession of binary divisions with subsequent Secondary contacts between some of the branches

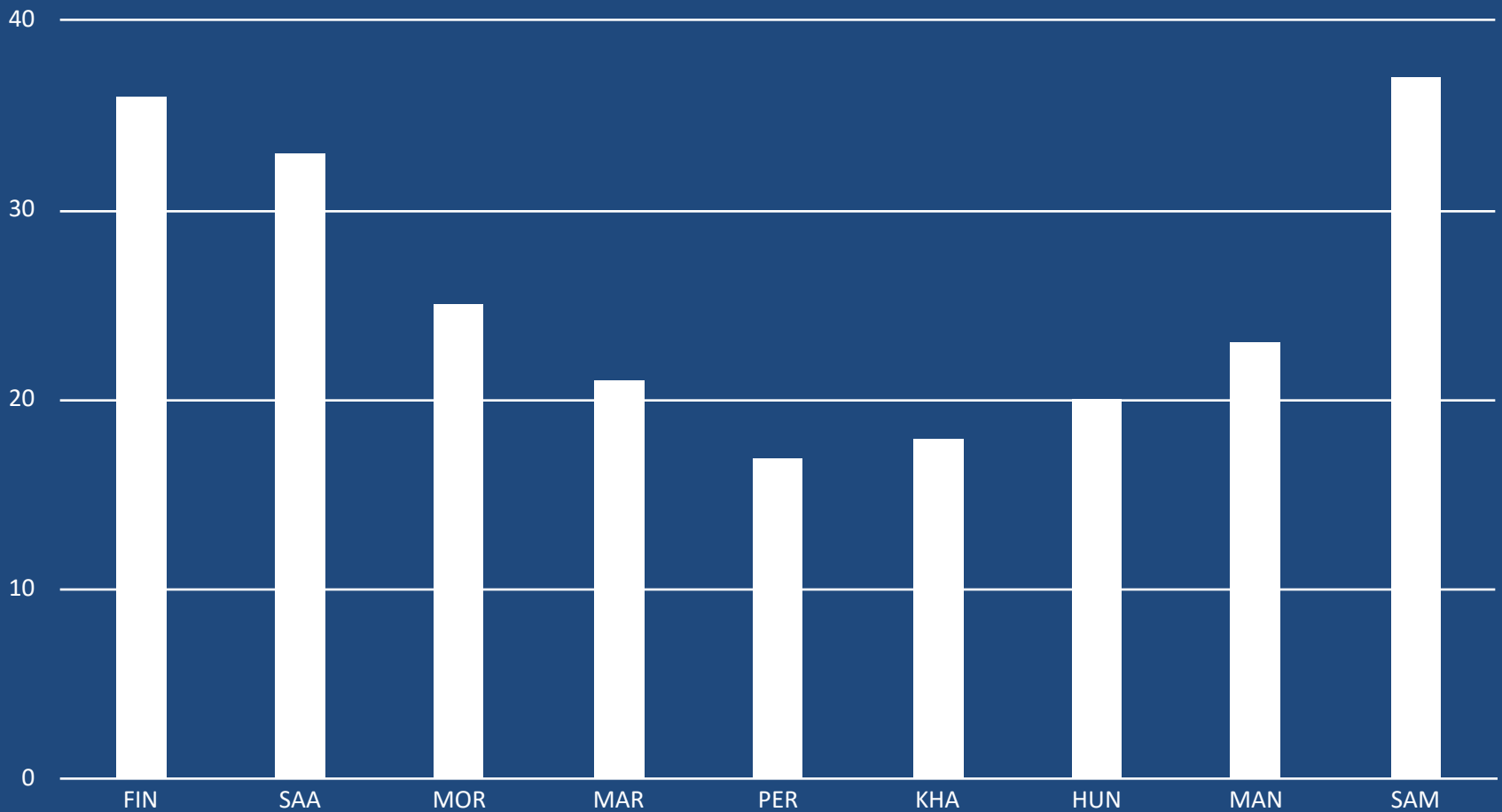
Donald Ringe

<https://www.sas.upenn.edu/sasalum/newsltr/summer96/branch.html>

# Centre vs. margins

- **Conservative features shared by the margins**
  - West Uralic vs. Samoyedic
  - Retention of grammatical morphemes
  - Including morphophonology
- **Rapid loss of material in the center**
  - Mari and Permic: massive restructuring
  - Hungarian: loss and rise of morphology

# Shared bound morphemes



# Areal correlations

|     | SAM | MAN | HUN | KHA | PER | MAR | MOR | SAA | FIN |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| SAM |     | 23  | 20  | 18  | 17  | 20  | 24  | 32  | 34  |
| MAN | 23  |     | 17  | 18  | 14  | 17  | 19  | 21  | 20  |
| HUN | 20  | 17  |     | 14  | 14  | 15  | 16  | 19  | 18  |
| KHA | 18  | 18  | 14  |     | 12  | 12  | 14  | 16  | 15  |
| PER | 17  | 14  | 14  | 12  |     | 14  | 15  | 14  | 14  |
| MAR | 20  | 17  | 15  | 12  | 14  |     | 21  | 21  | 21  |
| MOR | 24  | 19  | 16  | 14  | 15  | 21  |     | 25  | 25  |
| SAA | 32  | 21  | 19  | 16  | 14  | 21  | 25  |     | 32  |
| FIN | 34  | 20  | 18  | 15  | 14  | 21  | 25  | 32  |     |

# The case for Finno-Ugric

Absent in Samoyedic:

- numerals: 3-4, 6
- basic vocabulary: 'hand', 'head', etc.
- derivatives:
  - \*ño(x)ma-la 'rabbit' vs. Sam \*ñåmå
  - \*tu(x)l-ka 'feather' vs. Sam \*tuəy
  - \*kil-kə 'side' vs. Sam \*kil > \*kəy
  - ...

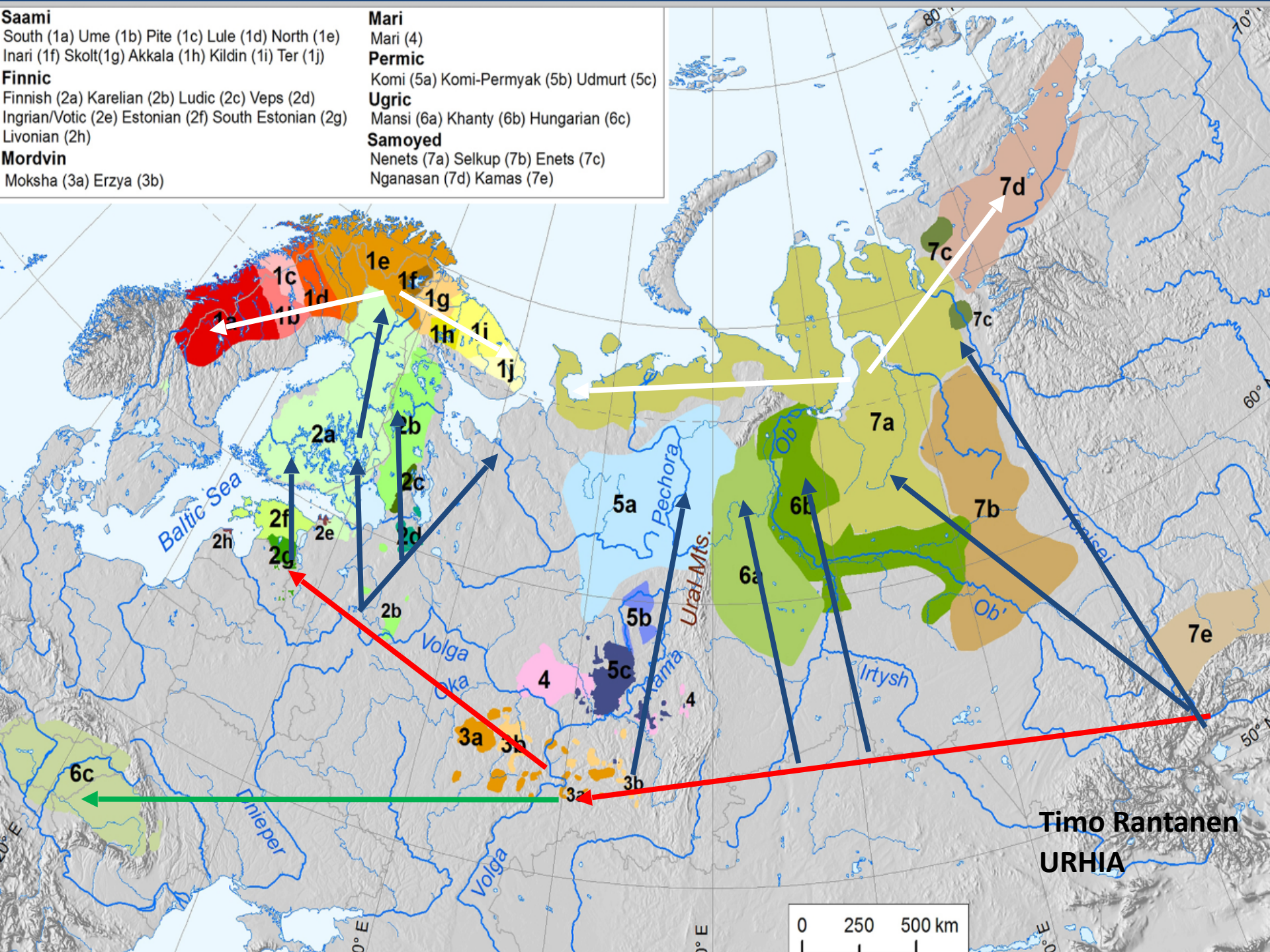
# Homeland and expansion

- a small limited eastern homeland
- earlier sources/spreads: Para-Uralic?
- expansion along the taiga/steppe border
- possibly extending to the steppe belt
- verified eastern limit: N Mongolia
- verified western limit: Livonia, C Scandinavia
- late parallel spreads to and in the arctic

# Stages of spread

- **Primary spread East to West**
- **Secondary spreads South to North**
  - Samoyedic Yenisei-Ob
  - Mansi / Khanty Ob-Ural
  - Permic Pechora
  - Saami / Finnic Karelia-Finland
- **Tertiary latitudinal spread**
  - Saami Lapland
  - Samoyedic Taimyr to Kanin
- **Quaternary dislocation**
  - Hungarian Carpathia

- Saami**  
 South (1a) Ume (1b) Pite (1c) Lule (1d) North (1e)  
 Inari (1f) Skolt (1g) Akkala (1h) Kildin (1i) Ter (1j)
- Finnic**  
 Finnish (2a) Karelian (2b) Ludic (2c) Veps (2d)  
 Ingrian/Votic (2e) Estonian (2f) South Estonian (2g)  
 Livonian (2h)
- Mordvin**  
 Moksha (3a) Erzya (3b)
- Mari**  
 Mari (4)
- Permic**  
 Komi (5a) Komi-Permyak (5b) Udmurt (5c)
- Ugric**  
 Mansi (6a) Khanty (6b) Hungarian (6c)
- Samoyed**  
 Nenets (7a) Selkup (7b) Enets (7c)  
 Nganasan (7d) Kamas (7e)

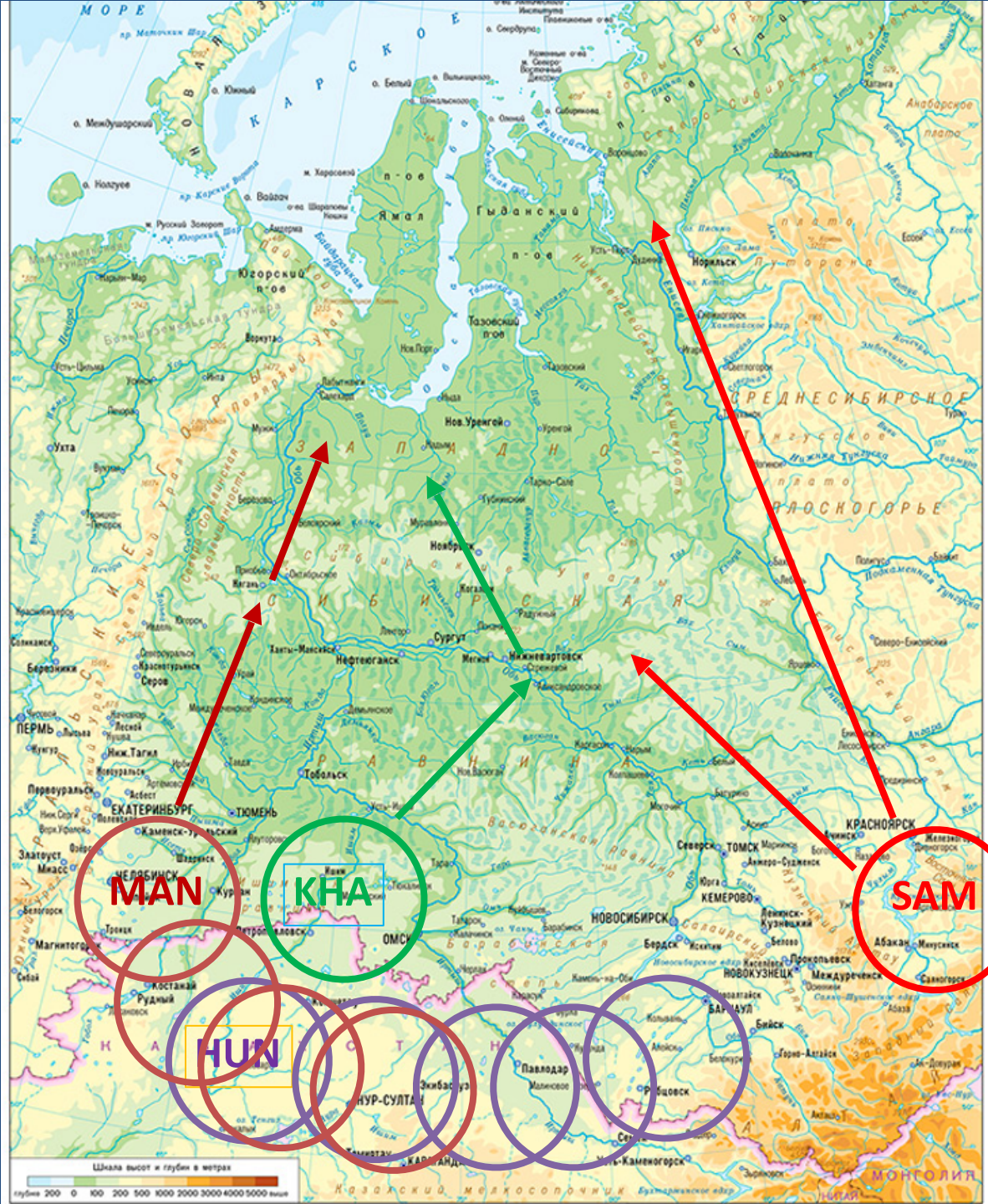


# Western Siberia

## The Ob-Yenisei Interfluve

S/N c. 2000 km

The “Ugric”  
branches may  
have changed  
positions in the  
S/N and E/W  
directions



Б. О. Долгих (1960)

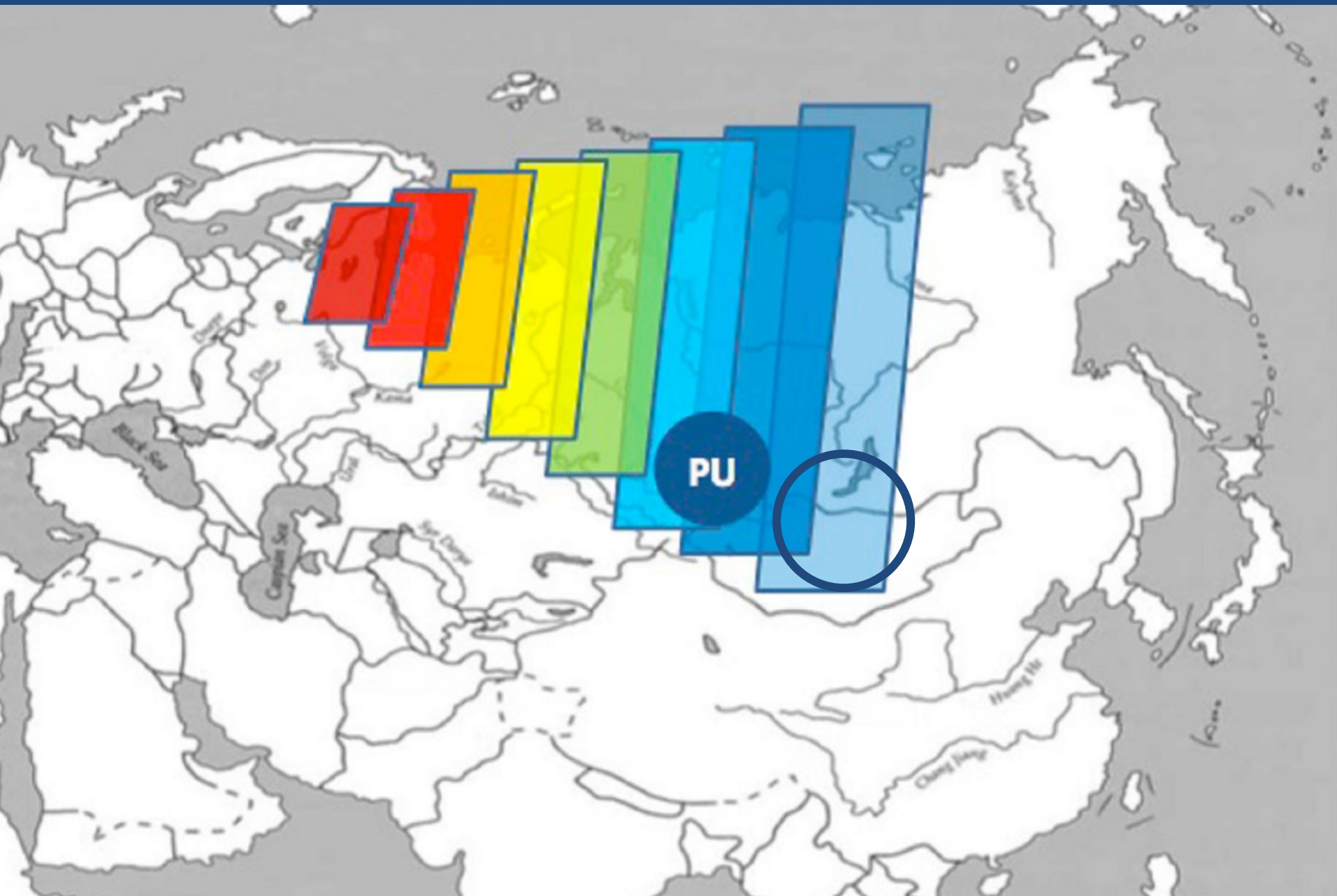
с. 1700 AZ

Succession of  
expansions:

Samoyedic  
Yeniseic  
Khanty  
Mansi  
Turkic  
Tungusic



# Para-Uralic



# Time levels of divergence

## Depth of language families:

- Pre-Neolithic –6000 BP
- Neolithic 6000–4000 BP
- Bronze Age 4000–2500 BP
- Iron Age 2500–1500 BP
- Mediaeval 1500– 500 BP
- Colonial 500– BP

# Inner EurAsia: “Ural-Altaic”

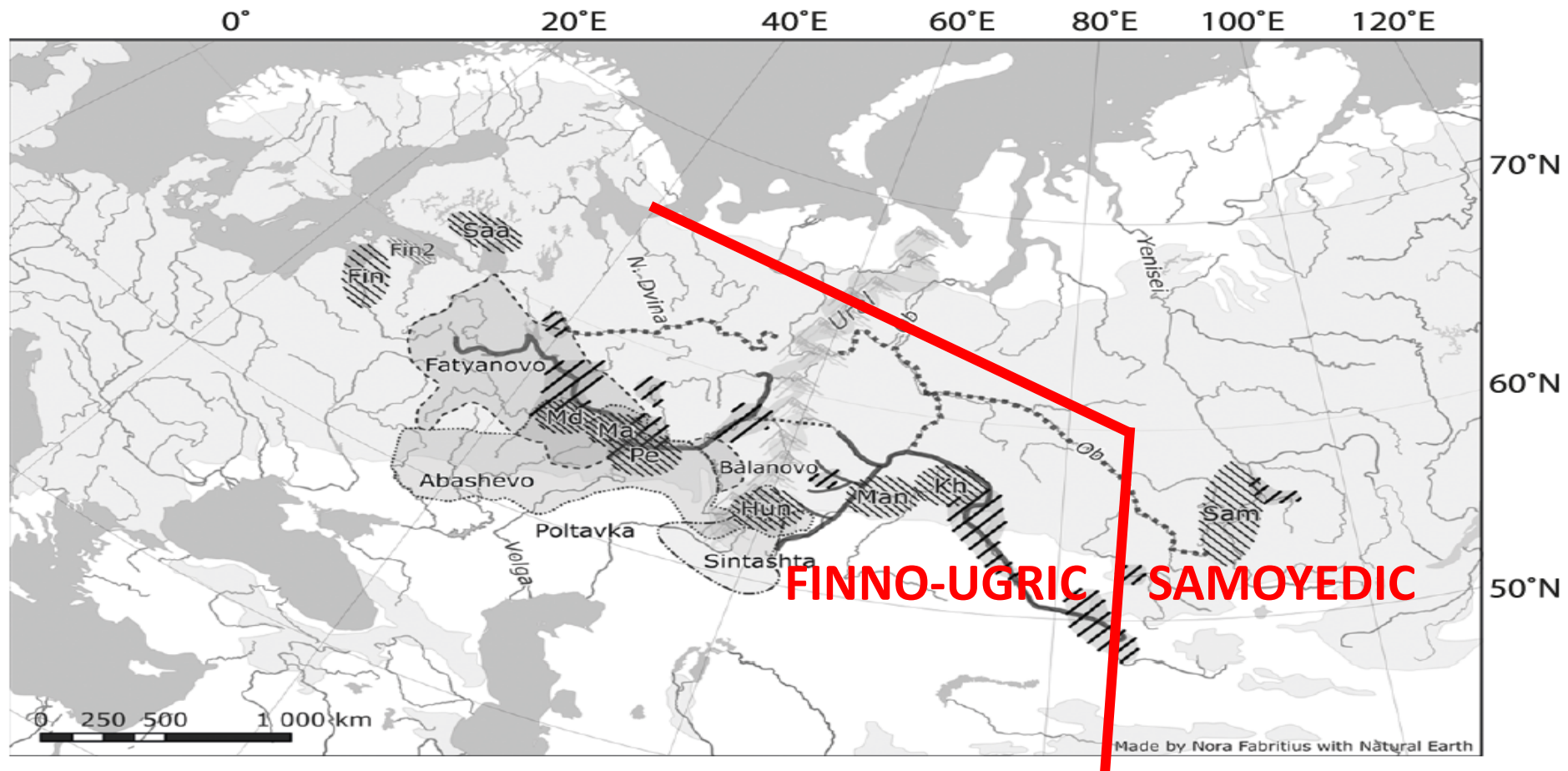
|            | <i>n</i> |                                     |
|------------|----------|-------------------------------------|
| • Uralic   | 40       | } URAL-ALTAIC<br>typological sphere |
| • Turkic   | 30       |                                     |
| • Mongolic | 20       |                                     |
| • Tungusic | 15       |                                     |
| • Koreanic | 2        |                                     |
| • Japonic  | 7        |                                     |

Juha Janhunen (2007). Typological expansion in the Ural-Altaic belt. *Incontri Linguistici* 30: 71–83.

# Some chronologies

|                  | ky |                |
|------------------|----|----------------|
| • Koreanic       | 1  | Mediaeval      |
| • Japonic        | 2  | Iron Age       |
| • Tungusic       | 2  | Iron Age       |
| • Macro-Mongolic | 2+ | Iron Age       |
| • Macro-Turkic   | 2+ | Iron Age       |
| • Indo-Hittite   | 5+ | Neolithic      |
| • Uralic         | 6± | Pre-Neolithic? |

# Uralic 6± ky BP



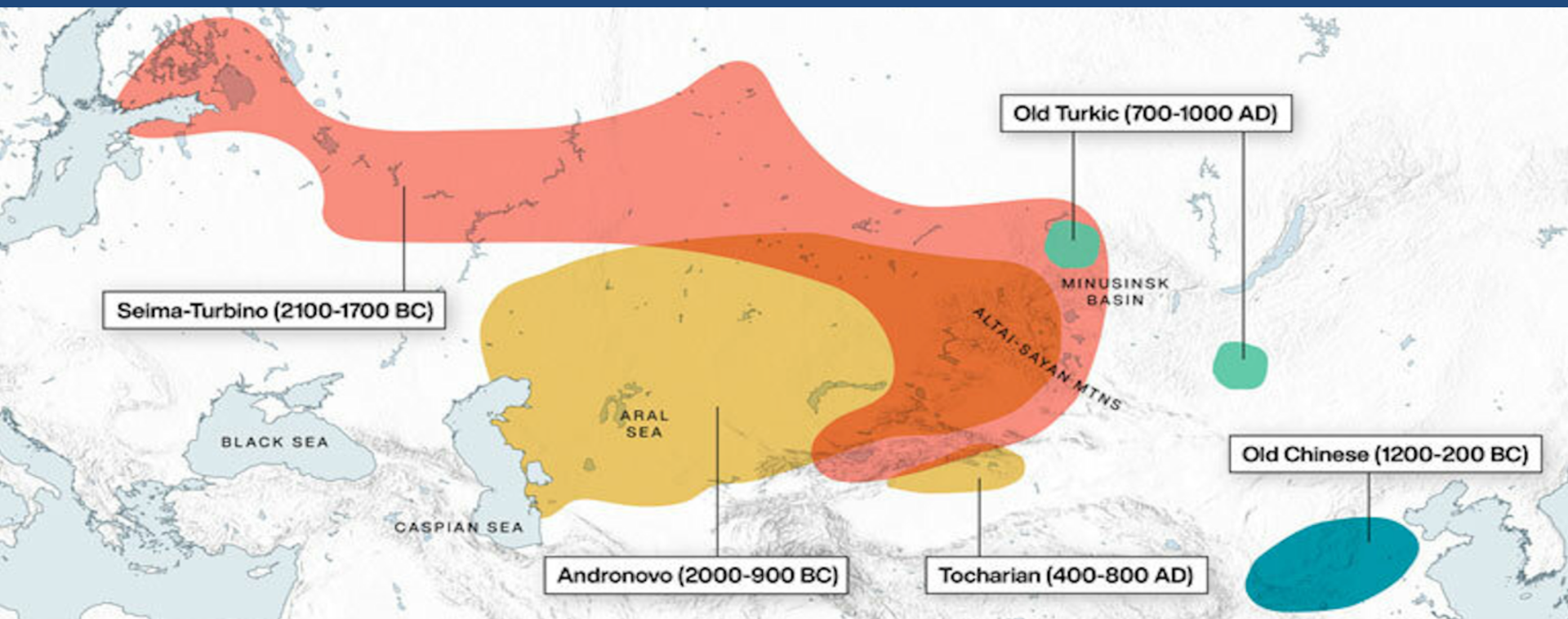
Riho Grünthal & al. (2022). Drastic demographic events triggered the Uralic spread.  
*Diachronica*. doi.org/10.1075/dia.20038.gru

# Why did Uralic spread?

- Right location at the right time - yes
- Part of a general trend in Eurasia – yes
- Demographic potential? – possibly
- Political or military strength? – unlikely
- Social prestige – unlikely
- Cultural edge? – trade, agriculture?

# The Seima-Turbino Phenomenon

- too little too late to explain the initial split of Proto-Uralic
- but too early to explain the spread of Uralic to the Baltic region
- no lexical evidence apart from \*wäçkä 'metal'



# Types of spread

- **Genealogical spread**
  - expanding language families
  - involves migration and diffusion
  - but also assimilation and absorption
  - replaces earlier languages
- **Typological spread**
  - takes place by areal interaction
  - can replace earlier typologies
  - but some earlier features can resist

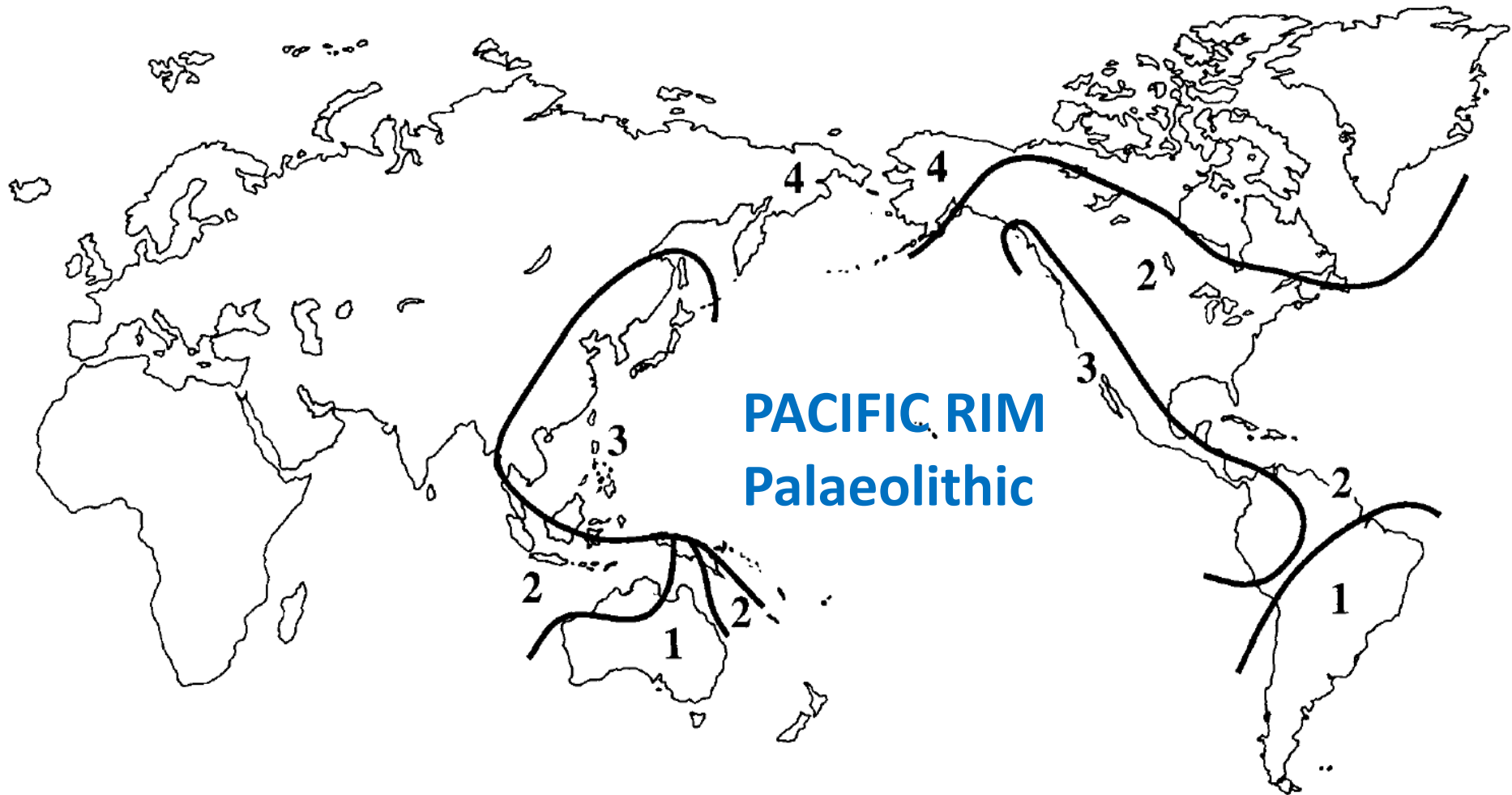


Figure 7. Four strata in Pacific colonization. (Placement of lines is highly schematic.) 1. Frontier languages, descendants of the first colonizers; spread originated in Southeast Asia and reached Australasia during glaciation. 2. Second stratum; centered in Southeast Asia; spread to Australasia during glaciation. 3. Third stratum, still chiefly coastal; late glacial or post glacial. 4. Fourth stratum, probably centered in Siberia; postglacial.

**Johanna Nichols (1994). The spread of language around the Pacific Rim. *Evolutionary Anthropology* 3 (6): 206–215.**

**Pacific Rim  
Neolithic**

**DIVERSE  
SIBERIAN**

**ALTAIC**

**SINITIC**

**DIVERSE  
SOUTHERN**

**PHYSICAL MAP  
OF  
EURASIA**

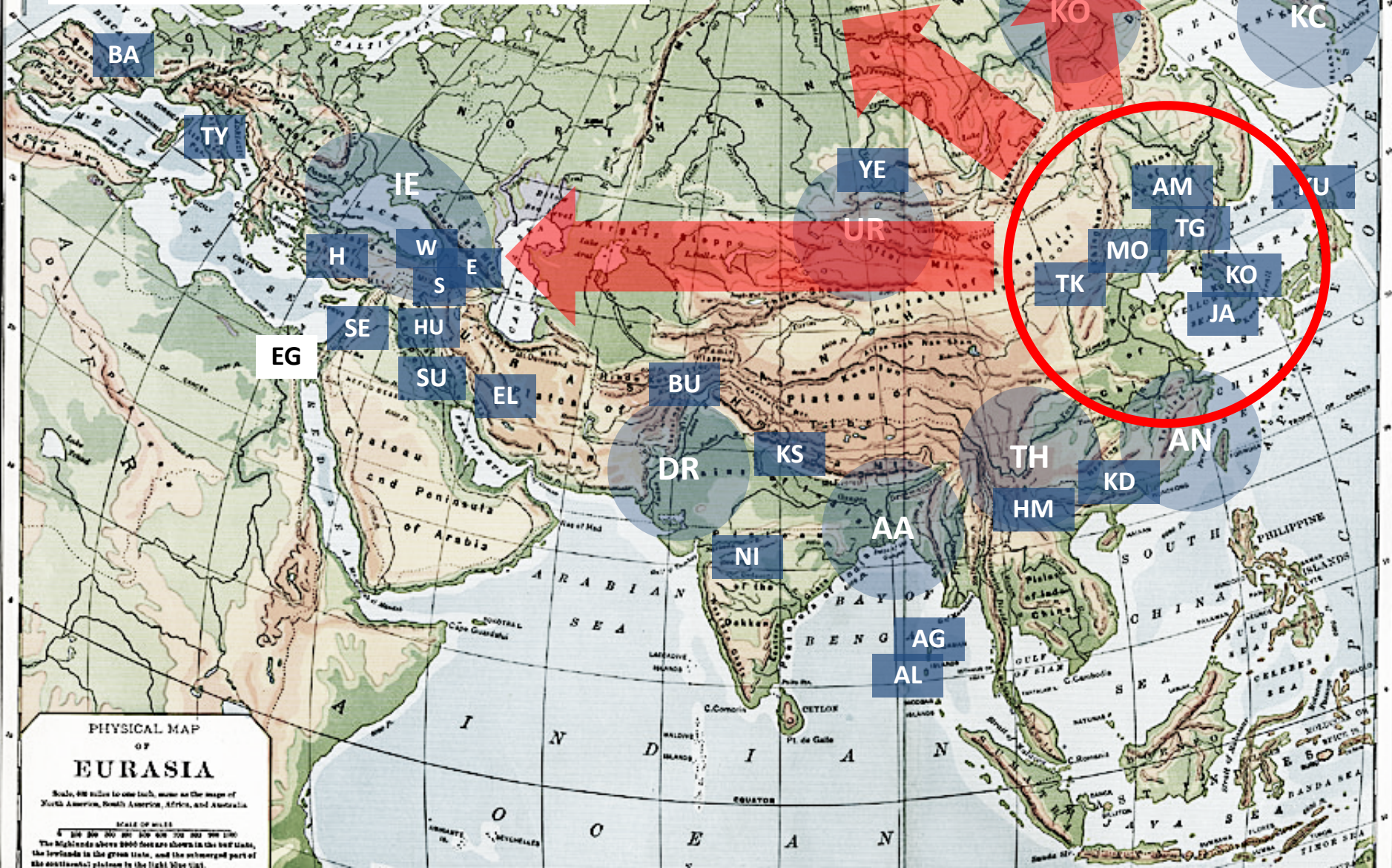
Scale, 400 miles to one inch, same as the maps of  
North America, South America, Africa, and Australia.

SCALE OF MILES

0 100 200 300 400 500 600 700 800 900 1000  
The highlands above 5000 feet are shown in the best state,  
the lowlands in the green state, and the submerged part of  
the continental platform in the light blue state.

# ALTAIC TYPOLOGY

## Iron Age Manchuria



# Tungusic

7 Ewenki

8 Orochen

9 Solon

10 Neghidal

11 Ewen

12 Oroch

13 Udihe

14 Nanai

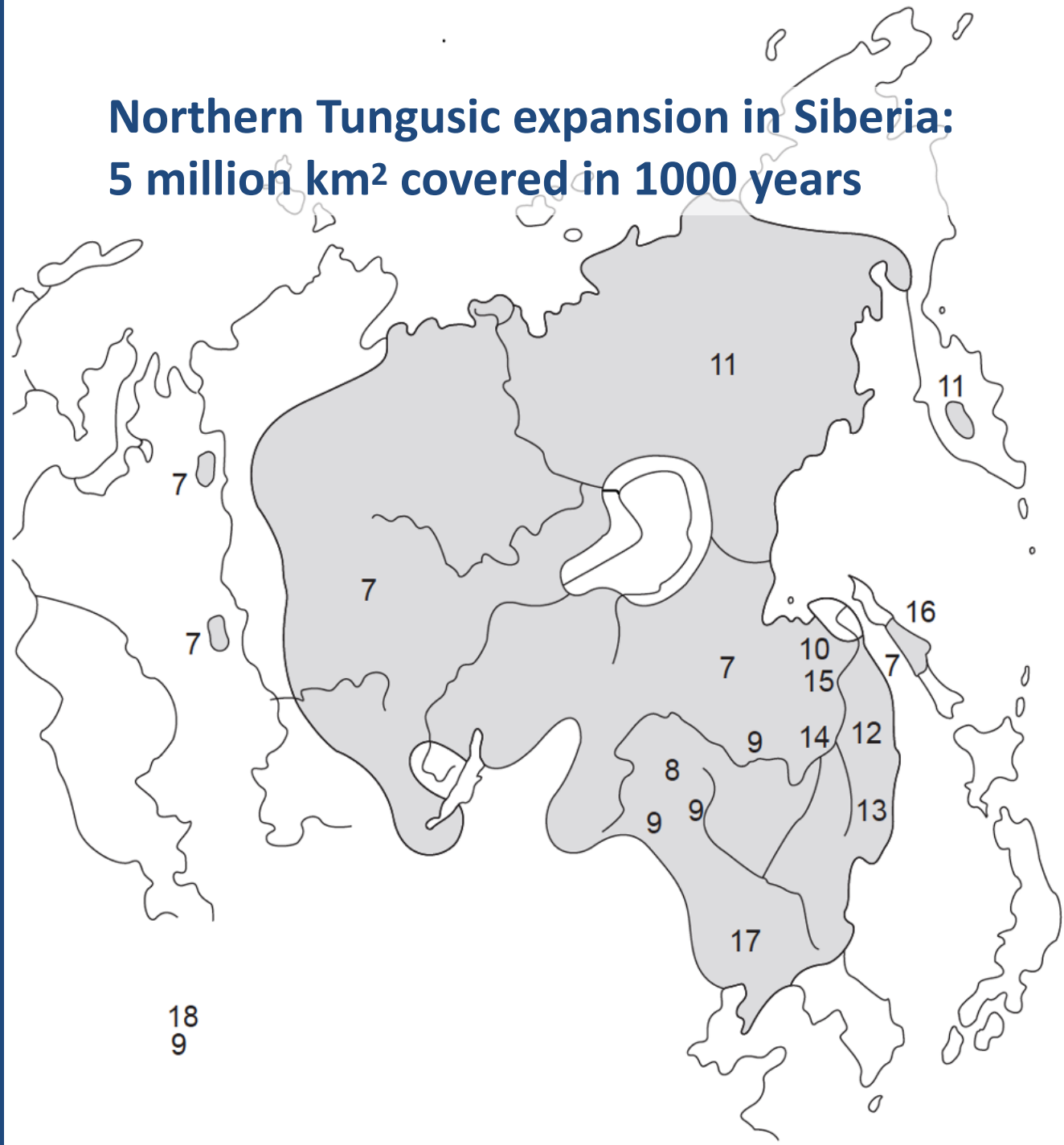
15 Ulcha

16 Uilta

17 Manchu

18 Sibe

Northern Tungusic expansion in Siberia:  
5 million km<sup>2</sup> covered in 1000 years



# Trans-Eurasian (proper)

## ALTAIC LANGUAGES

### AMo Mongolic languages

|      |                   |
|------|-------------------|
| AMo1 | Mongolian / Ordos |
| AMo2 | Oirat / Kalmyk    |
| AMo3 | Buryat            |
| AMo4 | Dagur             |
| AMo5 | Monguor-Santa     |
| AMo6 | Shira Yugur       |
| AMo7 | Moghol            |

AK Korean

AJ Japonic languages

agglutinating languages,  
so the language family  
is in dispute

### ATu Tungusic languages

|      |                                |
|------|--------------------------------|
| ATu1 | Northern Tungusic (Tungus)     |
| ATu2 | Southeastern Tungusic (Amur)   |
| ATu3 | Southwestern Tungusic (Manchu) |

|      |            |
|------|------------|
| AT1  | Qashqai    |
| AT2  | Salar      |
| AT3  | Yugur      |
| AT4  | Khalaj     |
| AT5  | Khakas     |
| AT6  | Tuvan      |
| AT7  | Shor       |
| AT8  | Altay      |
| AT9  | Tofa       |
| AT10 | Karakalpak |
| AT11 | Kazakh     |
| AT12 | Turkish    |

### AT Turkic languages

|      |                  |
|------|------------------|
| AT13 | Chuvash          |
| AT14 | Karaim           |
| AT15 | Turkmen          |
| AT16 | Azerbaijani      |
| AT17 | Tatar            |
| AT18 | Crimean Tatar    |
| AT19 | Bashkir          |
| AT20 | Uzbek            |
| AT21 | Kyrgyz           |
| AT22 | Gagauz           |
| AT23 | Afshar           |
| AT24 | Khorasani Turkic |
| AT25 | Uyghur           |
| AT26 | Nogai            |
| AT27 | Karachay-Balkar  |
| AT28 | Kumyk            |
| AT29 | Trukhmen         |
| AT30 | Dolgan           |
| AT31 | Sakha            |

From a geographical point of view the  
Turkic languages AT26 - AT29 are also  
belonging to the group of the otherwise  
isolated Caucasian languages.

## URALIC LANGUAGES

### UF Finno-Ugric

|     |                  |
|-----|------------------|
| UF1 | Baltic Finnic    |
| UF2 | Sami languages   |
| UF3 | Permic languages |
| UF4 | Volga-Finnic     |
| UF5 | Hungarian        |
| UF6 | Ob-Ugric         |

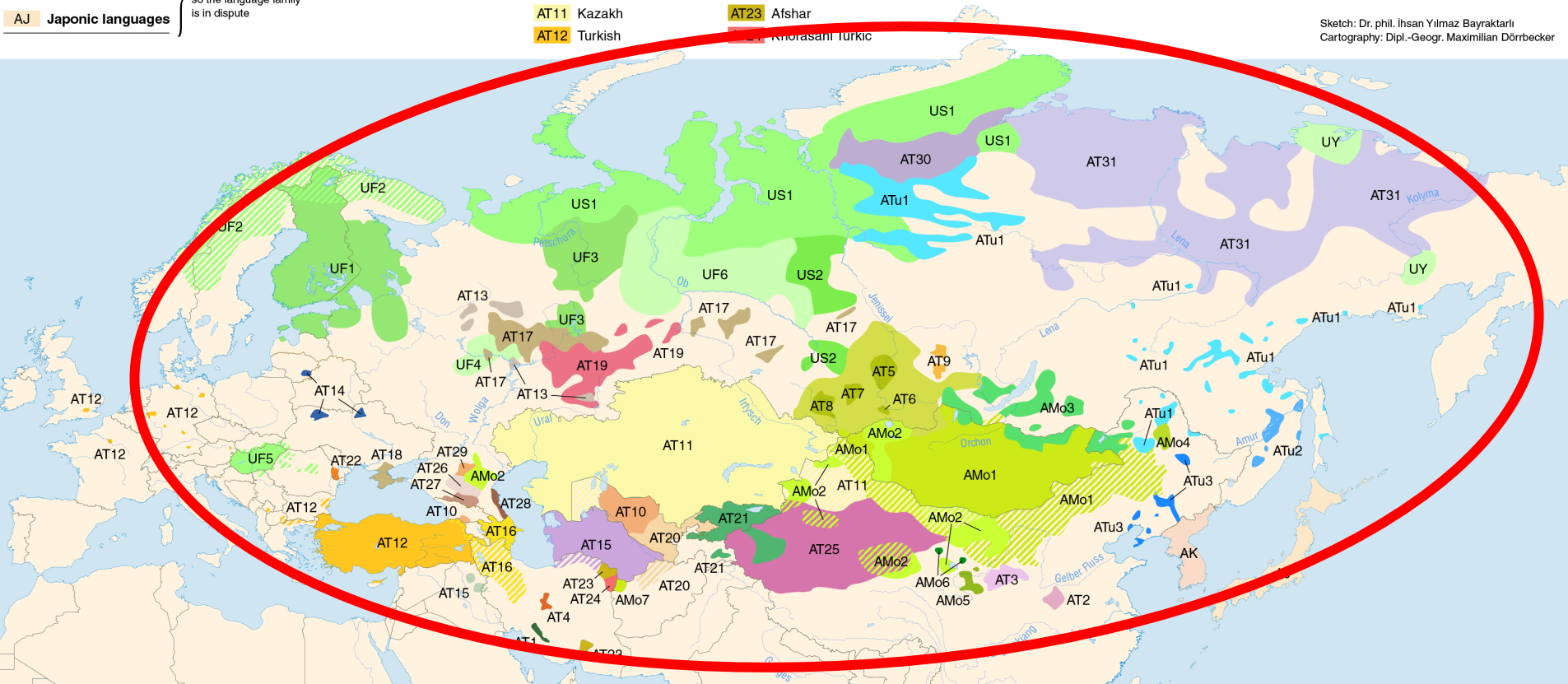
### US Samoyedic

|     |                |
|-----|----------------|
| US1 | Northern group |
| US2 | Southern group |

UY Yukaghir

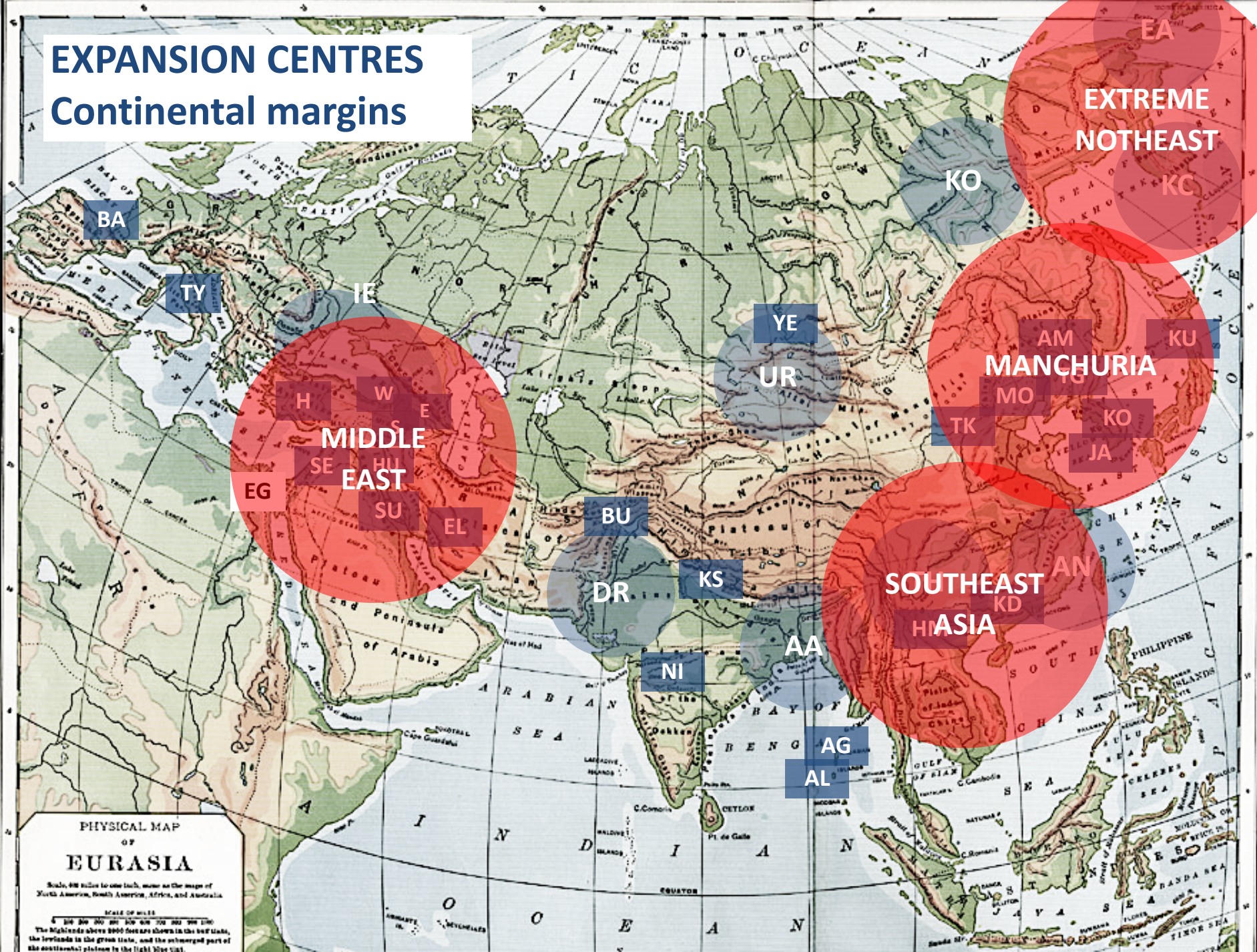
The affiliation to the Uralic  
languages is in dispute.

Sketch: Dr. phil. İhsan Yılmaz Bayraktarlı  
Cartography: Dipl.-Geogr. Maximilian Dörrbecker



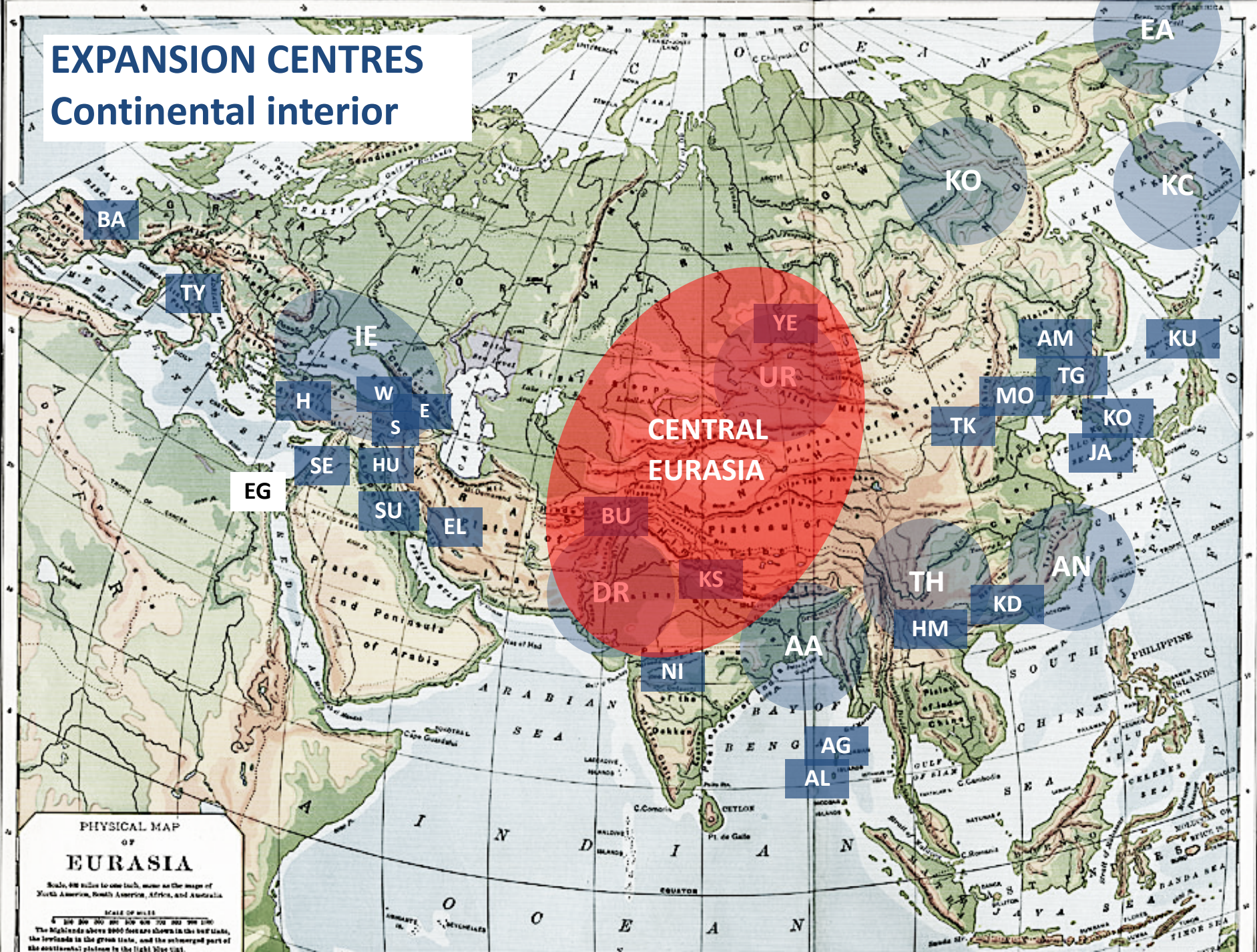
# EXPANSION CENTRES

## Continental margins



# EXPANSION CENTRES

## Continental interior



**Pacific Rim  
Where was  
Uralic?**

**DIVERSE  
SIBERIAN**

**URA  
LIC**

**ALTAIC**

**SINITIC**

**DIVERSE  
SOUTHERN**

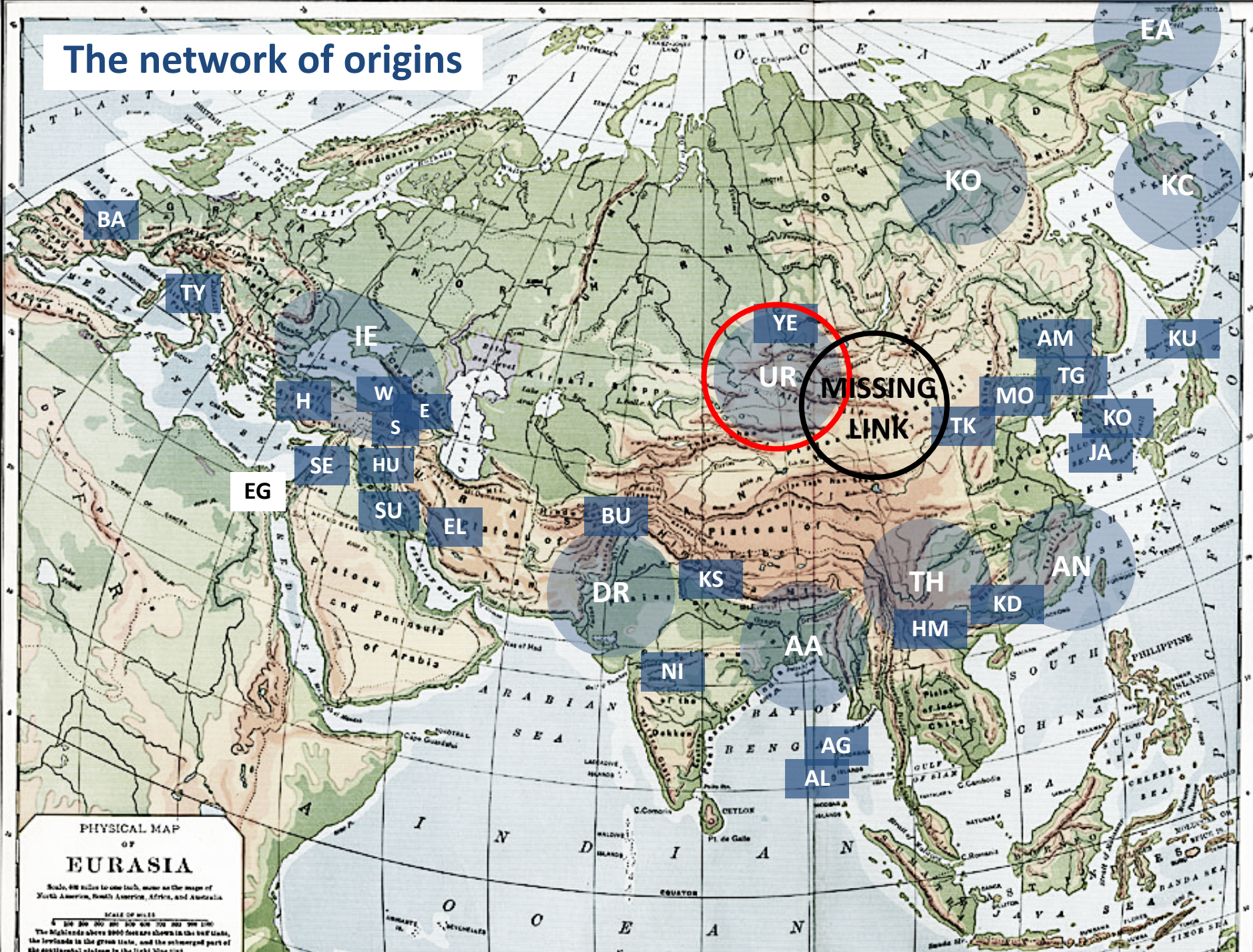
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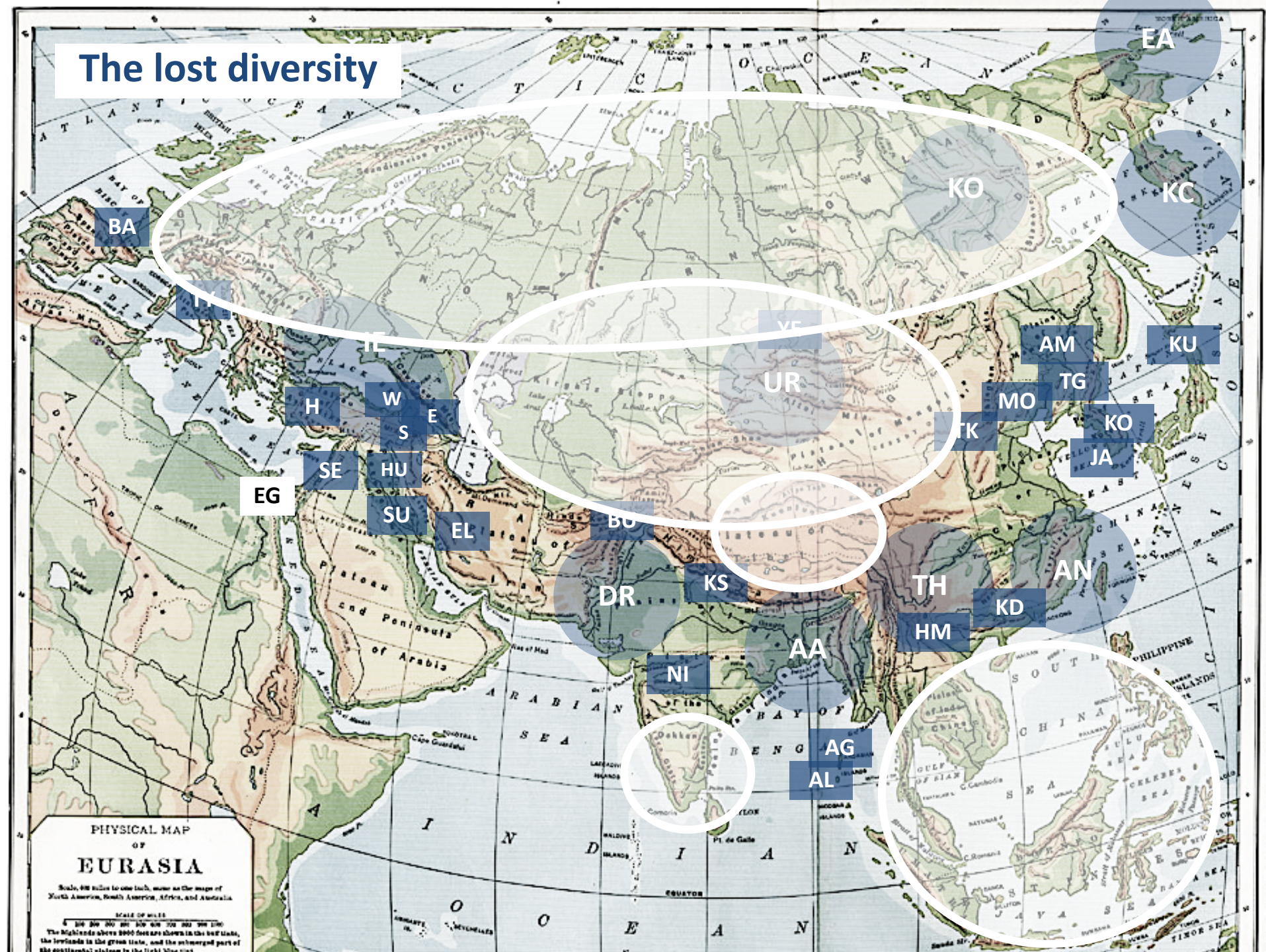
SCALE OF MILES

0 100 200 300 400 500 600 700 800 900 1000  
The highlands above 9800 feet are shown in the best state,  
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# The network of origins



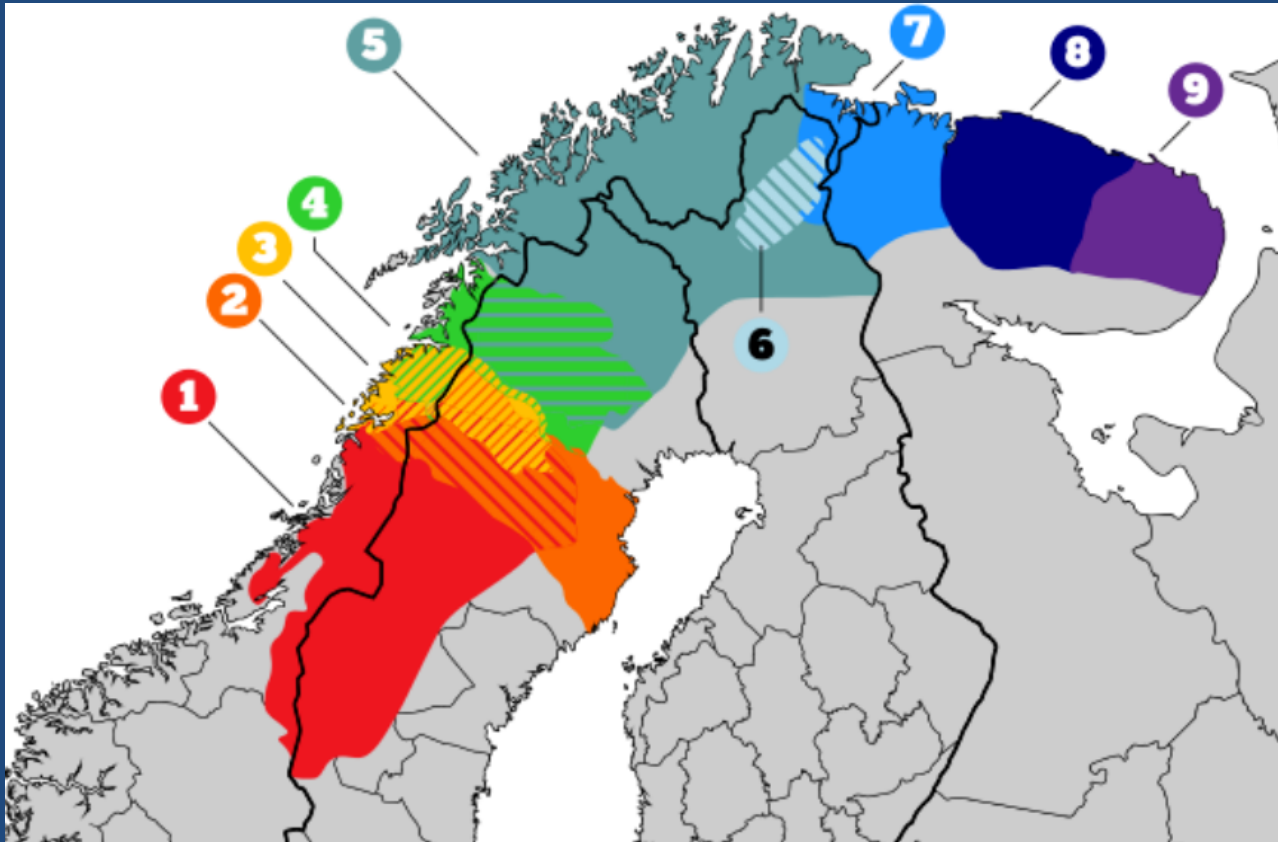
# The lost diversity



# Counting the losses

- **Basic fact: the number of languages has been constantly diminishing since the Palaeolithic**
- **Minimal assumption: Behind each modern language there is at least one lost language**
- **Assuming that the Uralic homeland was small and located in the east, all the modern Uralic languages cover one or more pre-Uralic languages absorbed into the Uralic sphere**

# Example: the Saami languages



In the period 500 to 1500 BP the modern 9 to 10 Saami languages have covered an analogous number of subsequently lost Pre-Saami languages that were until relatively recently spoken in northern Fennoscandia.

**Thank you!**