



ФЕДЕРАЛЬНОЕ АГЕНТСТВО НАУЧНЫХ ОРГАНИЗАЦИЙ РОССИИ
**ИНСТИТУТ
ЯЗЫКОЗНАНИЯ**
РОССИЙСКОЙ АКАДЕМИИ НАУК



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SOCIÉTÉ FINNO-UGRIENNE 

The rise of linguistic diversity at the Lower Yenisei (Siberia)

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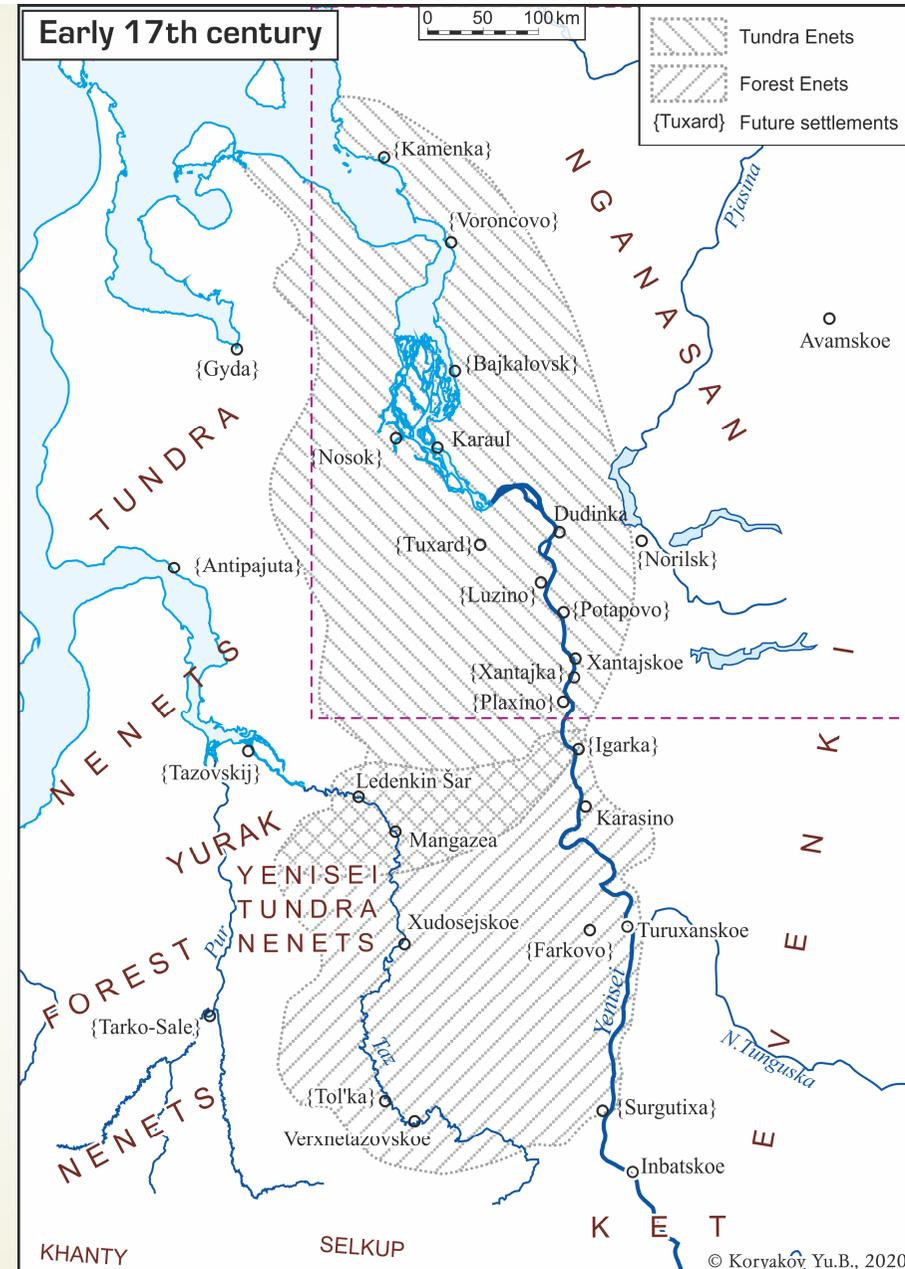
(in collaboration with Valentin Gusev & Yuri Koryakov, Institute of Linguistics RAS)





Languages spoken at the Lower Yenisei

- ▶ Northern Samoyedic (< Samoyedic < Uralic):
 - ▶ Tundra Nenets (and its dialects)
 - ▶ Forest Nenets
 - ▶ Tundra Enets
 - ▶ Forest Enets
 - ▶ Nganasan
 - ▶ † Yurak (Yurats)
 - ▶ With an exception of Tundra Nenets with thousands of speakers, all have always been spoken by hundreds of people at the most.
- ▶ Neighbors:
 - ▶ South: Selkup (Southern Samoyedic)
 - ▶ South: Ket (Yeniseian)
 - ▶ East: Evenki (Tungusic)
 - ▶ East: Dolgan (Turkic), in the 19th cent.
- ▶ 1000-1500 years ago: non-Uralic languages





Research questions

- ▶ How did this linguistic diversity arise?
- ▶ How did the Northern Samoyedic languages diversified and spread?
 - ▶ Where was the Proto-Samoyedic homeland?
 - ▶ What are the estimated dates of the protolanguage break off?
 - ▶ Why did Northern Samoyedic speakers leave the PS homeland?
 - ▶ How did they leave it?
 - ▶ Whom did they meet in their migrations? What kind of contacts were it?
 - ▶ Did they keep the contacts with their original group? With others who migrated in a different direction? How did they do it?
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Northern Samoyedic: overall geography





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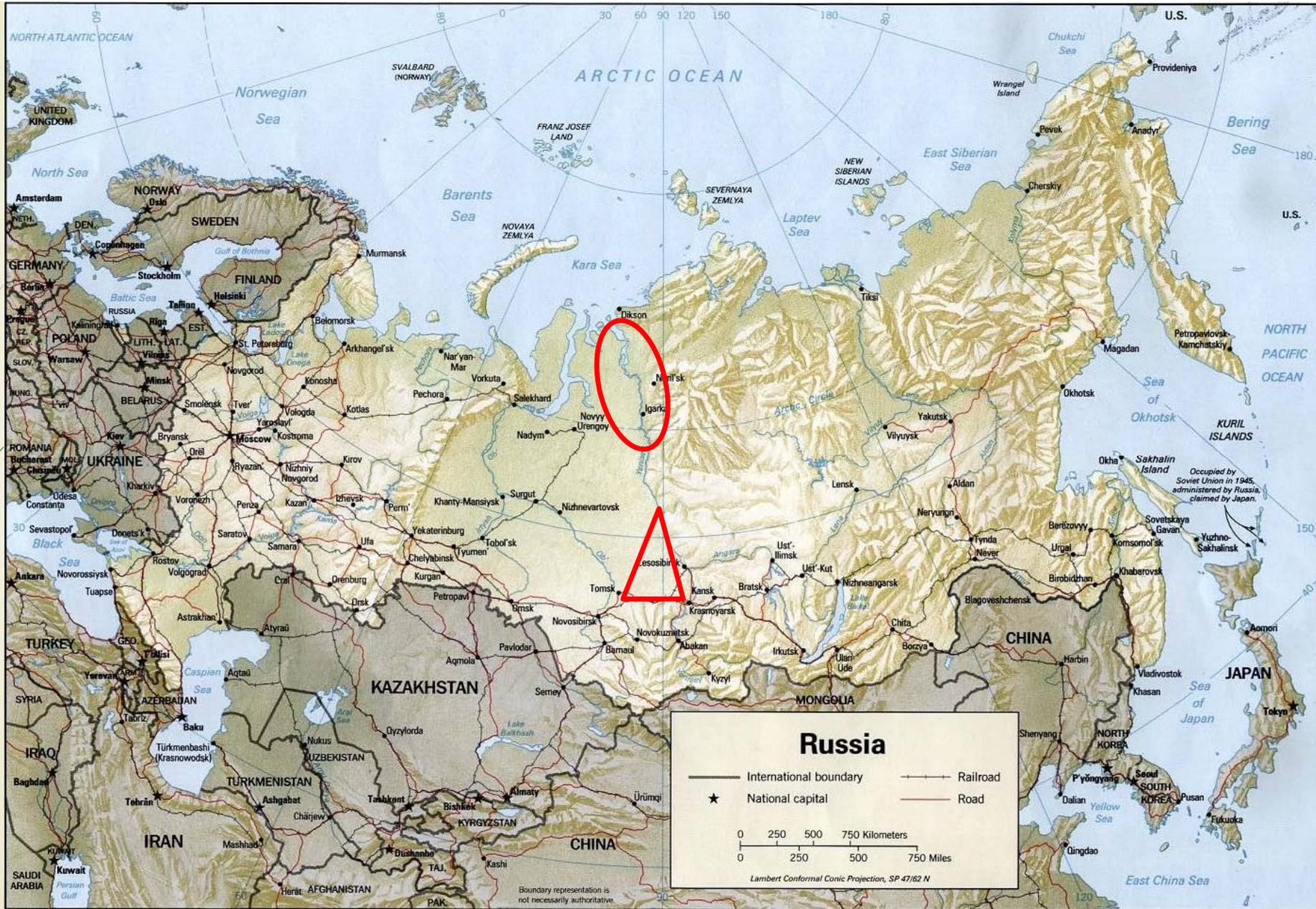
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Proto-Samoyedic background

- ▶ Where was the Proto-Samoyedic homeland?
 - ▶ (Helimski 1989/2000)
 - ▶ Reconstructed lexicon for flora and fauna; toponymics
 - ▶ External linguistic events: borrowings to protolanguage vs. to one of the branches only
 - ▶ Center of gravity, the highest phylogenetic divergence







Proto-Samoyedic background

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- ▶ What are the estimated dates of the protolanguage break off?
 - ▶ (Hajdu 1975; Korhonen & Kulonen 1991; Janhunen 1998, Helimski 1989/2000)
 - ▶ External linguistic events: borrowings to protolanguage vs. to one of the branches only
 - ▶ Archeological evidence: South Siberian ceramics at western Tajmyr 100-500 AD
 - ▶ 1500-2000 years ago, or 0-500 AD



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Why did they go the hostile north?

- ▶ A question that cannot be answered by linguistics.
- ▶ 2000 years ago transport reindeer herding emerged in the north of western/central Siberia.
 - ▶ Already Helimski (1989/2000) hypothesized an external reason for this abrupt split (e.g. emergence of reindeer herding),
 - ▶ Recent archeological findings (Fedorova 1998, 2002, 2019, Fedorova & Gusev 2019) could date the emergence of the reindeer herding.
 - ▶ The dates are the same!
 - ▶ A word of caution: 4 nouns for reindeer can be reconstructed for Proto-Samoyedic (Helimski 1989/2000), but archeologists interpret Yamal findings as signs of reindeer herding emergence at the Yamal peninsula or only slightly more to the south.
 - ▶ Clearly more communication archeology <-> linguistics is needed here...



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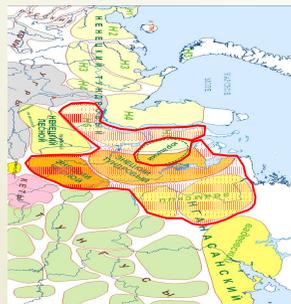


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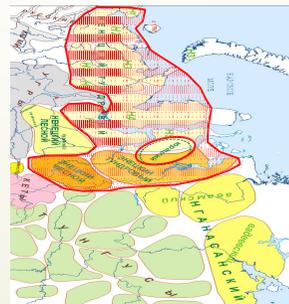
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How did NS speakers proceed to the north?

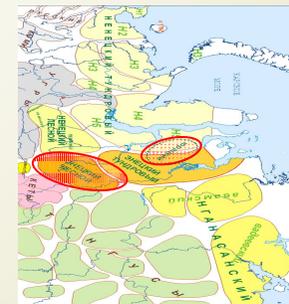
- ▶ Abruptly, slowly, or in several waves?
 - ▶ linguistic evidence, e.g. isolation by distance in vocabulary
 - ▶ has to be studied yet. 😞
- ▶ After the sudden break off from Proto-Samoyedic, Northern Samoyedic speakers remained in close contact with each other at least for 1000 years (Helimski 2000, 1982), with slow separation of the dialect continuum into distinct languages.
- ▶ On modern map of NS languages some isoglosses are broken (Gusev 2017), so there were sudden changes to the dialect continuum/chain



Сдвиги гласных d > ʒ между старшими
ненц (Таймырский полуостров), энц, энц, нган



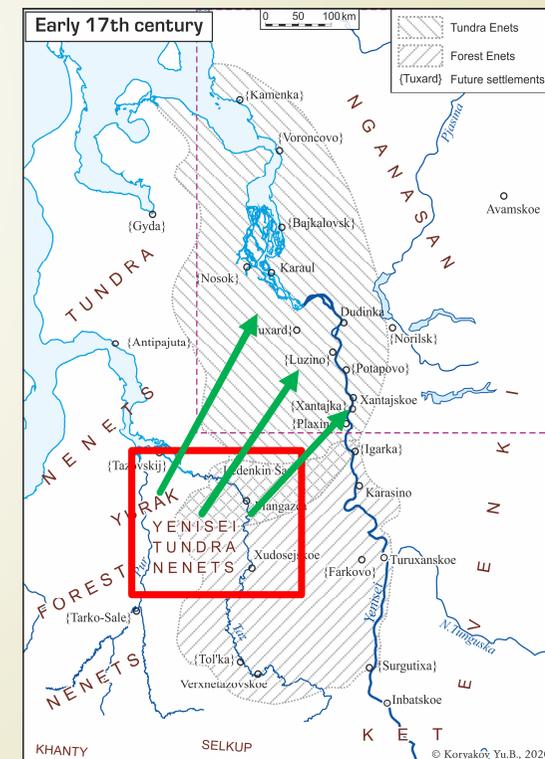
Переход N > e в языках
ненц, энц, энц



Переход Ns > Ts
ненц, энц

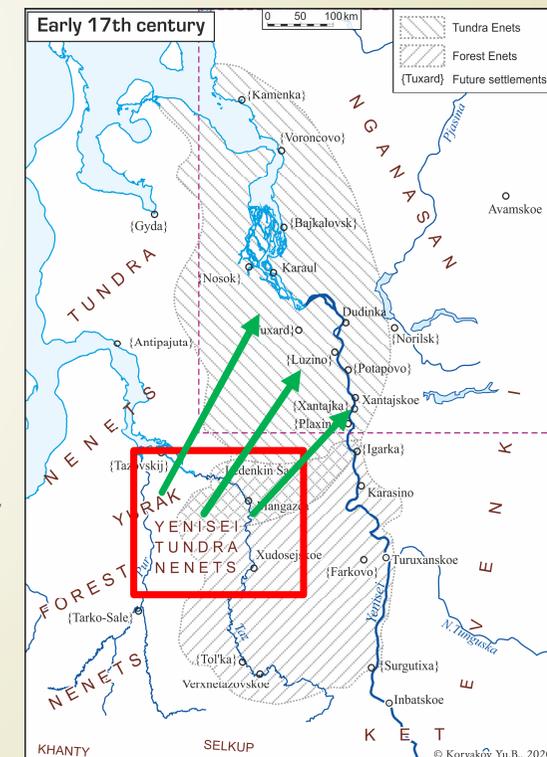
Changes in linguistic geography: 17th vs. 19th cent.

- ▶ 17th/18th cent: Tundra Nenets (Taz and Yenisei dialects), Forest Enets, Tundra Enets, Yurak yet remain in the Mangazeya area
 - ▶ Tribute records analyzed in (Dolgikh 1960): Forest Enets, Tundra Enets
 - ▶ Studies of isoglosses between NS languages point to different locations of Yenisei Tundra Nenets and Yurak than their most recent attestations, i.e. in direct contact with Forest Nenets (Gusev 2017, Khanina & Gusev, In prep.)
- ▶ 19th cent.: only Taz dialect of Tundra Nenets is spoken here, while the other 4 languages are spoken more to the north (and to the east).
- ▶ What happened? What was the sudden change responsible for messing up the dialect continuum?



Changes in linguistic geography: 17th vs. 19th cent.

- ▶ The emergence of large-scale reindeer herding is dated for the 17th/18th cent. turn (Stépanoff 2017, Krupnik 1993, Golovnev 1995).
 - ▶ Size of herds: several dozens -> several hundreds of reindeer per family.
 - ▶ «Reindeer change their behaviour when the herd reaches about a hundred individuals. In turn, people have to modify their way of life when reindeer become numerous: they follow more rigid routes and roam in more open landscapes.» (Stépanoff 2017)
- ▶ The withdrawal of Yenisei Tundra Nenets, Forest Enets, Tundra Enets, and Yurak to the north is well explained by this change in subsistence pattern.





Reindeer herding & NS languages

- ▶ The two reindeer herding breakthroughs (2000 years ago and at the 17th/18th cent. turn) are hypothesized to be conditioned by **climate changes**.
- ▶ Lower temperatures -> rise in reindeer fertility & deforestation: reindeer could cross the same distances faster (Stépanoff 2017, Krupnik 1993, Kharuk et al. 2013, MacDonald et al. 2008).
- ▶ Another causal factor for the change at the 17th/18th cent. turn could be man-made fires, also leading to deforestation.
- ▶ Whatever were the supposed reasons for the reindeer herding breakthroughs, their dating is quite reliable.
- ▶ In each case, the dramatic changes in subsistence caused northward migrations of Northern Samoyedic speakers.
- ▶ More detailed studies of NS isoglosses is needed to discover more details of recent migrations (ongoing with Valentin Gusev).



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Pre-Samoyedic population of the Lower Yenisei

- ▶ Whom did they meet in their migrations?
 - ▶ (Grünthal et al. Subm): the present-day northernmost Uralic languages, Saami and Samoyedic, exhibit exotic substratal vocabulary and/or grammatical and phonological effects, and in most places local northern toponymy and vocabulary for tundra flora and fauna include words of exotic non-Uralic origins, showing that today's northernmost languages were the frontier languages in the spread (Aikio 2012, Helimski 2001a, Saarikivi 2006, in press).
 - ▶ (Gusev 2019): Northern Samoyedic, but also - to different degrees - Northern Tungusic, Yukaghir, Chukotko-Kamchatkan, and Yakut show some grammatical and lexical patterns attested in Eskimo languages.
 - ▶ Interrogative and Auditive verbal suffixes, Anterior nominal suffix, intraclics, endonyms 'real people'
 - ▶ More research is needed here (ongoing by Valentin Gusev)
 - ▶ Numerous non-Samoyedic and non-Uralic lexemes in Nganasan
 - ▶ Current PhD research by Kaisla Kaheinen (University of Helsinki)



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Keeping contacts with each other

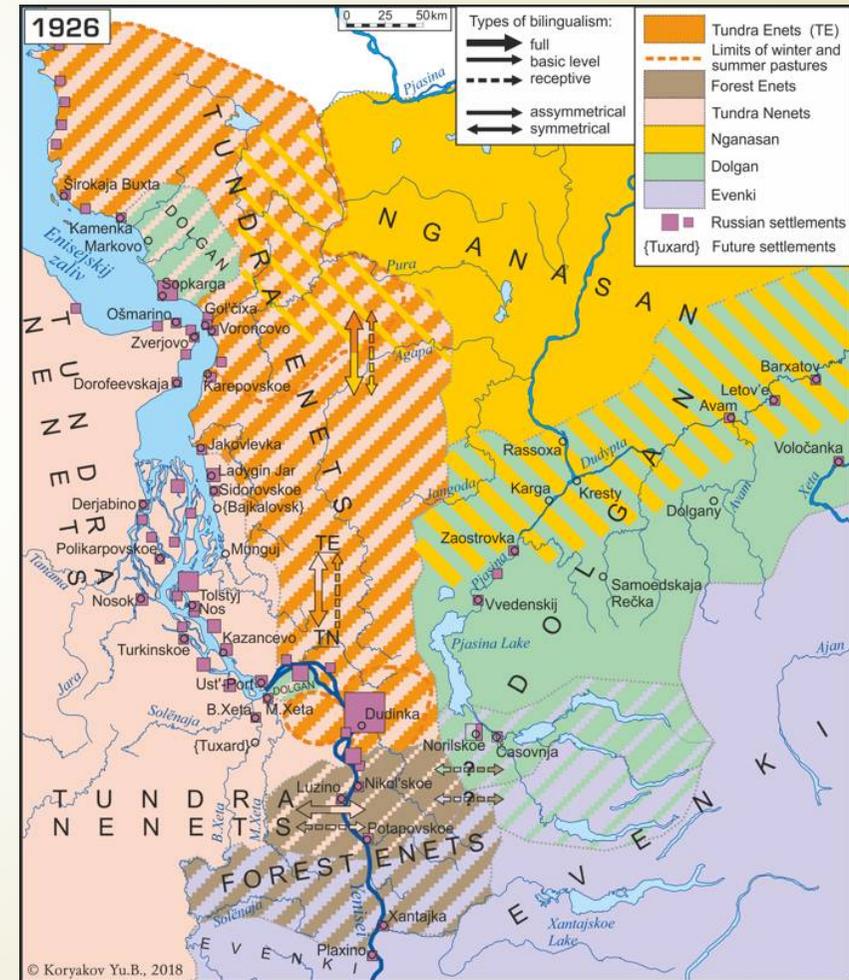
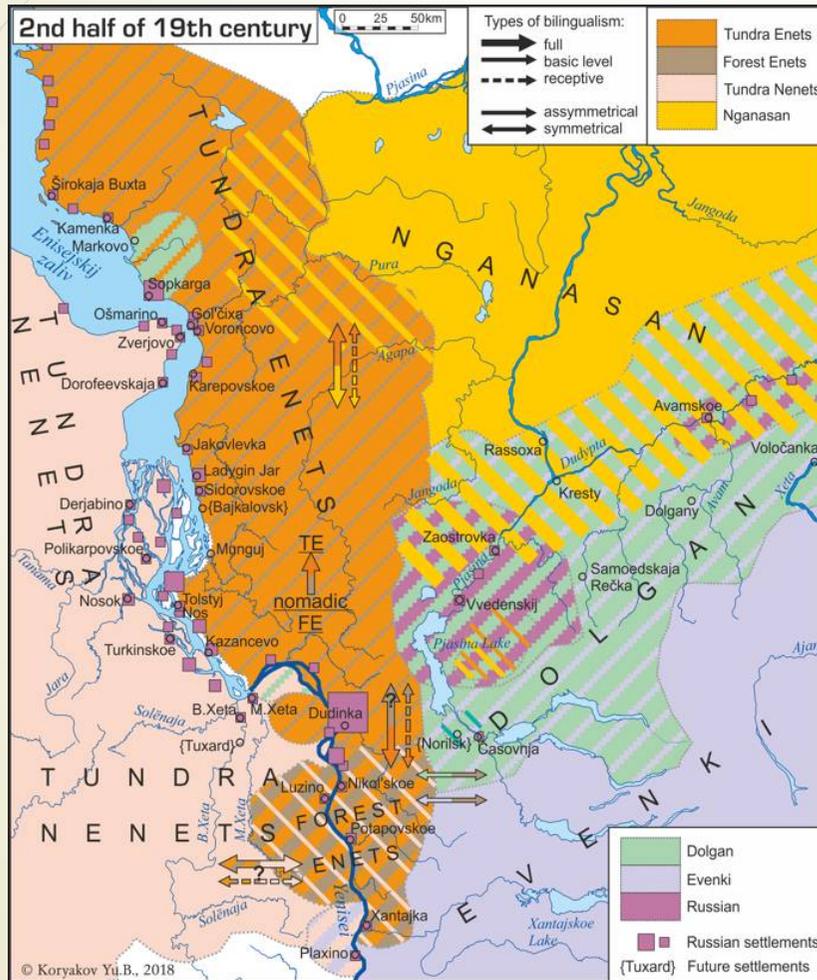
- ▶ Ethnographic and sociolinguistic studies of the recent past (pre-Soviet) can supply an approximation of contact situation of the more distant past
 - ▶ Only if linguistic data support it!
 - ▶ Here I replicate the idea of Evans (2017, 2018) that prehistoric linguistic past of small-scale indigenous communities can be reached via sociolinguistic studies of their modern communities and linguistic studies of their languages.
- ▶ From linguistic evidence, it is clear that despite huge distances, nomadic Northern Samoyedic speakers have always been in contact with each other.
 - ▶ Few grammatical innovations.
 - ▶ Many discourse strategies are the same in all Northern Samoyedic (works by Anna Urmanchieva, Institute of Linguistic Studies RAS), while discourse patterns would be supposed to change faster than lexicon and grammar without sustained contact.



Keeping contacts with each other

- ▶ Ethnography and sociolinguistics of the recent past (pre-Soviet) can supply an approximation of contact situation of more distant past
- ▶ Despite huge distances, nomadic Northern Samoyedic speakers have always been in contact with each other.
- ▶ The last 150 years: all cases of neighborhood of speakers of different Northern Samoyedic languages featured mutual bilingualism (Khanina & Koryakov 2018), (Khanina 2021)
 - ▶ at least receptive/passive, often each party speaking its own language
 - ▶ usually without any socio-economic dominance of one group over the other
 - ▶ NB: Forest Nenets has lost contacts with anyone but Tundra Nenets because of the Selkup migrations from the south

Multilingualism at Lower Yenisei



Keeping contacts with each other

- ▶ 17th - 19th cent.: numerous cases of **bilateral language shifts** by smaller groups of people (selected clans) can be reconstructed, apparently also through a transitional phase of bilingualism
 - ▶ from Nenets to Forest Enets (Dolgikh 1970: 120, 121),
 - ▶ from Nenets to Tundra Enets (Dolgikh 1970: 120, 121, 159),
 - ▶ from Forest Enets to Nenets (Dolgikh 1970: 121, 199, 203),
 - ▶ from Tundra Enets to Nenets (Dolgikh 1970: 121, 151, 159, 171-172),
 - ▶ from Tundra Enets to Nganasan (Dolgikh 1970: 140, 148, 150), see also (Gusev 2020)
 - ▶ from Nganasan to Tundra Enets (Dolgikh 1970: 175),
 - ▶ from Forest Enets to Tundra Enets (Dolgikh 1970: 145, 178, 179-180).
 - ▶ The Dolgans (Turkic), who appeared in the studied area only recently, were not an exception despite the differences in material culture: some Dolgan families switched to Tundra Enets and Nenets in the beg. of the 20th cent. (Amelina 2020), while some Tundra Enets switched to Dolgan at the turn of the centuries (Dolgikh 1970: 166).

(Khanina 2021), based on data from Dolgikh (1970)

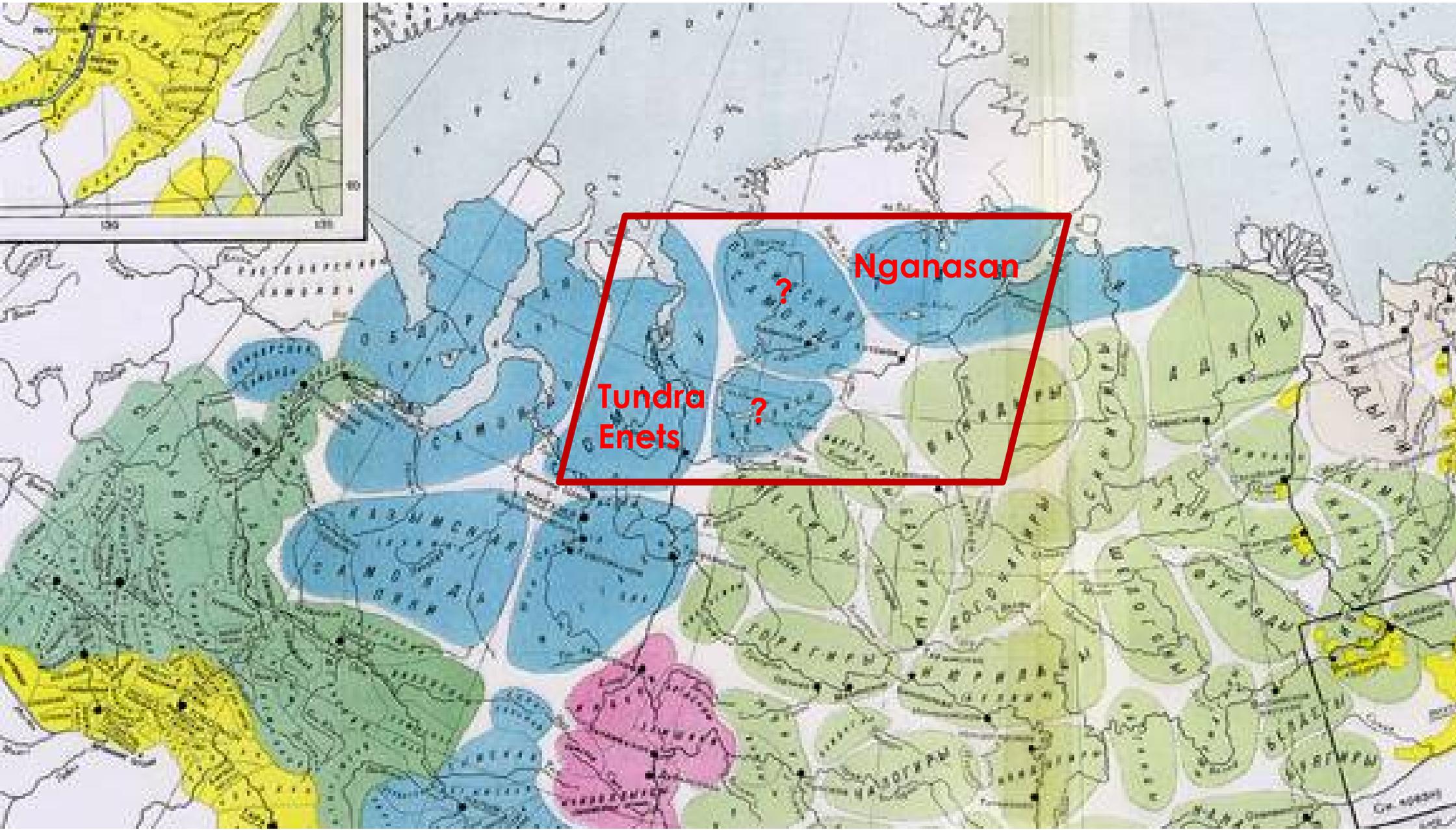
Keeping contacts with each other

- ▶ Inetrethnic marriages described in (Dolgikh 1962) for 1926.
- ▶ Multilingual practices and language ideologies typical for the 1930s:
 - ▶ The weight of languages in social identities of the Lower Yenisei is quite low (cf. Sutton 1978, Merlan 1981, Singer 2018 for Australia).
 - ▶ All Northern Samoyedic languages have equal social weight, the language of the family is usually predicted from the language of the majority in the given locality, not from the patrilects of the parents.
 - ▶ Clan boundaries, material culture types, and languages do not form a hierarchical structure.
 - ▶ Speech communities, not language communities (Gumperz 1968, Hymes 1968, Silverstein 1996); at language contact areas, constellations of languages are better descriptors of a community than a single code (cf. Kroskrity 2018 for US, Childs et al. 2014 for Africa).
 - ▶ As a consequence of such ideologies, disappearance of languages which are not backed up by monolingual use somewhere else.

(Khanina 2021), based on sociolinguistic interviews in 2017

Keeping contacts with each other

- ▶ How do linguistic data support the proposed language ecology?
 - ▶ Isoglosses between each pair of Northern Samoyedic languages.
 - ▶ Detailed studies of each well known case of language contact.
- ▶ E.g. the Tundra Enets – Nganasan case:
 - ▶ Tundra Enets vs. Nganasan today are almost as different, as all other NS vs. Nganasan
 - ▶ but Tundra Enets and Nganasan have many shared isoglosses (affixes, words, contructions)
 - ▶ At the Dolgikh (1960) map of the 17th cent. Siberian clans, the two groups between Tundra Enets and Nganasan have no clear linguistic attribution:
 - ▶ assimilated by TE? -> than modern TE would be more divergent from the rest of NS than the original TE
 - ▶ by Ng? -> than modern Nganasan would be more similar to the rest of NS than the original Nganasan
 - ▶ Some of the clans shown as belonging to one of these two groups became later a part of the Tundra Enets, some of them became later a part of Nganasans (Dolgikh 1960). However, some who became a part of Nganasans have a Nenets clan name (Gusev 2020)!



Tundra
Enets

Nganasan

?

?



Keeping contacts with each other

- ▶ How do linguistic data support the proposed language ecology?
 - ▶ Isoglosses between each pair of Northern Samoyedic languages.
 - ▶ Detailed studies of each well known case of language contact.
 - ▶ The more to the past we go (Castren, Miller, etc.), the more variation is there:
 - ▶ more language varieties,
 - ▶ more variation in individual words recorded for the same language
 - ▶ -> even 150-250 years ago, the Northern Samoyedic languages were less 'separate/distinct' than today.

Keeping contacts with each other

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Keeping contacts with each other

- ▶ E.g. the Tundra Enets – Forest Enets case:
 - ▶ By the 1830-1840, a group of Forest Enets managed to increase their reindeer herds
 - ▶ -> by the logic of reindeer herding they had to move northwards, from their current foresty lands to more open tundra lands
 - ▶ The more northern lands were occupied by Tundra Enets (also owning extensive reindeer herds), so the Forest Enets group started to follow similar migration routes as speakers of Tundra Enets.
 - ▶ In the 1898 census, these Forest Enets identified themselves as Forest Enets speaking Tundra Enets.
 - ▶ In the 1926 census, these Forest Enets identified themselves as Tundra Enets speaking Tundra Enets.
- ▶ More cases...



Some conclusions





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Some conclusions

- ▶ Only an interdisciplinary study can reconstruct the whole story of language diversification and spread at the Lower Yenisei.
 - ▶ historical linguistics, sociolinguistics, linguistic geography, ethology & climate change, folklore studies, archeology, genetics, etc.
- ▶ And this is just a beginning!
- ▶ The detailed reconstruction (once it is ready!) is particularly important for
 - ▶ history of Northeastern Siberia,
 - ▶ general linguistics,
 - ▶ studies of human and cultural evolution.



Broader impact

- ▶ The conditions of Northern Samoyedic spread at the far periphery of the habitable world were close to conditions of human expansion nearly everywhere in early prehistory
 - ▶ and certainly at the frontier of the human expansion, where work on the evolution of language complexity tends to assume a lot of the important evolutionary processes occurred
- ▶ It is thus a natural case that pares away all but the essentials in the mechanisms of diversification and structural evolution of the past.
- ▶ All other recent studies of language diversification which also take into account sociolinguistic details and social ecologies deal with tropical societies, where population densities and some horticulture show already a significant move away from the early prehistory conditions (Evans 2018, 2019, François 2011, Rumsey 2018).
- ▶ So the history of Northern Samoyedic has a direct impact on advances in much more general questions of human spread in the Neolithic times.

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